Harris Coyle Breen
Chartered Quantity Surveyors

MUNSTER TECHNOLOGICAL UNIVERSITY

Apprenticeship Expansion

Block A / MTU Campus / Cork

VOLUME C

Bill of Quantities

Public Works Contract for Building Works Designed by the Employer

EMPLOYER
Munster Technological University

REVISION
Rev-2

ISSUE / DATE
Tender · September 2026

HARRIS COYLE BREEN
First Floor, 5 Curragh Road, Turners Cross, Cork

QUANTITY SURVEYOR
TO THE EMPLOYER

Revision Control

DOCUMENT ISSUE & REVISION RECORD

DOCUMENT Volume C · Bill of Quantities

PROJECT MTU Block A Apprenticeship Expansion

PREPARED BY Harris Coyle Breen

REV	DATE	DESCRIPTION OF ISSUE / REVISION	PREPARED	CHECKED	APPROVED
Rev 0	10 Apr 2026	Volume C: Pricing Document / BoQ — Issued for Tender	MMcA	RH	RH
Rev 1	14 Apr 2026	Volume C: Pricing Document / BoQ — Issued for Tender	NMcA	RH	RH
Rev 2	04 Sep 2026	Volume C: Pricing Document / BoQ — Issued for Tender	NMcA	RH	RH

This page records the issue status and revision history of the document. Each subsequent issue must be recorded with its revision reference, date and a description of the change.

SECTION 3.0

Index

Table of Contents

INDEX OF BILLS

Project Particulars, Preliminaries and General Conditions ..... Section 1
Building Substructure (Plastering) ..... Section 2
External Walls (Plastering) ..... Section 3
Internal Wall & Partitions (Plastering) ..... Section 4
Floor and Galleries & Roof Structure (Plastering) ..... Section 5
Stairs and Ramps (Plastering) ..... Section 6
External Wall Completions (Plastering) ..... Section 7
Internal Walls Completions (Plastering) ..... Section 8
Stairs and Ramps Completions (Plastering) ..... Section 9
Roof Completions (Plastering) ..... Section 10
Wall Finishes Externally (Plastering) ..... Section 11
Wall Finishes Internally (Plastering) ..... Section 12
Floor Finishes (Plastering) ..... Section 13
Stairs Finishes (Plastering) ..... Section 14
Ceiling Finishes (Plastering) ..... Section 15
Roof Finishes & Cladding (Plastering) ..... Section 16
Drainage, Rainwater and Refuse Disposal (Plastering) ..... Section 17
Mechanical Installation (Plastering) ..... Section 18
Lift and Lift Shaft Installation (Plastering) ..... Section 19
Electrical Installation (Plastering) ..... Section 20
Demolitions & Alterations (Plastering) ..... Section 21

Prepared Site ..... Section 22
Ancillary Site Structures ..... Section 23
Site Enclosures, Retaining Walls ..... Section 24
Roads, Paths & Paving's ..... Section 25
Site Services Mainly Piped & Ducted (Foul Sewer) (Plastering) ..... Section 26
Site Services Mainly Piped & Ducted (Surface Water) ..... Section 27
Site Services Mainly Piped & Ducted (Watermain) ..... Section 28
Site Fittings & Furniture ..... Section 29

Demolitions & Alterations (Link Corridor) ..... Section 30
Building Substructure (Link Corridor) ..... Section 31
Internal Wall & Partitions (Link Corridor) ..... Section 32
Floors and Galleries (Link Corridor) ..... Section 33
Internal Walls Completions (Link Corridor) ..... Section 34
Wall Finishes Internally (Link Corridor) ..... Section 35
Floor Finishes (Link Corridor) ..... Section 36
Ceiling Finishes (Link Corridor) ..... Section 37

Demolitions & Alterations (Pipe Fitting) ..... Section 38
Building Substructure (Pipe Fitting) ..... Section 39
Internal Wall & Partitions (Pipe Fitting) ..... Section 40
Frame (Pipe Fitting) ..... Section 41
External Wall Completions (Pipe Fitting) ..... Section 42
Internal Walls Completions (Pipe Fitting) ..... Section 43
Roof Completions (Pipe Fitting) ..... Section 44
Wall Finishes Externally (Pipe Fitting) ..... Section 45
Wall Finishes Internally (Pipe Fitting) ..... Section 46
Floor Finishes (Pipe Fitting) ..... Section 47
Ceiling Finishes (Pipe Fitting) ..... Section 48
Roof Finishes & Cladding (Pipe Fitting) ..... Section 49
Mechanical Installation (Pipe Fitting) ..... Section 50
Electrical Installation (Pipe Fitting) ..... Section 51
Site Services Mainly Piped & Ducted (Foul Sewer) (Pipe Fitting) ..... Section 52

Building Substructure (Automotive Lab) ..... Section 53
Building Substructure (1A) (Automotive Lab) ..... Section 54
Electrical Installation (Automotive Lab) ..... Section 55

SECTION 1.0

Project Particulars & Preliminaries

(06) Project Particulars, Preliminaries & General Conditions

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS				
	(06) PRELIMINARIES AND GENERAL CONDITIONS				
	GENERALLY				
A	If the Contractor does not separately price any item in these Preliminaries he shall be deemed nevertheless to have allowed in his prices or in his rates for the cost of compliance with all the requirements of these Preliminaries. All the Preliminaries shall apply to the whole of the Works. The Contractor will be required to submit a detailed breakdown of his pricing of these Preliminaries before acceptance of his Tender	Note			
	1.1 Project, parties and consultants				
	Name of project				
B	Munster Technological University (MTU) - 1974 Main Building Block A Apprenticeships Expansion	Note			
	Nature/Description of the Works				
C	The project generally involves: (1) A new 2-storey building extension with tie-in to existing Block A, to include link corridors, new plastering workshop, stair & lift, lab/classrooms, offices, ancillary rooms and sanitary facilities. (2) Material change of use, internal reconfiguration and alterations to building elevations of existing double height plastering workshop to accommodate new pipefitting workshop and escape corridor. (3) External works to include traffic control measures to existing campus road, delivery yard, hard and soft landscaping, fencing/gates and gas storage compound. (4) Internal groundworks / substructure works to existing assembly test workshop for future mezzanine floor and install of car lift/testing lane equipment.	Note			
	Location of project				
D	Munster Technological University, Rossa Avenue	Note			

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 1.1 Project, parties and consultants				
	Name and address of the Employer				
A	The 'Employer' shall mean	Note			
	Munster Technological University (MTU)				
	Names and addresses of the Consultants				
	The term 'EMPLOYERS REPRESENTATIVE' (herein after referred to as the "ER") shall mean				
B	Ahearn Fire Engineering Ltd				
	The ARCHITECT is:				
	Ahearn Fire Engineering Ltd				
	The STRUCTURAL ENGINEER is:				
	Komplete Civil & Structural Engineers				
	The MECHANICAL & ELECTRICAL ENGINEER is:				
	Ahearn Fire Engineering Ltd				
	The QUANTITY SURVEYOR is:				
	Harris Coyle Breen Chartered Quantity Surveyors				
	General				
C	The Contractor shall note that the Consultants as listed and any other Consultants appointed from time to time by the Employer shall have access to the site to inspect all or any of the works. Their instructions and directions shall be carried out by the Contractor who shall co-operate with them as required taking into account that the Employer's Representative shall have final and binding say in the question of directions.	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	1.2 Description of the site				
A	Refer to Architects Site Management Plan CMP-A-0100 and Architects Drawing Nr. 1001, 1002, 1003, 1004 & 1005	Item	1		
B	Existing Boundaries of the site are shown on Site Management Plan CMP-A-0100 and Architects Drawing Nr. 1001, 1002, 1003, 1004 & 1005	item	1		
C	Proposed Boundaries of the site are shown on Site Management Plan CMP-A-0100 and Architects Drawing Nr. 1001, 1002, 1003, 1004 & 1005	Item	1		
D	Position of the works is shown on Site Management Plan CMP-A-0100 and Architects Drawing Nr. 1001, 1002, 1003, 1004 & 1005	item	1		
E	Harris Coyle Breen Chartered Quantity Surveyors	item	1		
F	Name of project	Item	1		
G	The Contractor shall make himself aware of the presence and location of existing over or underground services and shall take all necessary precautions to avoid interference or damage to the services during the execution of the works.	Item	1		
	Live Campus / Events & Programme Constraints				
H	The Contractor shall allow for working within a live university campus environment, including coordination with academic activities such as examinations, graduations, open days and other campus events. This shall include phased working, restricted access periods, out-of-hours working where required, and strict adherence to programme constraints including summer-only work periods where identified. No additional payment or extension of time will be made for disruption, restricted access, phasing or programme constraints arising from these conditions	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 1.2 Description of the site				
	Existing Services / Investigation				
A	The Contractor shall include for all necessary investigation, tracing, protection, temporary diversion, decommissioning and making good associated with existing services and structures. No claim for additional payment will be entertained arising from failure to adequately assess existing conditions.	Item	1		
	Reinstatement - Site Works / External Works				
B	All areas disturbed by the works, including roads, footpaths, landscaped areas, services and building elements, shall be fully reinstated to match existing conditions to the satisfaction of the Employer's Representative	Item	1		
	Demolition & Making Good (Demolition / Existing Works)				
C	The Contractor shall include for all demolition works, temporary support, protection of retained structures and services, and making good to existing elements affected by the Works.	Item	1		
	Ground Conditions & Earthworks Responsibility (Groundworks / Site Investigation)				
D	The Contractor shall be deemed to have allowed for all excavation, filling, compaction and ground preparation works in accordance with the specification and site conditions, including any measures required to achieve formation levels and bearing capacity.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 1.2 Description of the site				
	Interface with Existing Building (Structural & Services)				
A	The Contractor shall include for all interfaces between new works and existing buildings, including weathering, structural connections, dowelling, anchoring systems, load transfer requirements, service penetrations and making good, to achieve a complete and structurally sound installation	Item	1		
	Information to facilitate visiting the site				
B	The Contractor should make arrangements for visiting the site - as per the Instructions to Tenderers.	Item	1		
C	The Contractor will be deemed to have taken all the above matters into account when tendering and no charge for any extra labour or materials will be allowed in consequence of the Contractor's failure to do this	Item	1		
	1.3 Drawings and other documents				
	Tenders				
D	Tenders shall be submitted on the Form supplied fully completed. The Employer does not bind himself to accept the lowest, or any tender, nor will Contractors be remunerated for any expense they may have incurred in the preparation of their tender.	item	1		
E	Contractors shall submit their tenders for a gross specific sum to include all materials, workmanship, plant, carriage, cartage and expenses incidental to the due performance of the works as specified and shown in the Works Requirements, and other tender documents.	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 1.3 Drawings and other documents **(Cont) Tenders**				
A	The cost of complying with all the conditions, obligations and liabilities described in the Conditions of Contract and in the Specification will be deemed to be spread over and included in the prices stated in this Schedule unless expressly the subject of a specific item in this Bill of Quantities.	item	1		
	Contractor to Execute Contract Agreement				
B	Forthwith upon receipt of the letter of acceptance, the contractor shall enter into and properly execute the agreement in the form contained in the contract.	item	1		
C	Contractor to inform himself on all points	item	1		
D	The Contractor shall be deemed, before tendering, to have made a thorough examination of the Drawings, Specification & Schedules, the site, existing buildings, boundary walls to be demolished and all features thereof, with all mains, drains, adjoining premises or other things affecting the and extent of same and the conditions under which the proposed works will have to be executed and the Contractor shall be deemed to have obtained full information on all matters and things which could in any way have influenced his tender.	item	1		
E	The Contractor, at the time of tendering, is to satisfy himself with regard to all aspects of the works and descriptions described herein and the onus is upon him to contact the Employer's Representative during the tender period to clarify matters. No claim for delays or extras arising from the Contractor's inability to understand the full implications of the Project will be entertained.	item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 1.3 Drawings and other documents				
	Discrepancies in Contract Documents				
A	There are several documents forming the Contract which are to be taken as mutually explanatory to one another. The Contractor shall conform minutely to the signed Drawings and Specification. He shall work to any further Drawings which shall be furnished or approved in writing by the Employer's Representative during the progress of the works as fully and effectually as if such other drawings had formed part of the Contract Documents.	item	1		
B	The Contractor shall provide everything necessary for the proper execution of the works according to the Contract and to the true intent and meaning of the Drawings and Specification taken together whether the same may or may not be particularly shown on the Specification, provided that the same is reasonably to be inferred therefrom; and, if the Contractor finds any discrepancy in the Drawings or between the Drawings and the Specification he shall immediately refer the same to the Employer's Representative who shall decide which shall be followed. Figured dimensions are to be taken in preference to the scale, and detail drawings are to be taken in preference to 1 : 100 scale drawings	item	1		
C	Where discrepancies arise between drawings, specifications and schedules, the Contractor shall be deemed to have allowed for the most onerous requirement unless otherwise clarified prior to tender submission.	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 1.3 Drawings and other documents				
	Sufficiency of Tender				
A	In accordance with Article 4 of The Agreement, the Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of the rates and prices set out by him in the Priced Bill of Quantities on which rates and prices his tender shall be based and which tender shall cover all his obligations under the Contract, and all matters and things necessary for the proper completion of the work.	item	1		
B	The Contractor's original Priced Bill of Quantities on which his tender is based shall be lodged with the Employer's Representative for his use or that of the Quantity Surveyor and shall be used for the purpose only of the Contract.	item	1		
	Drawings Specifications, etc.				
C	The Contractor shall provide and keep on site all douments in accordance with clauses 4.12 and 4.18 of the conditions, in particular two copies of the Specification forming part of the Contract with two copies of the General Conditions of Contract and two complete sets of the drawings referred to in the Specification will be furnished to the Contractor. The Contractor shall provide and make at his own expense any working or progress drawings required by him in addition to those supplied by the Employer's Representative or necessary for the proper carrying out of the work and shall if required by the Architect furnish copies of the same to him for his approval and information.	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 1.3 Drawings and other documents **(Cont) Drawings Specifications, etc.**				
A	The works shall be carried out in accordance with the directions and to the satisfaction of the Employer's Representative in accordance with the signed Drawings, the original priced Bill of Quantities and the Specification, and in accordance with such further Drawings, details, change orders, directions and explanations as may from time to time be given by the Employer's Representative. The Contract Drawings and Specification shall remain in the custody of the Employer's Representative and shall be produced by him at his office as and when required by the Contractor.	item	1		
B	Any copies of the Drawings and Specification which shall have been furnished to the Contractor shall be the property of the Employer's Representative; be returned to him before the final certificate is given for payment of the balance of the Contract price. All documents are to be treated as confidential.	item	1		
C	In accordance with clause 4.12 of the conditions, the Contractor shall have a full set of Contract Documents available on-site for the Design Team, all drawings shall be the latest revision.	item	1		
	Builder's Work in Connection with All Systems				
D	The Contractor shall be deemed to have included for all Builder,s Work in Connection with Mechanical, Electrical, Lift, Security and Fire Alarm installations, including but not limited to openings, penetrations, supports, plinths, trenches, ducts, sleeves, cast-in items, fire stopping, coordination and making good. Responsibility for coordination of all building and services elements rests with the Main Contractor.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Payment				
A	No payment will be made to the Contractor until the ER is in receipt of a satisfactory bond in the sum of 10 % of the Contract figure.	Item	1		
	Drawings, Copies				
B	In accordance with Article 4 of the Agreement, the Contractor shall satisfy himself that there is sufficient information in the Bill of Quantities to enable him to price all items in the Bill. If he requires further information, he should communicate with the Quantity Surveyor who will supply what information is required. Descriptions shall be deemed to include such incidental works as are usual and necessary or as can be fairly implied although not specifically mentioned. All information and instructions to the various trades will be deemed to have been taken into consideration when pricing the whole of the Bill of Quantities.	item	1		
C	Copies of the Drawings, additional to those provided for in the Conditions of Contract, shall be provided at the Contractor's expense. Keep one copy of all Contract Drawings and Specification on the Works for inspection by the Employer's Representative. Return all copies of Drawings and Specification to the Employer's Representative on completion of the Works.	item	1		
D	The contractor is to maintain an up todate drawing register on site incorporating all revisions. The contractor is to ensure all drawings are dated and stamped correctly and superceeded drawings marked accordingly.	item	1		
	Inspection of Documents				
E	A full set of Drawings and other documents relating to the Contract may be seen by appointment at the office of the Employers Representative:-	Item	1		
F	Reddy Architecture + Urbanism				

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Quality Control				
A	A statement must be submitted with the Contractor's tender describing the organisation and resources which the Contractor proposes and undertakes to provide to control the quality of the Works including the work of subcontractors. The statement much include the number and type of staff responsible for quality control, with details of their qualifications and duties.	Item	1		
	Bill of Quantities				
B	The Bill of Quantities/Pricing Document has been measured in accordance with the Agreed Rules of Measurement (4) , issued by the Society Of Chartered Surveyors and the Construction Industry Federation, with amendments, including Supplement 1 Issue 2, and Mechanical & Electrical Works have been measured in accordance with ARM4 Supplement 2.	item	1		
C	No alterations or qualifications of any kind may be made by the tenderer to the text thereof, should any alteration, amendment, note or addition be so made it will be ignored and the text prepared by the Quantity Surveyor shall be adhered to.	item	1		
D	This Bill of Quantities is composed of a number of pages in numerical sequence. The Contractor is to check the number of each page and if any are missing or duplicated or if any word, letter or figure is indistinct, he is at once to notify the Quantity Surveyor. All items must be priced in Ink.	item	1		
E	This Bill of Quantities should be read in conjunction with the drawings and the Specifications and it should be supplemented by a careful analysis of the existing on-site conditions.	item	1		
F	The Contractor is not to use the Bill of Quantities as a Schedule for ordering materials without prior reference to the Drawings and on-site measurements.	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) Quality Control **(Cont) Bill of Quantities**				
A	All measurements herein are nett. When fixed in the works and in pricing, the Contractor must make such allowance as he thinks fit to cover the necessary waste.	item	1		
	Sufficiency of information				
B	In accordance with Article 4 of the Agreement, the Contractor shall satisfy himself that there is sufficient information in the Bill of Quantities to enable him to price all items in the Bill. If he requires further information, he should communicate with the Quantity Surveyor who will supply what information is required. Descriptions shall be deemed to include such incidental works as are usual and necessary or as can be fairly implied although not specifically mentioned. All information and instructions to the various trades will be deemed to have been taken into consideration when pricing the whole of the Bill of Quantities.	item	1		
	Unpriced Items				
C	Cost for items which are not priced shall be deemed to be included in priced items in the Bill of Quantities/Tender Price.	Item	1		
	Bill of Quantities, ER on site for Inspection				
D	The Contractor shall keep one unpriced copy of the Bill of Quantities on the Works and the ER or his representative shall at all reasonable times have access to it.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Bill of Quantities not a "Design Document"				
A	This Bill of Quantities is not a "Design Document" within the meaning and intent of the Safety, Health and Welfare at Work (Construction) Regulations 2001 (S.I. 481 2001) and does not purport to instruct the Contractor as to the manner and methods to be employed in the construction of this project. This information is to be ascertained from the Design Drawings and Specification.	Item	1		
	Confirmation that Works conform to Design Documents				
B	The Contractor will be required to confirm in writing to the Architect on completion of the project that all of the works have been built in strict conformity with all of the design documents.	Item	1		
	Duties, Taxes, V.A.T.				
C	Provide for all customs and excise duties and import licence fees. Price items of work exclusive of Value Added Tax which shall be shown and priced separately as an item.	Item	1		
	Tender Expenses				
D	The Employer will not remunerate Contractors for any expense incurred in the preparation of tenders.	Item	1		
	STANDARDS, CODES OF PRACTICE				
	Standards and Codes of Practice				
E	Reference herein to Irish, British or the National Standards or Codes of Practice do not give the year of issue or dates of amendments. The latest relevant published version including any relevant amendments at date of invitation to tender shall apply. Where a Standard or Code of Practice has been superseded, the latest edition of the superseding publication shall apply	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Standards, Codes of Practice and Text				
A	The Specification shall take precedence over the Standards and Codes of Practice which are referred to where documents are at variance. Any variance to be brought to the ER attention for further instructions.	Item	1		
	STATUTORY OBLIGATIONS				
	Local Authority Approval				
B	In accordance with its obligations under the Contract Conditions, the Contractor shall obtain approval from the Local Authority for the location of temporary entrances, hard standings and crossings required for the Works. Comply with the requirements of the Local Authority regarding their maintenance and reinstatement.	item	1		
	Local Authority Permission				
C	Obtain approval from the Local Authority for the location of temporary entrances, hard standings and crossings required for the Works. Comply with the requirements of the Local Authority regarding their maintenance and reinstatement.	Item	1		
	Local Authority Permission				
D	Obtain permission from the Local Authority for all temporary hoardings and fences, scaffolding,road opening licence and footpath closure licence. Comply with the requirements of the Local Authority.	Item	1		
	BCAR Compliance & Certification				
E	The Contractor shall fully comply with the requirements of the Building Control (Amendment) Regulations SI No. 9 of 2014, including all obligations relating to inspection, certification, coordination and documentation.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Garda Regulations				
A	Ascertain and comply with the garda regulations affecting the execution of the Works.	Item	1		
B	All workers on the site will be subject to Garda Vetting	Item	1		
	Traffic Regulations				
C	Ascertain and comply with Traffic Regulations and the Contractor shall comply with Clause 7.9.2 of the conditions.	item	1		
	Traffic, Logistics & Pedestrian Management				
D	The Contractor shall include for full traffic and pedestrian management and site logistics for the duration of the works, including segregation of construction activities from campus users, delivery management systems, booking procedures, routing, timing restrictions, temporary signage, barriers and safe access routes.	Item	1		
	Safety, Health and Welfare				
E	In accordance with clause 2.5 of the Conditions of Contract, the Contractor shall comply with all statutory safety, health and welfare regulations regarding work people, including those employed by sub-Contractors, employed on the site. (See separate Element)	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Building Regulations				
A	The Contractor will be deemed to be familiar with the Building Control Act 1991 and the related Statutory Instruments; the Building Control Regulations; the provisions of and amendments to the Building Regulations 1991 together with the Technical Guidance Documents and Supplements as published under Article 7 of the Building Regulations in 1997, 2000 2002and 2005 and 2011 and any subsequent amendments. No Variations will be considered arising from complying with the aforementioned.	Item	1		
	Legal Acts and Regulations				
B	The Contractor shall comply with all the legal acts and regulations which apply to this construction site	Item	1		
	Planning Conditions				
C	The Contractor shall include for and comply with all of the conditions attached to the grant of permission.	item	1		
	EMERGENCY SERVICES				
D	Ascertain and comply with the Regulations of the Fire Department and other Emergency Services including maintaining required access at all times to new and existing properties.	Item	1		
	REFUSE DISPOSAL				
E	Ascertain and comply with the Regulations and access requirements of the Refuse Disposal Department and all other mechanical and electrical services supply institutions regarding access for maintenance and emergency works.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	SAFETY OF THE PUBLIC				
A	To comply with its obligations under clause 7.5 of the conditions the Contractor shall take all reasonable measures to ensure the safety of the public. The Contractor's responsibility for trespassers is set out in clause 7.20 of the conditions and shall pay particular regard to preventing trespass onto his site by members of the public.	item	1		
	TRAINING				
B	Provide evidence to the ER of Training of all site personnel.	Item	1		
	2. CONTRACT				
	2.1 Form, Type and Conditions of Contract				
	Form of Contract				
C	The Articles of Agreement and Conditions of Contract shall be the Public Works Contract for Minor Building and Civil Engineering Works Designed by the Employer, PW-CF5 v 2.8, dated 1st May 2024.	Item	1		
D	The Articles provide for the inclusion of a Bill of Quantities (otherwise known as the pricing document) as a Contract Document.	Item	1		
	2.2 Tender and Schedule				
E	The Tender and Schedule shall be FTS5 v2.9, dated 25th November 2025. The completed Schedule: Part 1 of the contract is contained in the Form of Tender. The Contractor shall allow for all cost associated with complying with the completed Schedule: Part 1:-.	item	1		
	The Schedule: Part 2				
F	The Contractor shall also include for completing and returning with his tender package the completed Schedule Part 2 contained in Appendix B of the Form of Tender.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	The Schedule: Part 3				
A	To be Completed by the Employer after Tender and prior to issue of the Letter of Acceptance	Item	1		
	Extension of Time				
B	The Contract provides for extension of time for legitimate causes. To enable the Contractor to demonstrate the legitimacy of causes for which he makes claims for such extension, he must present his time schedule, in the form of a Bar Chart and accompanied by the Network Analysis to the Employer's Representative. Operations which cannot be carried out continuously by the same group of workmen must not be shown as one activity on this bar chart. Each time any delay is awarded by the Employer's Representative the bar chart must be amended by the Contractor and presented again in its revised form. This must also be done whenever the current bar chart is rendered obsolete due to any circumstances.	Item	1		
C	Delays will not be granted for routine or trivial hold-ups such as invariably occur in the course of any Contract. Allowances for these must be built into the programme. For example, claims will not be allowed for bad weather if this is normal for the time of year.	Item	1		
D	No extension of time or additional cost shall arise from delays associated with inspection, re-inspection, or compliance with BCAR requirements	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Change Orders				
A	A "Change Order" shall be deemed to be an alternative arising from the Architect's/Engineers instructions to the extent or quality of the works as expressed or implied in the contract documents. All change orders shall be issued by the Employer's Representative only. No payment will be made to the Main Contractor in respect of work for which a change order is issued by any person other than the Employer's Representative.	Note			
	Meaning of Substantial Completion				
B	Refer to Sub-clause 1.1 Definintions of the contract Conditions	Item	1		
	V.A.T.				
C	All items in this Bill of Quantities should be priced exclusive of the cost of Value Added Tax. Provision is made at the end of the General Summary for the addition of V.A.T. The addition of Value Added Tax, shall be adjustable pro rata to the amount of the Final Account before Tax. It shall be calculated at 13.50% of such amount or at such other rates as may be properly decided by the Revenue Commissioners under the powers vested in them by the Value Added Tax 1972 but shall exclude any overpayments made or penalties incurred under the Act	Item	1		
	2.5 Contractor's liability				
D	Refer Section 2. Form, Type and Conditions of Contract	note			
	2.6 Insurance Liability of Employer				
E	Refer Section 2. Form, Type and Conditions of Contract	note			

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	2.7 Local Authorities fees and charges				
A	The Contractor shall incude for all costs associated with Local Authorities fees and charges, including road opening licences, hoarding licences and permits, and the like, for the Works.	Item	1		
	2.8 Obligations and restrictions imposed by the Employer:-				
	2.8 a Access to and possession or use of the site				
	Access and possession etc				
B	Refer to Architects and Architectural Preliminaries - 25002-AFEC-00-XX-SP-A-000, Site Management Plan CMP-A-0100 and Architects Drawing Nr. 1001, 1002, 1003, 1004 & 1005	item	1		
	This work will be carried out on a phased basis, with restrictions around access and possession of areas (ref. AFEC Programme Overview Notional Works sequencing with existing facilities and timetables and Architectural Preliminaries - 25002-AFEC-00-XX-SP-A-0001) The main Phases are given separately hereunder: -				
C	New 2 Storey building extension including full fitout/handover of communal areas, corridors, stairs/lift and sanitary facilities. Handover of grey box lab/classrooms and offices for future fitout by employer: (15/02/2027 to 24/03/2028)	Item	1		
D	New plastering workshop fitout works: (29/11/2027 to 24/03/2028)	Item	1		
E	Link corridor works: Targeted for Summer 2027 outside of the academic calendar, running 03/06/2027 to 01 /09/2027	Item	1		
F	Assembly Test Workshop: Targeted for Summer 2027 outside of the academic calendar, running 03/06/2027 to 01 /09/2027	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 a Access to and possession or use of the site				
	(Cont) Access and possession etc				
A	Pipefitting enabling works within existing double height plastering workshop: Targeted for Summer 2027 outside of the academic calendar, running 03/06/2027 to 01 /09/2027	Item	1		
B	Pipefitting fitout works: Targeted for November 2027 with a pause in Plastering Syllabus Term 2, running 29/11/2027 to24/03/2028	Item	1		
C	Handover/completion: 24/03/2028	Item	1		
D	MTU require a traffic management personnel to be positioned full-time at the temporary entry and exit to control and manage vehicle access and pedestrian. Personnel is required to be positioned at this location from 6.30am to 4pm (Mon-Friday) during the period which the contractor requires the existing entrance route to be closed. Refer to Site Management Plan CMP-A-0100 and Architects Drawing Nr.1001 and 1050 - 1053 & Demolitions Plans Nr. 1100 - 1103	item	1		
E	All Vehicular access to the Construction site will be via the proposed new entrance off the school access road.	item	1		
F	Pedestrian access must be installed separate from the vehicular access.	item	1		
G	The contractor shall NOT be granted full possession of the works area and shall note that through access for fire tender and to the existing facilities will have to remain and fully accessible during the Works. The Contractor shall include for all cost associated with the through access being maintained during the works.	Item	1		
H	The site must not be used for any purpose other than carrying out the works	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 a Access to and possession or use of the site **(Cont) Access and possession etc**				
A	Provide for performing the work in such a manner as to cause the minimum interference with the occupants of the properties and lands adjoining the site which shall remain occupied and functioning during the execution of the work. The Contractor shall therefore take necessary precautions to protect the buildings and occupants from dust, excessive noise and other interference arising from the work.	Item	1		
B	The Contractor shall take all necessary precautions to minimise the dust within the work area, and should ensure that no dust spreads outside into areas outside the control of the Contractor.	Item	1		
C	All items of plant, which have a potential to create excess noise when being used, are to be fitted with proper noise attenuaters.	Item	1		
D	The Contractor shall consult the convenience of anybody who may be affected by the Works with regard to suitable times for carrying out the works, making deliveries, etc.	Item	1		
E	The Contractor must obtain permission from the relevant Local Authority to enable him to make connections to the public mains. Pay all costs and charges in connection with same and make good all work disturbed to the satisfaction of the Local Authority Engineers	Item	1		
F	The Contractor must maintain at all times clear and safe access and egress for construction personnel using the site and members of the public using the public road or in a visiting capacity to the existing adjoining facilities	Item	1		
G	10 KpH speed limit on site.	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 a Access to and possession or use of the site				
	(Cont) Access and possession etc				
A	The contractor shall implement an appropriate booking in and out system for all site operations and visitors procedures for safe pass and other certification methods.	item	1		
	Access for Employer's Representative and Workshops				
B	The Employer's Representative and any person authorised by him shall at all reasonable times have access to the works and to the site and to all workshops and places where work is being prepared or whence materials, manufactured articles and machinery are being obtained for the works and the Contractor shall afford every facility for and every assistance in or in obtaining the right to such access	Item	1		
	Notice to Employer's Representative for Inspection				
C	Before placing foundations, laying drains, filling trenches, pouring reinforced concrete and otherwise proceeding with work that will cover and conceal previous work, the Contractor shall give early notice in writing to the Employer's Representative and shall afford him an opportunity of inspecting the previous work. Approvals given at such inspections will not relieve the Contractor for full responsibility for the quality of the work throughout.	Item	1		
	Commencement of Work				
D	Inform the Employers Representative at least 15 working days before the proposed start date, or any shorter period the Employers Representative may agree, as per sub-clause 9.1.1 of the Contract Conditions	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 a Access to and possession or use of the site				
	Supervision/Programming and the like				
A	The contractor shall be deemed to accept responsibility for the supervision and administration of all Utility Providers & other Novated firms and arrange and monitor a programme with each novated firm. Arrange and monitor a programme with each public and private utility provider or other organisation engaged upon work concurrent with the contract.	item	1		
B	The Contractor shall agree a programme with all parties and keep them fully informed as to his own programme and progress of the works	item	1		
C	The Contractor shall give adequate notice to any of the above parties when he requires them to carry out any specific works on site.	item	1		
D	The contractor shall be deemed to have included in his price for any expense incurred in complying with this requirement.	item	1		
	Attendance:				
E	Ascertain the requirements of the novated specialists and/or local authorities or public and private utility providers engaged upon the works. Give adequate notice, in writing, to all concerned, when their work requires the use of scaffolding, light, water or special attendance in order that such work maybe completed before operatives, scaffolding or plant required are transferred.	item	1		
F	Allow for all general attendance on Novated Firms/Utiltiy Providers	item	1		
G	Allow for all special attendance on Novated Firms/Utiltiy Providers	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	2.8 b Limitations of working space				
	Working space				
A	The proposed boundaries are indicated on Architects Site Management Plan Architects Drawing Nr. 1001, 1002, 1003, 1004 & 1005. The contractor shall mainly confine his operation to that area of the site and include all works including parking and deliveries within the required site hoarding.	Item	1		
B	Pedestrian/Members/Staff access points, car parking and deliveries points, must be maintained safely throughout the various phases of construction. A method statement for the safe interaction of the phases of these and construction activities must be agreed with the design team and client prior to commencement.	item	1		
	Parking				
C	All vehicles are to be parked within the site boundary and within the site compounds for the duration of the contract. A suitable durable surface shall be provided for temporary car parking facilities for contractors personnel, subcontractors personnel and a minimum of Eight Employer/Design Team visitors to the site.	Item	1		
D	Traffic Management, including parking by students is of paramount importance in the execution of this contract. There is a high demand for parking in MTU and the contractor must not compromise parking spaces outside the designated work areas.	item	1		
E	Contractor to develop a Temporary Traffic Management Plan which will be agreed with MTU and the PSDP.	item	1		
F	Car park spaces for use by MTU staff and other related personel must not be used or impeded by the vehicles of any contractors personnel working on the project	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 b Limitations of working space				
	(Cont) Parking				
A	Parking along the sides of the public roads or within the existing Residential Estates is strictly prohibited.	Item	1		
B	The Contractor shall at all times during the execution, completion and maintenance of the works keep open and free from obstruction or nuisance of any description, all existing car-parks, roads, laneways, footpaths, public green spaces or other means of communication within, adjacent to or near the site or affected by the works, and shall keep free from obstruction all open spaces in the vicinity of the works other than the space allotted to him within the site boundary. The Contractor shall so arrange to carry out the work in a manner that will cause the least possible interference with the flow of traffic on all existing routes. Compliance with this requirement will be strictly enforced.	Item	1		
C	The Contractor is to highlight at tender stage any disruption which he envisages to such areas during the works and clearly state in a method statement on how they will overcome such disruptions, confirming the duration of such disruptions at the time of tender.	Item	1		
	2.8 c Limitations of working hours				
	Working hours				
D	The working hours are to be: 08:00 to 18:00 hrs Mondays to Fridays and 08.00 to 16.00 hrs Saturdays. If other working times are required or work which must be checked by MTU and the design team prior to commencement are to be carried out for specific purposes the contractor should consult with design team prior to commencement of that work.	item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 c Limitations of working hours **(Cont) Working hours**				
A	Based on this, the tenderer should allow for works to be carried out outside of operational hours i.e. late evening / Saturday if considered necessary to meet the programme requirements and handover dates indicated by MTU. This should be reflected and appropriately managed as part of your proposed programme of works. Refer to Site Management Plan CMP-A-0100, Architects Drawing Nr. 1001, 1002, 1003, 1004 & 1005 and AFEC Stage 2 - Programme Overview	item	1		
B	Any activities outside of these hours shall require the prior written consent of the Employer's Representative. In the case of any night work, or work outside the ordinary ("normal") hours, being carried out by the contractor, a minimum of two (2) clear working days notice shall be given in writing by the contractor to the 'Employers Representative', so that the latter may arrange supervision. Any overtime and night work carried out without such notice shall not be deemed to be work done under this contract and shall not be measured up for the purposes of certification. Any work so done and covered up shall be opened up at the Contractor's own expense for inspection.	Item	1		
C	Where permission is given to work outside the "Normal" working times, any additional costs incurred shall be borne by the Contractor.	Item	1		
	2.8 d Limitations on the Operation of plant with respect to adjoining property				
D	Refer to Works Requirements and Information Pack in tender package	item	1		
E	Noise during site clearance and construction shall not exceed 65db(A), Leq 30minutes and the peak noise shall not exceed 75db(A), when measured at any point of site.	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	2.8 e The use or disposal of any material found on the site				
	Materials etc. found on site				
A	All fossils, coins, articles, structures and other remains or things discovered on the Site of the Works shall be the absolute property of the Employer. The Contractor shall take all precautions to prevent his workpeople or any other persons from removing or damaging any such articles or things, and shall immediately upon discovery thereof and before removal acquaint the Employer's Representative of such discovery and except insofar as is provided under this Contract for the removal and disposal of rubble, rubbish demolished materials etc., shall carry out at the expense of the Employer, the Employer's Representative orders as to the disposal of same	Item	1		
	2.8 f Hoardings, fences, screens, temporary roofs, temporary name boards and advertising rights.				
	Site Security & Hoarding (Site Establishment)				
B	The Contractor shall provide and maintain secure hoarding, access control, signage and site security measures for the duration of the works.	Item	1		
	Hoardings etc.				
C	The contractor is to install suitable hoarding and ensure the site and Hoarding remains secure and safe at all times. Site set up and compound layout to be agreed with Design team and MTU prior to works commencing on site.				

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 f Hoardings, fences, screens, temporary roofs, temporary name boards and advertising rights. **(Cont) Hoardings etc.**				
A	Provide for all other necessary temporary fencing, hoardings, dust screens, fans, planked footways, guard rails, and the like as may be necessary for protecting the public for the proper execution of the works and for effectively enclosing and protecting the site against trespass and interference. Include for all alterations, modifications and maintenance as necessary during the work. Obtain approval from the Employer's Representative for all temporary hoardings and fences and comply with the requirements of the Local Authority.	Item	1		
B	Hoarding plans must be developed in connection with the Contractor's preferred phasing and sequence of works. Costs associated must include for all dismantling and re-erection as a sequence of the agreed programme/phasing. Any re-erection of hoarding must comply to the original design.	item	1		
C	All materials and equipment must be contained within the hoarding/fenced areas. A set of keys to the gates must be left with the ER.	item	1		
D	Allow for all necessary Licences and Permits, and associated costs for temporary hoardings and the like.	Item	1		
E	The contractor shall be required to submit a detailed Traffic and Pedestrian Management plan compiled by suitable qualified professional/ Engineer. The contractor shall be required to fully comply and implement the Traffic and Pedestrian management plan on site and include for all associated costs; refer to Architect's Drawings for further details and requirements	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 f Hoardings, fences, screens, temporary roofs, temporary name boards and advertising rights.				
	Site Sign Board				
A	Provide for a 1.80m x 3.40m site sign board consisting a vinyl image mounted onto a rigid PVC Backing sheet fixed to existing site sign structure. Graphics for the sign board to be provided as required.	Item	1		
B	The Contractor is to allow in his tender for the cost of maintaining and keeping the site sign board in a clean and presentable condition throughout the contract period.	Item	1		
C	The Contractor is to allow for the cost of dismantling and removing the sign board and associated site sign structure and foundations on completion of contract, carefully disposing of same to a licenced tip upon completion, including all necessary making good all work disturbed to the satisfaction of the Employer's Representative.	Item	1		
	Advertisements				
D	No temporary or permanent advertisements will be permitted on the Works.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	2.8 g The maintenance and protection of existing services on or over the site				
A	The site shall contain various services which will have to be diverted. Prior to commencing work on site the Contractor shall agree a Programme for carrying out the diversion work for all cables and services. No Claim for extension of time or disruption will be entertained arising from the Contractor's failure to make suitable arrangements with the Employer and all Services Authorities involved in this regard. The Contractor shall clearly mark all cables and pipes and protect before moving or diverting. The Contractor is to include for giving notices to the appropriate Authorities for disconnection and reconnection of services and all costs in connection therewith. If any of the services to adjacent buildings are interfered with or damaged then the Contractor will be required to pay all costs in connection therewith. All existing live services which cross the site are to be maintained during the execution of the work	Item	1		
B	The Contractor shall keep detailed written records of any areas opened up and testing carried out. These records are to have a written description of the relation to existing elements of the structure. Additionally, details of what was discovered and the procedure that followed as a result. These records to be handed over to the Employer's Representative and Quantity Surveyor at site meetings.	Item	1		
C	The Contractor is to carry out a full services survey of the site prior to commencing works to confirm locations of utilities if available further to survey contractor may connect to existing water and foul sewer connections for the construction works.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	2.8 h The execution or completion of the work in any specific order in sections or phases, including any coincidental work not at the descretion of the Contractor.				
A	On being granted possession of the site the Contractor shall commence and proceed with the execution of the Works in such order as may be most appropriate and in accordance with the Employer's Representative direction.	Item	1		
B	The contractor shall note that there is a restriction on works as set out Site Management Plan CMP-A-0100, Architects Drawing Nr. 1001, 1002, 1003, 1004 & 1005 and AFEC Stage 2 - Programme Overview	Item	1		
C	The contractor shall note that there is phasing restrictions on works as set out Site Management Plan CMP-A-0100, Drawing Nr. 1001, 1002, 1003, 1004 & 1005 and AFEC Stage 2 - Programme Overview	Item	1		
D	The works are to be completed internally in a number of zones as outlined on the drawings and it should be noted that the building must be kept operational during construction period. Works that may inconvenience the operation of the College may have to be done out of hours. Refer to Site Management Plan CMP-A-0100, Architects Drawing Nr. 1001, 1002, 1003, 1004 & 1005 and AFEC Stage 2 - Programme Overview	item	1		
E	Contractor will have to provide method statements for work in the corridors during normal working hours.	item	1		
F	The work zones where the work is taking place has to be separated to avoid MTU users accessing the areas. This separation is the responsibility of the contractor and should consult with the ER prior to commencing the works.	item	1		
G	The contractor is to install suitable hoarding and ensure the site and fencing remains secure and safe at all times. Refer to the phasing / compound drawings included in the tender.	item	1		
				To Collection €	**NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 h The execution or completion of the work in any specific order in sections or phases, including any coincidental work not at the descretion of the Contractor.				
	Programme Constraints & Phasing (Programme / Construction Planning)				
A	The Contractor shall be deemed to have allowed for all phasing, sequencing and programme constraints identified within the tender programme, including multi-stage works, restricted working windows and coordination between separate work areas.	Item	1		
	Summer Works Restrictions (Programme / Phasing)				
B	Certain elements of the Works, including link corridor connections and tie-ins to existing buildings, shall be undertaken during defined summer periods only. The Contractor shall plan and resource the Works accordingly, with no works permitted outside these periods where stated.	Item	1		
	Sectional Completion / Phased Handover				
C	The Contractor shall allow for sectional completion and phased handover of different parts of the Works, including coordination, commissioning and certification of each phase.	Item	1		
	Enabling Works & Early Contractor Obligations				
D	The Contractor shall prioritise and complete all enabling works, including relocation of existing services and infrastructure, to meet programme and operational deadlines.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 h The execution or completion of the work in any specific order in sections or phases, including any coincidental work not at the descretion of the Contractor.				
	Suggested programe of construction				
A	The Contractor shall be obliged to carry out the contract causing the least possible disturbance to the existing Residents, Businesses and other Buildings, adjoining properties and facilities which will continue throughout the duration of the Contract.	item	1		
B	Consideration has to be given as to how this might be achieved without seriously affecting the running of the remainder of these buildings.	item	1		
C	The normal hours are as indicated in the Preliminary Health & Safety Plan.	item	1		
D	If the Contractor or any sub-Contractor wishes to work outside of these hours, special arrangements must be made with the Employers Representative.	item	1		
E	Contractors must ensure that the builders work area is separated at all times from other areas of the site by temporary dust, weather and vandal proof screens.	item	1		
F	Contractors should note that access to the existing facilities must be provided at all times and in particular the Emergency Access only for Fire Tender, Emergency Services and the like	item	1		
G	Contractors must ensure that all sub-Contractors and Suppliers comply with the Programme and that the Building Work is not delayed by their failure to perform.	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 h The execution or completion of the work in any specific order in sections or phases, including any coincidental work not at the descretion of the Contractor.				
	Programme Compliance				
A	The Contractor shall be deemed to have reviewed and allowed for the requirements of the tender programme and shall not be entitled to additional time or cost arising from programme constraints, sequencing or interfaces identified therein	Item	1		
	General				
B	Contractors should note that Employers reserve the right to alter the programme and to omit sections of the work.	item	1		
C	The Contractor is to submit a detailed description of his programme and temporary arrangements, accompanied with coloured description maps, along with his tender.	item	1		
D	The assessment of the tenders will take into consideration the contract sum, the programme and the temporary arrangements proposed.	item	1		
E	The proposed programme and the temporary arrangement proposals are to be based on the requirements and limitations set out in the General Conditions, Preliminary Items Element of this Bill of Quantities and in the foregoing suggested Programme of Construction.	item	1		
F	The following are the basic objectives:	item	1		
G	Maintain adequate servicing and access throughout the Contract.	item	1		
H	The Contractor's programme is to be set out in a fashion to minimise disruption to the Client and adjoining facilities generally and at the same time achieve the earliest possible hand-over dates.	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 h The execution or completion of the work in any specific order in sections or phases, including any coincidental work not at the descretion of the Contractor.				
	(Cont) General				
A	The Contractor, at the time of tendering, is to satisfy himself with regard to all aspects of Works and descriptions described herein and the onus is upon him to contact the ER during the tender period to clarify matters. No claim for delays or extras arising from the Contractors inability to understand the full implications of the phasing will be entertained.	item	1		
	Temporary Arrangements				
B	The contractor will only be allowed to establish a compound within the area of the site indicated on the Site of Possession Drawing. The storage of all machinery, vehicles, equipment, materials, including the stockpiling of materials, spoil heaps, etc will only be permitted within the designated site curtilage and the compound area. It is proposed that the contractor make use of the existing hards standing made up ground area as a compound, allow for clearing the area of over growth, removing any existing builders rubble, waste and leveling the overall area.	item	1		
C	Contractors should note the limitations and the provisions that have to be made so that the occupants can enjoy un-impeded use of the areas they presently operate in for the duration of the Contract.	item	1		
D	All materials shall be brought in to site as directed by the Employer	item	1		
E	Access must be maintained to and from the adjoining/adjacent buildings, Residencies, Credit Union and Veterinarian facilities.	item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 h The execution or completion of the work in any specific order in sections or phases, including any coincidental work not at the descretion of the Contractor.				
	(Cont) Temporary Arrangements				
A	The Contractors to take all necessary precautions to ensure safety within the site when carrying out works that may affect same.	item	1		
B	The Contractor is to satisfy himself with regard to the extent of alterations within the site in respect of existing and the routes of new services together with connection to the existing services and all necessary temporary arrangments to comply with the nature of the works.	item	1		
C	The contractor must exercise a very high level of Occupant Awareness and at all times maintain a high level of general housekeeping.	item	1		
D	The Contractor is not to interfere with any services including electricity supplies to existing or handed over areas at any time during the Contract unless by prior arrangement with the Employer or the Employers Representative.	item	1		
E	Adequate security to the site and the site generally is to be maintained at all times throughout the Contract.	item	1		
F	Site huts, compounds, storage and other Contractors facilities must be contained within the area shown on the site managament plan .	item	1		
G	The Contractor is to ensure that there is no dust or other nuisance that could give cause to affect the systems or general operation of these areas.	item	1		
H	Services must be maintained to the existing buildings at all times.	item	1		
J	Fire Exit routes are to be maintained and kept clear at all times.	item	1		
				To Collection €	**NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 h The execution or completion of the work in any specific order in sections or phases, including any coincidental work not at the descretion of the Contractor.				
	(Cont) Temporary Arrangements				
A	Each Contractor tendering may be required to attend a meeting with the Employer and the Consultants, immediately following receipt of tenders to discuss and assess the details of this programming and temporary arrangement proposals.	item	1		
B	Fit all compressors, percussion tools and vehicles with effective silencers of a type recommended by the Manufacturers.	item	1		
C	Do not use or permit Employees to use radios or other audio equipment in ways or at times which may cause nuisance.	item	1		
D	The Contractor is to, upon receipt of instruction from the the ER. cease any noisy or disruptive work during opening hours without loss and expense to the Employer.	item	1		
E	Temporary dust screening to each room for protection as per Architects Drawing Nr. 1001, 1002, 1003, 1004 & 1005 and AFEC Stage 2 - Programme Overview	item	1		
	Temporary Works Design & Coordination (Contractor Design / Temporary Works)				
F	The Contractor shall be responsible for the design, coordination and implementation of all temporary works, including propping, falsework, back-propping, stability during demolition and construction, and any sequencing required to safely complete the Works	Item	1		
	Temporary Works & Phased Reinstatement				
G	The Contractor shall allow for all temporary works, temporary partitions, temporary escape routes and phased reinstatement required to maintain building operation during the Works	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 h The execution or completion of the work in any specific order in sections or phases, including any coincidental work not at the descretion of the Contractor.				
	Risks to Health and Safety				
A	In addition to complying with statutory requirements, the Contractor shall use products, methods of work and protective measures which will minimise health and safety hazards.	item	1		
B	Inform the ER in advance of all safety provisions and procedures (including those relating to materials which may be deleterious) which will require the compliance of the Employer or his representatives when visiting the site.	item	1		
	Impacts and Requirements associated with Pandemics (including Covid19)				
C	Impacts and Requirements associated with Pandemics (including Covid19) and other Emergency Health & Safety Measures as per Preliminary H&S Plan. The main contractor is responsible for, and must include in their tender for, putting in place all necessary procedures, processes and protective measures and the cost, programme and quality implications in complying with and completing the Works requirements in accordance with the contract, and in providing a safe system of work for all personnel working on and entering onto the construction site in accordance with current Regulations & Operating Procedures.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	2.8 j Temporary accommodation and facilities for use of the Employer, including heating, lighting, furnishing and attendance				
	Employers Representative/Design Team Office:				
A	The office shall have suitable chairs and table sufficient in size to accommodate a maximum of ten (10) persons during their attendance at meetings; provide for A0 sized drawing board, and ten number coat hooks.	item	1		
B	The Office shall have a First Aid kit and Fire Extinguishers, which are to be serviced and maintained for the duration of the contract.	item	1		
C	Provide for weekly maintenance to ensure the facilities are kept hygienic, clean and in a tidy manner.	item	1		
D	Provide A3 printer and consumables	item	1		
E	On completion remove from site and make good.	item	1		
	Sanitary Accommodation				
F	Provide and maintain in a clean condition seperate sanitary accommodation for the sole use of the Employers Representatives both Male & Female (to be located away from the main staff facilities). Provide WC, wash hand basin, toilet roll, clean towel, soap and water (hot & cold), lockable with lighting.				
G	Provide for daily maintenance to ensure the facilities are kept hygienic, clean and in a tidy manner.	Item	1		
H	On completion remove from site and make good.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 j Temporary accommodation and facilities for use of the Employer, including heating, lighting, furnishing and attendance				
	Designated Car Parking				
A	Provide and maintain secure designated Employer/Design Team parking area of minimum 8 number parking spaces; comprising a clean (and well drained) durable blinded hardcore hardstanding area. Parking area to be located adjacent to Employers Temporary Accommodation, with clean, level durable blinded hardcored access roads (free from any potholes and the like).	Item	1		
B	Deignated Car Park and associated access roads (from main Public Road) to be maintained in a suitable (level, pot-hole free), clean condition for the duration of the roads, for public road only vehicles.	Item	1		
	Refreshments:				
C	Provide for adequate supply of tea/coffee making facilities and 'light refreshments' for consumption by all attendees at site Progress Meetings, Progress Review Meetings and all other such meetings with the Employer and Design Team.	item	1		
	Meter Readings:				
D	Where charges for services supplies need to be apportioned ensure that meter readings are taken by the relevant authority at possession and/or completion as appropriate. Ensure that copies of readings are supplied to interested parties.	item	1		
E	Pay all RATES in respect of temporary services.	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	2.8 k Provision of connections to temporary voice and data communications systems for use of the Employer				
A	Provide, maintain and subsequently remove upon completion of the contract, WIFI Facilities to be available to the Employers Site Office(s) at download speeds not less than 5mb/s.	Item	1		
	2.8 l Periodic useage and access charges on voice and data communications systems for use of the Employer and associated running costs				
B	Provide, maintain and subsequently remove upon completion of the contract, WIFI Facilities to be available to the Employers Site Office(s) at download speeds not less than 5mb/s.	Item	1		
	2.8 m Provision of Project Supervisor Construction Stage services, by the Contractor under the Safety, Health & Welfare at Work (Construction) Regulations.				
C	The Contractor shall note the content of the Preliminary Safety and Health Plan contained in Works Requirements Documents. The Contractor shall include here for all costs associated with the full compliance with the requirements of this Preliminary Safety and Health Plan, including the carrying out of temporary and permanent works as required, the preparation of appropriate Method Statements; and administration etc.	Item	1		
D	Provide for all costs in respect of complying fully with the Safety Health and Welfare at Work (Construction) Regulations 2006 & subsequent amendments, and the contractor shall include for complying with the Safety Health and Welfare at Work Acts and Regulations current at date of tender.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 m Provision of Project Supervisor Construction Stage services, by the Contractor under the Safety, Health & Welfare at Work (Construction) Regulations.				
A	The Contractor shall include for being appointed by the client under a collateral agreement to the main contract as Project Supervisor for the Construction Stage in respect of the project pursuant to the Safety Health and Welfare at Work (Construction) Regulations 2006 & subsequent amendments. The Contractor shall provide for carrying out functions of Project Supervisor (Construction Stage) pursuant to Regulations.	Item	1		
B	The term "temporary works" shall mean all temporary works of every kind required in or about the construction, completion, and maintenance of the works; it shall include temporary works to support and ensure the stability of the partially completed permanent works and of adjoining structures and lands, as well as such matters as trench shoring, scaffolding, propping, working platforms, gangways, access stairs and landings.	Item	1		
C	The Contractor shall appoint an approved, competent Temporary Works Designer who shall take overall design responsibility for the stability of the partially completed permanent works and of adjoining structures and lands during the envisaged construction process and, further, the main contractor shall employ suitably qualified site engineer; both shall liase with each other and the with the Project Supervisors, all in accordance with the HSA Guidelines to Safety, Health and Welfare at Work (Construction) Regulations 2006, & subsequent amendments. Subject to the Employer's Representative consent, (a) on small routine projects the site engineer need not be permanently on site; an/or (b) it may be permissible for one person to fulfil both of these roles	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 m Provision of Project Supervisor Construction Stage services, by the Contractor under the Safety, Health & Welfare at Work (Construction) Regulations.				
A	The Contractor shall in consideration of the acceptance of his/her tender and by way of Collateral Agreement to the Main Contract, provide the services of Project Supervisor Construction Process within the meaning of the Safety, Health and Welfare at Work (Construction) Regulations 2006, & subsequent amendments,. The cost of the provision of this service shall be deemed to be included in the Contract Sum.	Item	1		
B	The Contractor shall in respect of all person and site activities provide for and ensure compliance with all Safety, Health and Welfare Legislation in connection with the works.	Item	1		
C	The Contractor shall ensure that safe practices and methods of work are adopted at all times. The contractor in that capacity or in his capacity as project Supervisor Construction Process shall notify the Employer's Representative in writing prior to the submission of his tender if he considers any requirement relating to the time for carrying out the works or any part of the works or the design of the work or specification of materials render work methods or procedures necessarily hazardous or in any way prevent the works from being safely carried out. The Contractor shall bear all costs arising out of his failure to give notice of foreseeable matters in this regard.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 m Provision of Project Supervisor Construction Stage services, by the Contractor under the Safety, Health & Welfare at Work (Construction) Regulations.				
A	The Contractor shall include for procuring that the insurance cover required to be obtained and maintained by the contractor pursuant to the Clauses of the main contract indemnity in respect of any claim for bodily injury or property damage which the contractor may incur by reason of the performance of the functions and duties of the Project Supervisor for the construction Process of the project.	Item	1		
B	The Contractor shall coordinate arrangements between all contractors to ensure the provision, in writing, of such information as is necessary for the Project Supervisor Design Process to complete the safety file, and shall monitor the implementation of the arrangements and take any necessary corrective action as set out in the Regulations.	Item	1		
C	The Contractor shall include for providing all necessary information by electronic and hardcopy as requested by the Project Supervisor for the Construction Process to enable the preparation and completion of the Safety File excluding drawings and specifications which shall be provided by the appropriate member of the design team and relevant sub-contractors. The contractor shall allow for all costs associated with preparing eight copies of the Safety File.	Item	1		
D	Provide for all costs in respect of complying fully with the European Communities (Protection of Workers) (Exposure to Asbestos) Regulations, 1989 to 2000	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 m Provision of Project Supervisor Construction Stage services, by the Contractor under the Safety, Health & Welfare at Work (Construction) Regulations.				
A	The contractor shall include for providing assistance to the appropriate member of the design team in providing the latest issue of construction drawings for inclusion in the Safety File.	Item	1		
B	Th minimum information required from the Main Contractor for completion of the Safety File includes the following:	Item	1		
C	(a) Details of services, plant, and the project equipment, which comprise part of the structure, from specialist supply and installation contractors, as well as from statutory bodies and local authorities where appropriate	Item	1		
D	(b) Manuals, and where appropriate certificates, produced by the specialist contractors and suppliers which outline operating and maintenance procedures and schedules for all plant and equipment	Item	1		
E	(c) Accurate site survey drawings of the as-constructed location and layout of all utilities and services, including drainage, water mains and emergency and fire-fighting systems	Item	1		
F	The PSCS to ensure that suitable directional signage, fire escape signage, fire equipment signage and assembly signs are put in place and maintained on an ongoing bases during the works.	item	1		
	2.8 n Other obligations and restrictions:-				
G	A method statement for construction traffic movements within the site must be agreed with the design team and client prior to commencement to ensure public and contractors safety during access and egress of trucks and any construction traffic.	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 2.8 n Other obligations and restrictions:-				
A	The contractor is to ensure and maintain fire vehicle, refuse collection and delivery access to buildings adjacent to and within the site at all times.	item	1		
B	A method statement for the access and egress of all construction traffic must be agreed with the design team and client prior to commencement.	item	1		
C	A Permit to work will be required for the decommissioning of all live services and should include details of the service providers, a statement on proof of isolation, certificates and records of services including a map (if applicable) of the services diverted.	item	1		
D	Temporary works shall not be executed until the relevant Temporary Works Design Certificate has been signed by the PSDP and signed by the Contractor.	item	1		
E	A Permit to Work (from the main contractor) will be required for all hot works and a fire watch shall be maintained until there is no long a risk of fire.	item	1		
F	A Permit to Work (from MTU) will be required for all works which may affect the services, alarm systems or access/circulation in MTU	item	1		
	Sites of Archaeological/Historical Importance				
G	Not applicable	Item	1		
	Convenience of Occupants				
H	The existing adjacent lands and properties will remain occupied during the execution of the Contract and the Contractor shall therefore take necessary precautions to protect the buildings and occupants from dust, excessive noise and other interference arising from the work.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) Convenience of Occupants				
A	The Contractor shall consult the convenience of anybody who may be affected by the Works with regard to suitable times for carrying out works, making deliveries, etc.	Item	1		
B	The Contractor shall obtain permission from the owner of adjoining properties, if it is necessary to use that property for any purpose in connection with the works, and indemnify the employer against all charges arising there from.	Item	1		
C	The Contractor shall also be responsible for all matters pertaining to health and safety	Item	1		
D	The Contractor shall be required to maintain through access throughout the works on the adjoining Residents, the Creche Facilitty, for all users, staff, occupants, Fire Tender, Emergency services, Refuge collections, and the like.	Item	1		
	Building Regulations				
E	The contractor shall ensure that all work is in full compliance with the current Building Control Regulations 1990 and the 2005 Building Regulations current at date of tender, whether or not such itemised requirements are stated on the Drawings, Specifications, or Bill of Quantities	Item	1		
	Building Control Regulations 2014				
F	The contractor shall make himself aware of and satisfy all the requirement under the new building control regulations as required	item	1		
G	The inspection requirements set out in this document do not in any way relieve, replace, or reduce the builders duty to supervise the works.	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) Building Control Regulations 2014				
	Coordination of tests, inspections & records				
A	the appointed Builder shall meet and coordinate and update the Inspection Notification Framework and preliminary Inspection Plan with the builders construction programme.	Item	1		
B	the Preliminary Inspection Plan is updated to show the agreed inspection milestones	Item	1		
C	all elements identified in the Inspection Notification Framework to be made available for inspection at each milestone (a) complete, (b) not concealed (c) safely accessible.	Item	1		
D	the Builder shall facilitate random inspections by the Assigned Certifier, Ancillary Certifiers and/or Building Control Authority as if such inspections were identified in the Inspection Notification Framework.	Item	1		
E	the Builder to provide in a timely manner all certificates and tests for materials, products and assemblies	Item	1		
	Advance notice and time for inspections:				
F	due consideration shall be given by the Builder for inspection notices . No claims for extension of time or financial claims shall be considered for delays arising out of inspection or re-inspection requirements.	Item	1		
G	the Builder shall ensure advance notifications are issued with respect to works to be inspected that are identified in the Inspection schedule. The minimum advance notice required for inspection of items of works is 5 working days	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) Building Control Regulations 2014				
	Re-Inspections/Follow up inspections				
A	the minimum notice required for re-inspection of items of works not complete or requiring remedial works shall be 3 working days.	Item	1		
B	the Assigned Certifier shall without delay notify the Builder through the CA/ER of any incomplete work at a given milestone identified in the Inspection Notification Framework. Note chain of communication may lead to delays.	Item	1		
C	the Builder shall diligently ensure that any incomplete areas of given milestones are completed and that such works are kept available for inspection again, or until a record of completion is furnished, as may by required by the Assigned Certifier.	Item	1		
D	the Builder shall diligently ensure that any areas of non compliance are rectified and that such works are kept available for inspection again, or until a record of rectification is furnished, as may by required by the Assigned Certifier.	Item	1		
E	the Main Builder shall ensure all tests and certificates for materials, components and assemblies listed in the Inspection Notification Framework are undertaken in a timely way. Any test failure shall immediately be made known to the ER/AC, the materials/works in question shall be replaced/rectified and retested undertaken prior to proceeding with subsequent work.	Item	1		
F	It is the responsibility of the Builder to coordinate and supervise the works and no claim for delay or cost shall arise from the requirement to re-inspect.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) Building Control Regulations 2014 **(Cont) Re-Inspections/Follow up inspections**				
A	The Contractor shall note that Certificiation required under B(C)AR is to be submitted on an interim basis. This is a precondition for interim payment for the relevant sections of work.	Item	1		
	Non-Conformance				
B	Materials & Workmanship- contract clauses	Item	1		
C	Contract /Works Requirements- contract clauses	Item	1		
D	Missed Inspections- Ultimately they are recorded on the completed Preliminary Inspection Plan and registered with Building Control.	Item	1		
	Builders Progress Records				
E	the Builder shall maintain progress records and inspection records prepared by him prepared in accordance with the Method Statement submitted at tender as set out in this document	Item	1		
F	the Tenderers shall include in their tender costs for the provision of progress records as the works proceed	Item	1		
G	Method of Recording	Item	1		
H	Promptly provide a copy to the Assigned Certifier of all progress records and inspection records prepared by the Builder and the Ancillary Certifiers	Item	1		
J	At completion the Builder shall issue the AC a copy of the records prepared by the Builder and the Ancillary Certifiers.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) Building Control Regulations 2014 **(Cont) Builders Progress Records**				
A	the Builder shall also retain in his own central office all records prepared by the Builder and the Ancillary Certifiers for a minimum period of 6 years.	Item	1		
B	one hardcopy and/or softcopy of all records shall be issued 5 days in advance of the nominated completion date.	Item	1		
C	the record should include evidence of the successful execution of the Builders method statement on supervision including tests, check sheets, photographs and memos. All evidence shall be indexed by location and date.	Item	1		
D	acceptance of such records shall not constitute approval or imply that their content has been examined.	Item	1		
	The tendering contractors shall submit the following documentation as part of their tender. Failure to do so may invalidate the tender:				
E	builders Competence Assessment	Item	1		
F	Sub-Contractor/Specialist Competence (Ancillary Certifiers) Assessment	Item	1		
G	builders Method Statement	Item	1		
H	Tenderers shall note that Substantial (Practical) Completion for this contract is contingent upon, amongst others, the successful registration of the works on the Building Control Management System. (Refer also to sub-clause 1.1 of the Conditions of Contract for other necessary prerequisites in obtaining Substantial Completion)	Item	1		
J	Tenderers shall note that this project shall require a Prior Notification of Completion to be submitted to the Building Control Authority in advance of completion	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) Building Control Regulations 2014				
	(Cont) The tendering contractors shall submit the following documentation as part of their tender. Failure to do so may invalidate the tender:				
A	The Builder shall provide 4/6 weeks in advance of the nominated completion date all completed and/or prospective documentation and confirmations for Registration. The Assigned Certifier and the Builder shall cosign the Completion Certificate as set out in Appendix F4	Item	1		
B	The Assigned Certifier is responsible for uploading Certificate of Compliance on Completion	Item	1		
C	The Assigned Certifier and Builder shall then lodge/upload the documentation onto the Building Control Authority system.	Item	1		
D	Notwithstanding any statutory duty to retain same, in advance of project completion, the Builder shall issue to the Assigned Certifier a copy of all inspection records retained by the Builder during the course of the project	Item	1		
	Commencement Notice				
E	The Assigned Certifiers, are to submit a Commencement Notice, fully completed, has been submitted to the appropriate Local Authority, not less than 14 days and not more than 28 days before actual commencement on site. Such commencement can be defined as site strip.	Item	1		
F	The Contractor will issue the Commencement Notice to the Local Authority after consultation with the Employer's Representative.	Item	1		
G	The Assigned Certifier is to be responsible for submitting Commencement Notice, however, a minimum of 2-4 weeks shall be allowed for compiling this submission as part of the Commencement Notice. The Contractor shall take cognisance of same, and include for this within the overall Contract Programme.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) Commencement Notice				
A	"Undertaking by Builder" shall be completed by the Contractor, and submitted with the Commencement Notice. The Contractor shall allow for all necessary Costs associated with same in his tender.	Item	1		
	Tenders, Unpriced Items				
B	The Contractor at the time of tendering, must furnish the Bill of Quantities, completed and signed by an authorised person, fully priced in ink. Pricing in pencil is not acceptable.	Item	1		
C	No Tenderer will be remunerated for any trouble or expense incurred in the preparation of his tender	Item	1		
D	The Bill of Quantities, hard copy, fully priced in INK, must be submitted at the time of tendering.	Item	1		
E	The lowest or any tender will not necessarily be accepted	Item	1		
F	Costs for items which are not priced shall be deemed to be included in other priced items in the Bill of Quantities	Item	1		
G	Please note that in accordance with the Construction Industry Council (CIC) Practice Note CIC-1/2000 this Bill of Quantities must be priced in Euro only	Item	1		
	Customs Duties				
H	The Contractor will be deemed to have included in his tender for all Customs and other duties legally payable at the Designated Date.	Item	1		
	Special conditions				
J	1. Tenderers shall submit, with their tenders, proof of current insurance cover.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) Special conditions				
A	2. Tenderers shall submit with their tenders, details of their Management Organisational Structure. Particulars of head office and site management must be shown separately.	Item	1		
B	3. Tenderers shall submit, with their tenders, a detailed Curriculum Vitae of the Site Manager whom they propose to use on the project.	Item	1		
C	4. Tenderers shall submit, with their tenders, a tender programme showing all work activities up to the period of Substantial Completion.	Item	1		
D	5. Tenderers will be deemed to be using those products given as examples in the specification where not otherwise stated.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Programme of Work				
A	When requested by the Employer's Representative, the lowest evaluated Contractor shall submit, before the 'starting date', a detailed Programme of Work in box chart form for the completion of the works within the date for Substantial Completion. The Programme shall comply fully with the requirements as set out in Clause 9.1 of the Conditions of Contract, and shall include all necessary programme contingencies as set out in the Schedule. The contractor is to provide two copies of the programme for the 'Employers Representative', and is to keep one further copy available for inspection in the site office. The contractor is required to review and update the programme at monthly intervals and modify to take account of circumstances which have affected the programme. Two copies of the revised and updated programme to be issued to the 'Employers Representative' .The Contractor must also submit, at the same time, a detailed network analysis in support of his programme. The Programme should contain details of resources needed for each Phase of the Programme. The Programme of Work must be agreed with the Employer	Item	1		
	Tax Clearance Certificate:				
B	It will be a condition for the award of Contract that the firm must be able to produce promptly a Tax Clearance certificate (unless he has a Sub-Contractor's C2 Certificate.)	Item	1		
C	In the case of a non-resident, a statement from the Revenue Commissioners will be required	Item	1		
D	All Sub-Contractors must produce a C2 Certificate to the Contractor, and be properly registered for V.A.T. before they commence on site	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Time for Completion				
A	The Contractor shall, subject to and in accordance with the conditions of contract, be required to complete the works in the time stated in the Tender & Schedule of being given possession of the site.	Item	1		
	Damages				
B	Liquidated and Ascertained Damages under the Conditions of Contract will be as set out in the Schedule to the Contract.	Item	1		
	Or Equivalent Proprietary Names, Rates/Manufacturer and Type:				
	Important Note				
C	In these specifications trade names and/or suppliers are sometimes used for the purpose of brevity and clarity of technical, aesthetic and functional intent. Such references are for the conveniences of the tenderer in clearly indicating the standard of technical, aesthetic and functional requirements sought by the specifier. The intention is not to favour one product over another or to eliminate other products/suppliers.	item	1		
D	Other materials/suppliers may be put forward for consideration as equivalent materials to those stated in the specification	item	1		
E	Approval for substitution of equivalent materials/suppliers will be given where the alternative material/supplier are demonstrable equal in full accord with the original specification	item	1		
F	Equivalence of an offered substitution will be judged on the basis of objective, clear and verifiable independent proof of similar compliance with equal standards to those specified.	item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) Important Note				
A	Where appropriate verification is provided through a detailed technical dossier, drawings, data sheets and/or a test report from a recognised body, a material/product substitution will be permitted by the architect who is the client representative. Any increased costs arising whatsoever from such a substitution in terms of redesign, rescheduling, health and safety issues etc. shall be borne by the Contractor.	item	1		
B	Alternative suppliers/installers will need to prove their ability to perform their sub-element part of the main contract through the submission of proof of their technical and/or professional capacity (education, experience, equipment etc.); including their ability to manage in an environmentally sound manner such as EMAS or other certified environmental management systems or details of such measures taken in previous contracts.	item	1		
C	The contracting authority, through its architect who is the client representative, will determine on a case by case basis, from a technical, aesthetic and functional perspective, what constitutes an equivalent standard/product. Verification will take place only after the award of contract, as part of the contract management regime. Sufficient time is to be allowed to check submissions and provide samples as indicated in this specification.	item	1		
D	When the contractor proposes an equivalent product , they shall present Data sheets for same in strict accordance with the format of Data sheet in the Architects/Engineers Specification so that like with like an comparison can be easily made to enable a decision in a timely manner	item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	DEFINITIONS AND EXPLANATIONS				
	Headings:				
A	The clause headings used in the Preliminaries section of the Bill of Quantities/Pricing Document shall not be deemed to be part of the text.	item	1		
	Approved:				
B	"Approved" shall mean approved in writing by the Employers Representative (ER).	item	1		
	Instructed:				
C	"Instructed" shall mean instructed in writing by the ER.	item	1		
	IS and BS:				
D	"IS" or "BS" followed by a number means respectively the Irish or British Standard Specification relating to a particular product.	item	1		
	SIS:				
E	"SIS" followed by a number means the Swedish Standards Institution Specification relating to a particular product.	item	1		
	DIN:				
F	"DIN" followed by a number mean the German Standard Specification relating to a particular product.	item	1		
	ASTM:				
G	"ASTM" followed by a number means the Standard Specification relating to a particular product published by the American Society of Testing Materials.	item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Manufacturer and Type:				
A	Where "Manufacturer" is used in the specification of materials it shall mean the firm under whose name the particular product is marketed. Where "type" is used it shall mean the proprietary brand name, reference or other quality by which the product is identified.	item	1		
	Proprietary Names:				
B	The phrase "or equivalent" shall be deemed included whenever materials are specified by proprietary name.	item	1		
	Formwork:				
C	The term "formwork" shall be deemed to include falsework.				
	DEFINITIONS AND EXPLANATIONS				
D	"FIGURES" in descriptions are millimeters unless qualified by a unit of measurement or by a word or phrase indicating a reference e.g. B.S. pipe, grade, or are associated with a dash e.g. rebates - 2. A figure associated with a dash gives the number of times the condition described occurs.	item	1		
E	The term "INCLUDED ELSEWHERE" qualifying any part of a description means that provision is made elsewhere in these Bills of Quantities for pricing the part so qualified.	item	1		
F	The term "FIXING BY" used in connection with any method of fixing is a description of fixing method only and excludes the fixing devices.	item	1		
G	"HOLES": The provision of holes is deemed to be included in work described to be fixed with screws.	item	1		
H	The term "PLUGGING" means the provision and fixing of approved proprietary plugs or, at the Contractors discretion, fixing by approved mechanical means.	item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) DEFINITIONS AND EXPLANATIONS				
A	Descriptions of "FINISHINGS" applied to new surfaces is deemed to include the preparation of these surfaces to receive the finishings.	item	1		
B	The phrase "MANUFACTURER'S RECOMMENDATIONS" means the manufacturer's recommendations or instructions, printed or in writing an current at the designated date.	item	1		
C	The phrase "AND THE LIKE" means similar/ equivalent work to that described in accordance with the groupings indicated in the Agreed Rules of Measurement.	item	1		
D	"AS DESCRIBED": To avoid long descriptions and repetition, certain descriptions of measured items refer to the Specification by using the words "As described"; whether so referred to or not, all instructions and information contained in the Specification shall be deemed to have been taken into consideration in pricing the whole of the Bill of Quantities/Pricing Document.	item	1		
	Tender Prices:				
E	Tender prices shall include for all labour and materials required for the execution of the works and shall include for all costs in connection therewith, such as freight and transport, insurance of goods and persons, taxes, duties and other such charges current at date of submission of tender and for all charges arising from statutory legislation affecting the cost of labour. The responsibilities regarding knowledge of the operation or amount of any of these charges shall lie with the tenderer and no allowance shall be made for them after submission of tender.	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Award of Contract:				
A	Prior to awarding this Contract the Contractor whose tender is in all respects considered suitable for acceptance must produce within seven days of being given notice of such requirements a tax clearance certificate all in accordance with the procedures laid down by the Minister for Finance and the Revenue Commissioners.	item	1		
B	In the case of a firm which is nonresident in the State it will be required to produce a statement (in lieu of a tax clearance certificate) from the Revenue Commissioners that it has satisfied them as to its suitability on tax grounds to be awarded the contract.	item	1		
C	The tender must comply with all the conditions set out in the Contract Documents. The acceptance of any tender is subject to the approval of the Employer.	item	1		
	Evaluation of Tenders:				
D	As per Instructions to Tenderers	item	1		
	Errors in the Bill of Quantities/Pricing Document:				
E	As per Instructions to Tenderers	item	1		
	Connections to Public mains				
F	The Contractor must obtain permission from the relevant Local Authority to enable him to make connections to the public mains. Pay all costs and charges in connection with same and make good all work disturbed to the satisfaction of the Local Authority Engineers	Item	1		
	Deliveries				
G	The Contractor shall consult the convenience of anybody who may be affected by the Works with regard to suitable times for carrying out the works, making deliveries, etc.	Item	1		
				To Collection €	**NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Project Photographs				
	Aerial Photographs				
	The Contractor is to produce Aerial Photographs of the entire Site, its adjacent boundaries and Works Areas, for the ER's Approval. The medium used is to be both conventional and digital formats; date and time recorded:-				
A	One Full set prior to commencement of any works on site	Item	1		
B	One Full set PER CALENDAR MONTH for the entire Contract duration.	Item	1		
C	One Full set at Substantial Completion.	Item	1		
	Progress Photographs				
D	The contractor shall submit a minimum of 24 number digital-format site photographs (with date and time recorded) describing the current work areas, to coincide with each progress report as per sub-clause 4.10 of the Conditions to Contract. Hardcopy prints required also with Progress Reports.	Item	1		
	Levels				
E	Before the Contractor commences work and before the existing ground is disturbed, the Contractor shall confirm in writing his agreement that all existing levels as indicated on the drawings are correct prior to undertaking any works on site.	Item	1		
F	If the Contractor considers that the existing ground levels vary from those shown on the drawings he shall seek clarification and instruction from the Employer's Representative	Item	1		
G	Failure by the Contractor to comply with this requirement will be taken to indicate that no difference between existing levels and those indicated on the drawings exists	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Works beyond the Boundary of the Site/ on existing main roads				
A	Provide where work is executed beyond the boundary of the site in public areas for adequate watching and lighting, traffic signalling; temporary barricades walking platforms and warning notices sufficient to ensure the safety of all persons and removing same on completion, giving notice to the Local Authority, paying their fees and charges and carrying out the work to their satisfaction	Item	1		
B	Provide also for maintaining in working order all services, conducting, telephone cables etc and for making good any damage occasioned thereto by reason of these works to the satisfaction of the Authority concerned.	Item	1		
C	The contractor shall be required to submit a detailed traffic & Pedestrian management plan compiled by suitable qualified professional/ Engineer. The contractor shall be required to fully comply and implement the Traffic & Pedestrian Management plan on site and include for all associated costs.	Item	1		
	Convenience of Others				
D	The Contractor shall consult the convenience of anybody who may be affected by the work with regard to users of any rights of way and the approaches to adjoining property, suitable times for making deliveries and all other matters affecting them	Item	1		
	Sites of Archaeological/Historical Importance				
E	Not applicable	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Employer's Representative Inspection				
A	Before placing foundations, laying drains, filling trenches, pouring reinforced concrete and otherwise proceeding with work that will cover and conceal previous work, the Contractor shall give early notice in writing to the Employer's Representative and shall afford him an opportunity of inspecting the previous work	Item	1		
B	Approval given at such inspection will not relieve the Contractor from full responsibility for the quality of the work throughout	Item	1		
	Progress meetings				
C	Regular progress meetings will be held at Fortnightly intervals throughout the duration of the Contract and a responsible representative of the Contractor will be required to attend in addition to his senior staff and, if required by the Employer's Representative representatives of any domestic Subcontractor and principal material suppliers.	Item	1		
	Records				
	The Contractor shall provide site records in hardcopy and electronic format each week for the Employer's Representative and Quantity Surveyor. Site records to comprise the following:-				
D	(a) A daily record of the number and description of tradesmen and labour employed on the works	Item	1		
E	(b) A daily record of all plant, i.e. number, type and capacity	Item	1		
F	(b) A daily record of all materials and goods including name of supplier, delivery docket number etc.	Item	1		
G	(c) A daily record of wet hours, during which time work was prevented by bad weather	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Protection of Adjoining Property				
A	The Contractor shall provide everything that may be necessary for the protection and safety of adjoining property, while carrying out the works. The Contractor shall alter, adapt and maintain, as necessary, any temporary works required in this connection and finally clear away and make good	Item	1		
B	The Contractor will be held responsible for any damage to adjoining property and any other properties adjacent to the site, which may be caused by the execution of the works and he is to provide any neccessary protection for this purpose and remove same when no longer required and make good any damage at his own damage. All excavation work within 3m of adjoining structures shall be carried out by hand	Item	1		
C	Before commencement, the Contractor shall undertake a condition survey of adjoining buildings within close proximity of the Works, together with all adjoining boundaries, footpaths and roads (not subject to upgrade). A copy of this survey & associated Report shall be forwarded to the Employer's Representative.	item	1		
	Works after Substantial Completion				
D	Works carried out by the Contractor after Substantial Completion shall be by prior arrangement with the Employer and in full conformity with their limitations and restrictions including hot work permits, wearing of name tags, restricted use of facilities, general housekeeping and security requirements	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Programme, Bar Chart				
A	The Contractor will, before the 'Starting date' submit without delay a properly prepared construction programme together with full supporting network analysis techniques for the completion of the works within the Contract period, in a form to be approved by the Employer's Representative. The Programme shall comply fully with the requirements as set out in Clause 9.1 of the Conditions of Contract, and shall include all necessary programme contingencies as set out in the Schedule, and must clearly and explicitly set forth the sequence of all operations (including those of sub-contractors) and the time limits within which the Contractor proposes that each operation shall be commenced and completed, including amongst others the critical path. Upon production of the programme, the Contractor shall distribute copies of the programme to all members of the design team.	item	1		
	Programme Updating				
B	The Contractor must keep the construction programme up to date and make copies available to all members of the design team immediately prior to the site meetings along with supporting network analysis. The programme must include, inter alia, actual activity durations against estimated durations together with particulars of labour, materials, plant resources and the like. Copies of the programme must be displayed in the various site offices.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Method Statement				
A	The Contractor is required to submit, post tender and pre-construction stage, a properly prepared method statement in a standard format to the Architect. The method statement must clearly demonstrate the contractor's proposed sequence and method of working together with the planned resources required to execute the works. This shall include site set up details, location of offices/site hut, material storage, protection for public and pedestrian, traffic management, waste collection and disposal, site maintenance etc.	Item	1		
	Setting Out				
B	The Contractor shall set out the Works and keep them correct. Opening up and excavation shall not be commenced until the Engineer/ Employer's Representative has inspected the setting out. Two days notice is to be given to the Architect to check the setting out. The checking of any setting out or of any line or level by the Employer's Representative or the Clerk of works (if any) shall not relieve the Contractor of his responsibility for the correctness thereof. Discrepancies between specification and drawings should be brought to the Architect's attention prior to the work starting on site.	Item	1		
	Setting Out & Coordination				
C	The Contractor shall be responsible for full setting out and coordination of all elements, including verification of dimensions and interfaces with all disciplines.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Snagging:				
A	Prior to notifying the ER that the Works are ready for Substantial Completion inspection, the Contractor is deemed to have completed his own snagging and de-snagging procedures. These shall, at a minimum, comply with the requirements as set out in the Engineers and Architects Specifications.	item	1		
B	This shall incorporate the completion of all Public, semi-public and private hard and soft landscaping areas to allow uninterupted safe access/egress, together with all services and utilities fully operational, commissioned and certified.	item	1		
	Notice of Completion				
C	Give the Employer's Representative at least three weeks notice of the anticipated dates of Substantial Completion of the whole or parts of the works	Item	1		
	Notice to the Quantity Surveyor				
D	Give reasonable notice to the Quantity Surveyor before covering up any work which the Quantity Surveyor may require to be measured.	Item	1		
E	The Contractor is to produce photographic record of any work, prior to being covered up, which may lead to the instruction of a Change Order by the Employer's Representative. The use of digital photographs will NOT be permitted for the use of recording variations, all photographs are to be date and time recorded.	Item	1		
	Pipe course				
F	Pipe, cable and wire courses shall be laid out by the Contractor as early as practicable for approval by the Employer's Representative and laying or fixing shall not be commenced without such approval.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) Pipe course				
A	Existing pipe, cable or wire courses interfered with during the execution of the work shall be reinstated if, when and as required to the Employer's Representative satisfaction.	Item	1		
	Materials and Workmanship				
B	The materials and workmanship shall be to the satisfaction of the Employer's Representative and shall be the best of their respective kinds. Materials shall comply where applicable to the current Irish or British Standard. All trade practices customary in ordinary good quality work shall be observed so as to ensure a sound and satisfactory job. All materials shall be used, applied and fixed strictly in accordance with their manufacturer's instructions, together with all necessary appliances, accessories, etc., as may be recommended by them. All work shall be carried out by qualified, experienced and competent tradespersons under the supervision of the Contractor or reliable foreperson. Workmanship shall comply with good workmanship and building practices.	Item	1		
C	In every case where in this Specification, materials, appliances, or fittings of special design, manufacture or description, patented or otherwise, are described, or the names of the manufacturers or agents are given, it is to be clearly understood that such references are inserted solely for the guidance of intending contractors with respect to the nature and quality of the articles or services required.	Item	1		
D	The term "Standard" in the Specification means that the articles or services specified shall conform to the latest appropriate Irish Standard Specification or where such is not available to the appropriate British or European Standard Specification.	Item	1		
	Samples				

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) Materials and Workmanship				
A	Samples of all materials, manufactured articles and executed work shall be submitted to the Employer's Representative for approval before adoption. Such approval will not relieve the Contractor from responsibility for any defects.	Item	1		
	Submission of Samples				
B	If requested by the Employer's Representative, samples of all materials proposed to be used for the works shall be submitted to him, together with the name and address of the supplier and such information, instructions and directions as the supplier has issued. Samples shall then be subject to the Employer's Representative approval prior to the delivery of the materials to the site. All materials delivered to and used upon the works must be at least equal in quality to the same, and the Contractor shall ensure that he complies with all manufacturer's instructions and recommendation. Any materials condemned by the Employer's Representative as unfit for use in the works shall be immediately removed from the site at the Contractor's expense.	Item	1		
C	The Contractor shall include here for supplying the samples requested in the specifications.	Item	1		
D	All materials and prefabricated items shall be manufactured and tested in accordance with the specified requirements. When evidence of conformance depends solely on inspections and tests performed by a Sub-Contractor, Manufacturer, Supplier or independent inspecting authority, the Contractor shall ensure that such evidence is satisfactory and that appropriate records are maintained.	Item	1		
E	No materials or prefabricated items shall be used in the works until it has been verified that they comply with the specified requirements	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) Submission of Samples				
A	Where appropriate, all materials and prefabricated items delivered to the site shall bear the Manufacturer's name, brand name, or any other detail that may be required to verify the exact nature of the material or item and relate it to the specified requirements.	Item	1		
B	Where applicable, materials and prefabricated items shall be obtained from Suppliers and Manufacturers who have been assessed by an independent certification authority accredited by the National Accreditation Council for Certification Bodies.	Item	1		
C	Where applicable, materials and prefabricated items shall bear the British Standards Institution Certification mark, the British Board of Agreement Certification mark or other appropriate certification mark.	Item	1		
D	Transportation, handling and storage of materials and prefabricated items shall be controlled to prevent mis-use, damage or deterioration.	Item	1		
E	The Contractor shall operate quarantine procedures for the identification and isolation of materials and prefabricated items that do not comply with the specified requirements.	Item	1		
F	Works test certificate shall include, whenever applicable, the location in the works or the delivery or batch which the sample represents.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) Submission of Samples				
	Samples				
A	Where approval of commodities is specified, submit samples. Do not confirm orders for commodities until approval has been obtained. Retain approved samples on site for comparison with commodities used in the works. Remove when no longer required. Where samples of finished work are specified, obtain approval before proceeding with the works. Remove when no longer required.	item	1		
B	The Contractor shall allow here or elsewhere for all costs that may be incurred in providing the following non-exhaustive list of sample panels. Please refer to specifications and other Works Requirement details:	item	1		
	Architectural				
C	Samples of materials and finishes to be provided as requested and referenced with the Architects Specfication	item	1		
	Civil & Structural Engineering				
D	Allow for all samples as per the Civil & Structural Engineering Works Requirements	Item	1		
	Mechanical & Electrical Engineering				
E	Allow for all samples as per the Mechanical Engineering Works Requirements	Item	1		
F	Allow for all samples as per the Electrical Engineering Works Requirements	Item	1		
	Other				
G	Allow for all other samples	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) Submission of Samples				
	General				
A	It should be noted the above quantities are based upon the initial required sample, however, should the samples proposed not comply witht he Works Requirements, subsequent samples maybe requested by the ER, until such time as the sample is compliant with the Works Requirements and to the full satisfaction of the ER.	item	1		
	Sample Rooms:				
	N/A				
	Concrete/Tarmac/Paving Finishes and the like				
B	Contractors attention is drawn to Architects and Structural Engineers Specification and the high standards of finish and tolerances which must be provided where specified.	item	1		
C	No Patching of finishes/structures will be accepted. Contractor shall remove, dispose, and re-construct defective areas of finishes/structures.	item	1		
	Standard Tests				
D	Testing to be provided as requested and referenced with the Architects Sprecification	item	1		
E	Testing to be provided as requested and referenced with the Engineers Specifications	item	1		
F	The Contractor shall make such standard tests of concrete, blockwork, mortar, steelwork and other materials as set out in the Specification or as the Employer's Representative may direct.	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) Standard Tests				
A	The cost of all on and off site tests, all testing fees and charges and any apparatus required, or the use of such shall be borne by the Contractor. The Contractor shall also bear the cost of forming concrete test cubes and transporting the cubes for testing.	item	1		
B	Pendulum test for floor tiles and polished conc floor.	item	1		
C	Hose test to the glazed facade.	item	1		
D	Testing of concrete as set out in Engineers Concrete specification i.e. cube testing	item	1		
E	Weld testing as set out in HL Steelwork specification	item	1		
F	Bolt pull out tests as required	item	1		
G	Concrete samples for colour and finish (where advised by architect)	item	1		
H	Electronic thermographic building integrity test as per Architects Specification	item	1		
J	Air permeability testing as per Architects Specification	item	1		
K	Air testing shall be carried out by an independant approved contractor	item	1		
	Testing				
L	Allow for testing the whole of the works during the duration of the Contract and clean down and leave prefect on completion.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) Testing				
A	The Contractor shall keep detailed records of where opening up or testing takes place. These records will consist of a written description of the location. Additionally, details of what was discovered and a record of decisions made and what procedure was followed as a result. These records shall be handed over to the Employer's Representative, Architect, Engineer and Quantity Surveyor (as appropriate) at site meetings.	Item	1		
B	4 nr in-situ pull tests	Item	1		
	Products				
C	All Tenderers shall submit a detailed list of the products they intend to use for evaluation where they differ from the examples given in the specification	Item	1		
D	Tenderers will be deemed to be using those products given as examples in the specification where not otherwise stated	Item	1		
	Certificate of Standard				
E	All materials and goods are to be of the best quality products / materials shall either be certified as complying with the Irish Standard Specification and shall bear the Irish Standard mark or shall be certified to a National Standard of another member state of the European Union which bears an equivalent guarantee of safety and suitability - certification to be by the National Standards Authority of Ireland.	Item	1		
F	Where possible Irish materials must be used.	Item	1		
G	All works and materials required under this Contract shall be in compliance with the requirements of this Specification and the standard referred to herein.	Item	1		
H	Materials for the works shall be of Irish Manufacture wherever such is available	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) Certificate of Standard				
A	The workmanship throughout shall be of a high standard and the materials in all cases the best quality of the kinds specified, all to the approval of the Employer's Representative. In every case where in the specification of materials, appliance or fittings of special design, manufacture or description, patent or otherwise are described, it is clearly to be understood that such references are inserted solely for the guidance of intending Contractors with respect to the nature and quality of the articles or services required	Item	1		
B	The term "Standard" in the specification means that the articles or services specified shall conform to the latest appropriate Irish Standard Specification or where such is not available to the appropriate British Standard Specification	Item	1		
	Latent Defects Insurance				
	Provide for Latent Defects Insurance cover, for all 66 Units, for non-compliance in design, workmanship and/or materials of a functional requirement of the Building Regulations, by Homebond or equivalent to cover:-				
C	Structural Insurance: 10 years cover for the repair of major structural defects;.	item	1		
D	Smoke Penetration / Water Ingress: 5 years cover for remedial work in the event of smoke penetration/ water ingress	item	1		
E	Physical Danger: 5 years cover for certain physical fire safety risks	item	1		
F	Damage: 5 years cover where damage affects the use of a significant portion of the habitable areas for ordinary and reasonable residential purposes	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Proprietary Names, Rates:				
A	Where the phrase "trade names or equivalent" is used the rates or prices shall be held to be based on the particular commodity specified.	item	1		
	High Alumina Cement				
B	Under no conditions whatsoever is concrete containing high alumina cement to be used in any part of the work.	Note			
	Ordering of Materials				
C	The Bill of Quantities shall not be used for ordering of materials. The Contractor shall take his own measurements on site and from the drawings for the ordering of materials	Item	1		
	Removal of Improper Work and Materials				
	The Employer's Representative shall have the power to order during progress of the Works :-				
D	(a) Removal from the site of any materials which in his opinion are not in accordance with the Contract.	Item	1		
E	(b) Substitution of proper materials	Item	1		
F	(c) Removal and proper re-execution (notwithstanding any previous test thereof or interim payment therefore) of any work which in respect of materials or workpeople is not in accordance with the Contract.	Item	1		
	Procurement of Materials				
G	The Contractor is to allow adequate time to source materials, taking into account the requirement to obtain any necessary licenses.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Technical Support				
A	The Contractor shall ensure that full technical support is available from material suppliers for the duration of the contract. Include for all costs in connection with same.	Item	1		
	Vesting Certificates				
B	Within 21 days of acceptance of his/her tender the Contractor shall send to the Employer's Representative a list of the Suppliers from whom the Contractor intends to obtain goods or materials to be embodied in the works and (if not direct Suppliers) the manufacturers of each item of plant to be embodied in the works. The Contractor shall also notify the Employer's Representative promptly in writing of any addition to the list during the course of the works. The list and any additions to the list shall be accompanied by a vesting certificate from each Supplier and manufacturer named. A vesting certificate shall certify that the full ownership (free of any lien or charge) in all goods and materials delivered by or with the authority of the Supplier or manufacturer to the Contractor (whether on the Site of the Works or elsewhere) shall pass irrevocably to the Contractor not later than such delivery notwithstanding any terms of contract of the Supplier or manufacturer and whether or not the Supplier or manufacturer has been paid for the goods and materials. The Contractor shall include with every progress application written evidence that any goods or materials in respect of which payment is requested are the subject of a vesting certificate furnished to the Employer's Representative by the Supplier and (where relevant) manufacturer in accordance with the previous sub-clause. In the absence of such evidence no payment shall be certified in respect of goods or materials	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Patent Rights and Royalties				
A	The contractor shall save harmless and indemnify the Employer for and against all claims and proceedings for or on account of infringement of any patent rights, design, trademark or name or other protected rights in respect of any constructional plant, machine, work or material used or in connection with the Works.	Item	1		
	Measurements				
B	Notwithstanding anything shown on the drawings, the Contractor shall check all dimensions on site before putting work in hand, and shall be responsible for the dimensional coordination of all parts of the work.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Sub-Contractors / Suppliers - Design and Production Information				
A	Certain Sub-Contractors/Suppliers will be required to provide design and production drawings and other information: The Contractor shall make reasonable allowance for the time taken in completing such information, checking, inspection by the Employer's Representative. The Contractor shall take appropriate action to obtain all information which the Sub-Contractors/Suppliers are required to provide. The Contractor shall thoroughly check on the basis of information available, note any comments, discrepancies and divergences and submit to the Employer's Representative. Ensure that any necessary amendments to the information are made in accordance with any comments of the Employer's Representative, and re-submit unless the Employer's Representative so confirms that this is not necessary. If submitted information differs from the Sub-Contract documents, each such difference must be the subject of a request for substitution or Change Order. Should any amendment required by the Employer's Representative be considered to involve a variation, the Contractor shall notify the Employer's Representative without delay and shall not proceed until sub-sequentially instructed. Claims for the extra over cost of such work, if made after it has been carried out, may not be allowed. Obtain final version of all information and submit to the Employer's Representative the number of copies required by him. Distribute additional copies to all affected Sub-Contractors and Suppliers, retain copies for your the Contractors own use and keep at least one copy on site. Ensure that the work is carried out in accordance with this final version	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Ancillary Certificates & Specialist Coordination - Subcontractors / Specialist Works				
A	The Contractor shall coordinate and procure all Ancillary Design Certificates and Ancillary Completion Certificates from Specialist Contractors and Designers	Item	1		
	All statutory obligations				
B	The Contractor shall comply in all respects with all statutory obligations or regulations in carrying out the works.	Item	1		
	Clearance of Site				
C	On completion of the Works and as and when directed by the Employer's Representative, the Contractor shall clear away and remove from the site all constructional plant, surplus materials, rubbish and temporary works of every kind and leave the whole of the site and Works perfectly clean and in a workmanlike condition to the satisfaction of the Employer's Representative.	Item	1		
	Sub-Letting				
D	The Main Contractor must not assign or sub-let any part of the work to others without the written consent of the Employer's Representative.	Item	1		
E	Consent must be applied for in writing, with full particulars, to allow adequate time for enquires to be made, and to complete preparations, depending on the Employer's Representative's decision, before construction works commence.	Item	1		
	Before the Employer's Representative will give his consent for any part of the works to be sub-let, the Main Contractor will have to satisfy the Employer's Representative on the following points :-				

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) Sub-Letting				
A	1. That the result of sub-letting will be to secure higher or more specialist skills than the Main Contractor could reasonably be expected to provide within his own organisation or obtain on the ordinary labour market.	Item	1		
B	2. That sub-letting will not reduce the effectiveness of the Main Contractor's control over the job, or lessen the Site Manager's/General Foreman's authority on the site.	Item	1		
C	3. That any increase in productivity [in the purely quantitative sense] due to labour only sub-contracting will not be accompanied by any lowering of standards of workmanship or exploitation in any other form.	Item	1		
D	4. The Main Contractor will have a proper and binding agreement with the Sub-Contractor, whereby the latter is held to all the relevant particulars of the Specification and agrees to abide by the Employer's Representative decision.	Item	1		
	3.3 Work by Utility Providers				
	Utility Providers and others' Fittings or Equipment				
E	The Contractor will be held responsible for any damage caused through his want of proper care to any of the fittings, equipment or machinery installed by Utility Providers Engineers or other statutory undertakers and their agents.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	Access for Utility Providers and Others to site				
A	The Contractor shall if required allow access to the site and building for the staff of Utility Providers or others carrying out telephone and other installations and employed by or acting on behalf of the Employer. He shall also allow access to the employer's staff connected with this work.	Item	1		
B	The employer intends to permit Utility Providers to install underground services during the progress of the works. Provide reasonable facilities and give at least seven days notice to the 'Employers Representative' of when the works may proceed.	Item	1		
	Inspection for Local Authority Officers				
C	Should a recognised and responsible Officer of a Local Authority desire to see the premises, building or documents, the Contractor shall refer this person to the Employer or the Employer's Representative	Item	1		
	3.4 Work by others engaged directly by the Employer				
D	The Contractor shall note that other contractors and/or specialists maybe employed in/adjacent to the site during the course of the contract.	item	1		
E	These special works will not form part of the Contract and the Building Contractor will not be allowed any profit, cash discount for other work outside the scope of the Contract.	item	1		
	General Attendance on Others engaged directly by the Employer				
F	The Building Contractor shall provide general attendance as herein before described on Specialists employed direct by the Employer.	item	1		
	During Contract Period				

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 3.4 Work by others engaged directly by the Employer				
	(Cont) General Attendance on Others engaged directly by the Employer				
	During Defects Period				
	4. General facilities and obligations				
	4. a Supervision and co-ordination of the works				
	Contracts Manager				
A	The Contractor shall immediately on appointment assign a Contracts Manager who shall have a full authority to act on the Contractor's behalf in connection with the Contract. The Contractor shall notify the Employer's Representative of the name of the person so appointed and of his normal place of work. The Contractor may from time to time by further written notice to the Employer's Representative remove any person from his appointment as the Contracts Manager and appoint another person in his place with effect from a date to be specified in the notice. The Contractor shall at all times until the end of the Defects Liability Period ensure that a person is appointed to act as the Contracts Manager.	item	1		

To Collection € NIL

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 4. a Supervision and co-ordination of the works				
	Site Manager/Foreman				
A	From the commencement of work at the site until the works have been certified as practically complete, the Contractor shall ensure that some suitable person is employed by him at the Site as Site Manager. The Site Manager shall supervise and co-ordinate all work carried out on the site by the Contractor and receive all instructions given by or on behalf of the Employer's Representative to the Contractor at the site. The Site Manager shall be present at the site throughout normal working hours except when on leave, sick, or absent for reasons connected with the proper performance of this Contract. Whenever the Site Manager is absent from the site during normal working hours, a suitable person shall be appointed to act as his deputy. The Site Manager shall not be employed by the Contractor to do work other than work specifically related to the Contract. The Contractor shall notify the Employer's Representative of the person appointed as Site Manager and shall not change such appointment without the prior written consent of the Employer's Representative.	item	1		
B	The Contractor shall ensure that there are at all times on the site sufficient suitably qualified and experienced staff to supervise and co-ordinate all work carried out by the Contractor and to advise and assist the employer in taking possession of the works.	item	1		
	Contractor Employed Community Liaison Officer:				
C	Employ a competent Liaison Officer on site for the full duration of the contract. The appointment of the Liaison Officer shall be subject to the express approval of the Employer's Representative .	item	1		
	The Liaison Officer duties will include, mainly:-				

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 4. a Supervision and co-ordination of the works				
	(Cont) Contractor Employed Community Liaison Officer:				
A	preparing site information boards/reports for liaising with adjoining neighbours/residents.	item	1		
B	agreeing method statements for work areas with the Employers Representative and Design Team.	item	1		
C	attending weekly liaison meetings	item	1		
D	issuing daily progress updates to the Clerk of Works.	item	1		
E	maintaining access and cleanliness for the works and adjoining areas	item	1		
F	A Dedicated contact number(s) is to be provided for reporting of issues that arise outside of normal working hours	item	1		
	Clerk of Works				
G	The Employer may appoint a Clerk of Works who shall be paid by him. Neither the appointment nor the actions of the Clerk of Works will invalidate the responsibility of the Contractor and the Clerk of Works shall have no power to authorise Change Orders.	item	1		
	Workpeople Generally				
H	None but fully qualified, experienced and competent workpeople shall be employed on the Works and the Contractor shall furnish such evidence as the Employer's Representative may require as to the qualifications and competence of any work person. The Employer's Representative shall have the power to have dismissed from site any work person who misconducts him/herself or who is incompetent or negligent. The Contractor shall be responsible for keeping all workpeople under his control and within the confines of the site.	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 4. a Supervision and co-ordination of the works				
	(Cont) Workpeople Generally				
A	Operatives will be required to carry out sample work on site to indicate their expertise. Acceptable operatives should be familiar with and able to handle materials specified and have competence in the various work procedures.	item	1		
B	The Contractor, where circumstances dictate, will be required to provide additional training to operatives where their knowledge is lacking.	item	1		
C	Persons engaged upon the Works should in so far as is practicable and without affecting the efficiency of the work be recruited from the local offices of SOLAS/FAS to the extent that the total labour requirement of the contract exceeds the Contractor's core workforce	item	1		
	Sub-Contractor Co-ordination:				
D	Accept responsibility for the co-ordination, supervision and administration of all sub-contracts and arrange and monitor a programme with each subcontractor and supplier and obtain and supply information as necessary for co-ordination of the work. Arrange and monitor a programme with each public body or other organisation engaged upon work concurrent with the contract and obtain and supply information as necessary for co-ordination of the work.	Item	1		
	Co-ordination of Engineering Services:				
E	The Contractor shall include for the provision of a dedicated full time Services coordinator whose role shall include carrying out the following activities:	item	1		
F	the proper and accurate co-ordination of services	item	1		
G	agreement of service routes/builders work openings	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 4. a Supervision and co-ordination of the works				
	(Cont) Co-ordination of Engineering Services:				
A	liaise at all times with the Services Engineers and Services Specialists	item	1		
B	liaise with the specialist equipment installers during the works	item	1		
C	liaise with the Utility companies (power, telephone, gas, water and the like)	item	1		
D	liaise with relevant Local Authority bodies	item	1		
E	ensure proper and accurate co-ordination of all services	item	1		
F	ensure proper and accurate system of final commissioning, testing and staff training	item	1		
G	ensure proper and accurate system of final commissioning, testing and staff training	item	1		
H	ensure all required certification documents for BCAR requirements are provided in a timely manner for handover	item	1		
J	ensure full and accurate as-built drawings are prepared and signed off for inclusion in the O&M manual	item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 4. a Supervision and co-ordination of the works				
	Co-ordination of Civil Engineering Works:				
A	The site organisation staff must include one or more persons with appropriate knowledge and experience of civil engineering works to ensure compatibility in relation to the Works generally. The proposed person shall be a qualified Engineer with the appropriate qualifications and experience to supervise all civil & structural engineering aspects of the works including fixing of steel reinforcement, concrete, structural steelwork, masonry and drainage. Submit to the Employers Representative, when requested, CV's or other documentary evidence relating to the staff concerned.	Item	1		
	Systems Integration & Interfaces (All Disciplines)				
B	The Contractor shall allow for full coordination and integration of all building systems and structural elements, including all interfaces between architectural, structural and building services works.	Item	1		
	BCAR Inspection & Programme Coordination				
C	The Contractor shall allow for full compliance with the Preliminary Inspection Plan and Inspection Notification Framework, including advance notices, coordination of inspections, preparation of method statements, and allowance within the programme for inspections, testing and certification	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 4. a Supervision and co-ordination of the works				
	Social Benefit Requirement				
A	The Contractor, during the construction stage, will ensure that a minimum of 10% of the aggregate number of person weeks, i.e. the amount of work done by an individual work based on a 39 hour working week, is to be carried out by contractors personnel who are registered on a national unemployment register within the EU for a continuous period of at least 12 months immediately prior to their employment specifically for the purposes of this Contract ("Relevant Workers"). Personnel who commence employment more than four weeks prior to the issue of the Letter of Acceptance shall not be considered a Relevant Worker. The Contractor are to use all reasonable endeavours to ensure that these objectives are met	Item	1		
B	The Employer undertakes to assist the Contractor and any Specialists/Sub-contractors to provide employment opportunities by providing details of agencies that can assist in the recruitment of suitable employees. Any action taken by the Employer, or its agents, does not imply, and must not be deemed to imply any promise to provide suitable labour/agencies, and does not imply and must not be deemed to imply that any individuals or agencies referred to the Contractors are suitable for engagement.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 4. a Supervision and co-ordination of the works				
	(Cont) Social Benefit Requirement				
A	The Contractor will be required to provide regular monitoring information to the Employers Representative, which is to be provided every 3 months for the duration of the construction stage. The primary function of the monitoring information will be to enable the Employer to measure and produce reports on the Contractors performance against the social benefit performance measures. The format of the monitoring reports will be agreed between the Employer and the Contractor. To comply with the Data Protection Act, all monitoring and training documents must include a statement authorising the Contractor to disclose personal data to the Employers Representative/Employer for the purposes of monitoring performance and reporting on the implementation/outcome of the inclusion of Social Benefit requirements	Item	1		
	4. b Plant, tools and vehicles				
	Provide all plant, tools, equipment and vehicles required for the execution of the work				
B	bringing to site, installing and removing on completion	item	1		
C	maintaining on site for the duration of the works	item	1		
D	The Contractor shall give the Employer's Representative, Architect, Clerk of Works and Quantity Surveyor each week a daily return of the number, type and capacity of all plant, tools and equipment currently operating on the works.	item	1		
E	Plant and scaffolding etc. shall not be removed until ordered by the Employer's Representative and when so ordered it shall be removed expeditiously.	item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	4. c Scaffolding				
	Scaffolding				
A	bringing to site, erecting and removing on completion	item	1		
B	adjusting and maintaining on site for the duration of the works	item	1		
C	The Contractor is required to give a written undertaking to the Employer's Representative that only qualified, experienced and competent Scaffolders will be employed upon the works. The Contractor must furnish the necessary evidence to the Employer's Representative prior to the carrying out of scaffolding works.	item	1		
D	Provide as necessary all general scaffolding required for the execution of the works. Include for protective dust proof and water proof sheeting on all scaffolding. The Contractor shall also make provision for properly constructed access points (minimum 4nr) within the said scaffolding to facilitate inspection of the Works by the consultants. The scaffolding and the erection of same must comply with BS 5973 or the latest British Standard and all other associated construction regulations and the like.	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 4. c Scaffolding				
A	The Contractor shall be responsible for and shall include in prices for the design, the erection, the maintenance and removal of all scaffolding to provide a safe means of access and egress from the works, to provide safe and secure working platforms, and to protect site personnel ,the public and the occupants of adjoining properties, scaffolding shall comply in all respects with B.S. 5973 and 5974 and with the Safety, Health and Welfare at Work (Construction) Regulations 2006 and subsequent ammendments including the components, construction, erection, inspection and maintenance of the scaffolding, and the keeping of records of inspections and tests; examine and ensure the structural stability of the elements of the building before attaching scaffolding and equipment thereto	Item	1		
	Specialist Scaffolding				
B	The contractor shall provide specialist scaffolding, with and including Design of same and submitting design to Employers Representative , method statements etc for approval	Item	1		
C	The Contractor shall ensure that all scaffolding uprights and the like are encased with foam insulation/uPVC pipes to a height not less than 2.0m.	item	1		
	4. d Site Administration including the provision and keeping of all statutory records				
	Site Administration				
D	The Contractor shall ensure that there are at all times on this project sufficient suitably qualified and experienced staff to administer all work carried out by the Contractor.	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 4. d Site Administration including the provision and keeping of all statutory records				
A	The Contractor shall ensure that systems and procedures are in place with regard to the provision and maintenance of records in compliance with statutory requirements.	item	1		
	4. e Security				
	Site Security				
B	Provide for safeguarding the site, the works, materials and plant against unauthorised entry damage and theft including providing all necessary watching and lighting for the security of the works and the protection of the public. Make good any damage caused by ineffective protection.	item	1		
	4. f Provision of clearly identifiable site perimeters and surroundings				
	Perimeters and Surroundings				
C	Site perimeters and local surroundings are shown on Architects Site Plan drawings	item	1		
D	Protection of the Public	item	1		
	4. g Provision for protection of the public from site operations and arrangements for protection of third parties and visitors to the site in accordance with all statutory requirements				
E	The Contractor shall effect all necessary measures to safeguard members of the public and all other third parties from the risks and perils associated with all construction related site operations.	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	4. h Transport for workpeople				
	Transport				
A	Provide for obtaining an adequate labour force for the works and include for transporting workpeople to and from the site if necessary.	item	1		
	4. i Protecting the works from inclement weather				
	Protecting the Works				
B	Protect the works, materials and plant from the weather and make good any damage caused.	Item	1		
	4. j Water for the works				
	Water				
C	Provide an adequate supply of clean fresh water for the works and pay all charges.	Item	1		
	4. k Temporary lighting and power for the works				
	Temporary lighting and power				
D	Provide a separately metered electricity supply and provide all equipment for lighting and power for the works and make temporary arrangements for distributing about the site. The contractor shall erect external safety lighting along the pedestrian footpaths. Ascertain independently the available voltage, type of supply, location of supply point(s) and pay all costs. No generators / noisy plant or equipment are to be used on site due to close proximity of nearby residences.	Item	1		
E	Provide all necessary power and fuel for the Contractor's own plant and that of Specialist Sub-Contractors and include for all connections, installation and running costs.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	4. l Temporary roads, hardstandings, crossings and similar items				
	Temporary roads, hardstandings, crossings and similar items				
A	Provide all necessary temporary roads, tracks, hardstandings, crossings and the like and reinstate surfaces on completion. Obtain approval from the Employer's Representative for the location of temporary entrances, hardstandings and crossings required for the works. Comply with the requirements of the Local Authority regarding their maintenance and reinstatement.	Item	1		
	4. m Temporary accommodation for the use of the Contractor				
B	Provide temporary sheds, offices, messrooms and sanitary accommodation required for own use and for use by sub-contractors. Comply with the requirements of the Factories Acts. Make good and fully reinstate on completion all surfaces, vegetation, grassed areas, etc., disturbed or damaged by Contractor's operations during the course of the works.	Item	1		
	4. n Temporary storage areas including suitable and separate storage for dangerous materials or substances				
	Temporary storage facilities				
C	Suitable sheds for the use of the workpeople and the storage of materials shall be provided by the Contractor, maintained during the progress of the Works and removed on completion, the site thereof being made good.	Item	1		
D	Stores for cement and plaster are to be watertight and are to have raised floors to the approval of the Employer's Representative	Item	1		
E	The Contractor's and subcontractors storage huts and the like are to be positioned within the site.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	4. o Temporary telephones for the use of the Contractor				
	Communication Facilities				
A	Provide temporary communication facilities (mobile phones and WIFI Broadband) for your Contractors own use and pay all charges including costs of calls. WIFI Facilities to be available to the Employers Site Office(s) at download speeds not less than 5mb/s.	Item	1		
	4. p Traffic regulations				
	Traffic regulations and management				
B	The Contractor shall ascertain and provide for complying with all traffic regulations and Garda regulations affecting the execution of the works.	Item	1		
C	The Contractor shall note that the works are on existing public roadways which will have to remain open during the works. The contractor shall liaise with the local council, erect all necessary temporary road signage, diversions, temporay traffic lights (if required) etc. which are necessary to complete the works	Item	1		
D	Allow for all Road Opening Licences, permits and the like and all associated costs	item	1		
E	A traffic management plan will have to be prepared by the Contractor and submitted for approval	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	4. q Welfare facilities for work people to be in compliance with fourth schedule of the Safety Health and Welfare at Work (Construction) Regulations				
	Toilet Facilities, Wash Rooms and the like				
A	The Contractor is to provide temporary toilet, wash room and canteen facilities and the like during the course of the works and these must be kept clean at all times and maintained in a proper manner.	item	1		
	4. r Safety Health and Welfare at Work provisions including items for the following:-				
	1. The operation of the requirements of the Safe Pass/SOLAS and Constructions Skills Certificates Schemes				
B	The Contractor shall comply in all respects with the operation of the 'Safe Pass/SOLAS' and 'Construction Skills Certificates' schemes	Item	1		
	2. Safety Officers and all safety supervisors, first aiders, inspectors and certifiers required				
C	The Contractor shall include for a competent person or persons to carry out the duties of Safety Officers and all safety supervisors and first aiders required.	Item	1		
D	The Contractor shall provide everything necessary to comply in all respects with the requirements of the Health and Safety Inspectors and Certifiers.	Item	1		
	3. Tests and certificates on plant and equipment				
E	The Contractor shall include for providing all tests and certificates necessary for plant and equipment operating on the site.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 4. r Safety Health and Welfare at Work provisions including items for the following:-				
	4. Safety signs and signals				
A	The Contractor is to ensure that sufficient supplies of safety signs and signals are present on site. The Contractor shall include for maintaining and keeping these sign and signals in a clean and operable condition throughout the contract period.	Item	1		
	5. Provision of Personal Protective Clothing and Personal Protective Equipment				
B	The Contractor is to ensure that sufficient supplies of personal protective equipment, e.g. safety helmets, steel toe-cap boots and personal protective clothing, e.g. reflective vests/visibility jackets and the like are available for the use of visiting Consultants, clients representatives and indeed the client themselves to the site.The Contractor must ensure that such PPC and PPE is kept clean and in a hygienic condition at all times in readiness for use by the visiting consultants.	Item	1		
C	Operatives shall be required at all times to wear personal protective clothing and personal protective equipment appropriate for the task at hand and to carry out such tasks with the appropriate equipment and procedures required to the Health and Safety Regulations and the safety of others.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 4. r Safety Health and Welfare at Work provisions including items for the following:-				
	6. Provision and maintenance of Emergency routes and exits and designated personnel responsible for emergency procedures				
A	The Contractor is to ensure that operatives and other personnel are made aware of the location of Emergency routes and exits from the site and associated buildings, and the Contractor is required to provide designated personnel responsible for emergency procedures.	Item	1		
	7. Energy distribution installations				
B	The Contractor is to provide for ensuring that all temporary lighting and power for the works is installed and maintained in a safe manner.	Item	1		
	8. Temporary Fire detection and fire fighting systems				
C	The Contractor is to provide necessary fire detection and fire fighting systems, including maintaining in a safe manner and removal upon completion of the works.	Item	1		
	9. Maintenance of appropriate working conditions and work stations				
D	Provide for daily maintenance to ensure that temporary offices, workstations, messrooms and sanitary accommodation for the use of the Contractor are kept hygienic, clean and in a tidy manner.	Item	1		
	10. Provision and maintenance of on site traffic routes				
E	Provide for the identification and maintenance of on-site traffic routes including the provision of adequate watching and lighting; temporary barricades, walking platforms and warning notices sufficient to ensure the safety of all persons and removing same on completion	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 4. r Safety Health and Welfare at Work provisions including items for the following:-				
	11. Provision of first aid equipment and first aid room as appropriate				
A	Provide for first aid equipment and a first-aid room to be located in either separate temporary accommodation or in temporary accommodation already deemed necessary, as appropriate, for the Contractor's own use and for use by sub-contractors or others on site.	Item	1		
	Safety, health and welfare of workpeople				
B	The Contractor shall comply in all respects with the Safety, Health and Welfare at Work Act 2006 & subsequent amendments, and with any relevant Statutory provisions as defined under that Act.	Item	1		
C	The Contractor shall comply in all respects with the Factories and Safety in Industry Acts and any other Acts amending those Acts and with any Statutory Instruments or Regulations issued thereunder. In particular, the Contractor shall comply in all respects with the Safety, Health and Welfare at Work (Construction) Regulations, 2006 & subsequent amendments.	Item	1		
D	The Contractor shall include for the Project Supervisor for the Construction Stage giving Notice to the National Authority for Occupational Safety & Health prior to commencement of work on site in accordance with the first schedule of the Safety, Health and Welfare at Work (Construction) Regulations, 2006 & subsequent amendments.	Item	1		
E	The Contractor is required to identify in his tender any aspect of the project which he considers, as a competent Contractor, to be incapable of being constructed in a reasonably safe way.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 4. r Safety Health and Welfare at Work provisions including items for the following:-				
	(Cont) Safety, health and welfare of workpeople				
A	The Contractor shall complete and return with his tender an official Competence Assessment Form.	Item	1		
B	Further information about safety requirements may be obtained from the National Authority for Occupational Safety and Health	Note			
C	The Contractor shall include for procuring all necessary, "As built" drawings for inclusion in the safety files	Item	1		
	4. s Disbursements arising from the employment of workpeople				
	Provide for all costs in respect of labour including costs of, for example				
D	Social Welfare Acts	Item	1		
E	Conditions of Employment Acts	Item	1		
F	Insurance (Intermittent Employment) Act	Item	1		
G	Holiday (Employees) Act	Item	1		
H	Redundancy Payments Acts	Item	1		
J	Industrial Training Acts	Item	1		
K	Factories Act, Building (Safety, Health and Welfare) Regulations	Item	1		
L	Travelling Time, Expenses, Fares & Transport	Item	1		
M	Guaranteed Time	Item	1		
N	Non-Productive Overtime and Other	Item	1		
P	Expenses in connection with Overtime	Item	1		
Q	Incentive and Bonus Payments	Item	1		
R	Sick Pay Disbursement	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 4. s Disbursements arising from the employment of workpeople				
A	Country Money	Item	1		
B	Pensions	Item	1		
C	SI No 455 of 2017 Sectoral Employment Order (Construction Sector) 2017	Item	1		
D	etc.	Item	1		
	Trade Union Membership, Pension Fund				
E	All workers employed by the Contractor and his sub-contractors shall be members of a recognised Trade Union.	Item	1		
F	The Contractor shall be a fully paid up member of the CIF Pension/Sick Pay Scheme and all payments made in respect of employees must be available for inspection at all times.	Item	1		
	4. t Maintenance of public and private roads				
G	The Contractor shall be responsible for all damage to existing roads and footpaths caused by his own or sub-contractors' or suppliers' transport to and from the site. Maintain the Employer's existing roads and footpaths during the Contract and make good any damage caused by site traffic or site operations. Protect all underground services encountered during the execution of the works. The Contractor shall make good any damage caused by his own, by sub-contractor's or by suppliers' operations.	Item	1		
H	Take adequate precautions to protect persons and property from damage or nuisance caused by water, smoke, dust, rubbish and otherwise.	Item	1		
J	The Contractor is also to take reasonable steps to prevent the excessive deposit on roads and footways of mud from his vehicles or those of any sub-contractor under the Contract and is to allow for cleaning such deposits as necessary.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 4. t Maintenance of public and private roads				
A	The Contractor shall provide measures during the construction phase to prevent dirt entering onto the school and public road, he shall clean the public roads in the vicinity of the site at least daily and continuously during the Earthworks and demolition stages of the project. The Contractor is to provide a wheel washing facility during the contract located at the site entrance.	item	1		
	4. u Removing rubbish, protective casings and coverings and cleaning the works on completion				
	Removing rubbish etc.				
B	Remove all rubbish from the works as it accumulates and maintain the works in a clean and tidy condition for the duration of the contract. Clean the works internally and externally, remove all rubbish and leave the entire works in a tidy condition ready for occupation or use. Final clean to be carried out by professional cleaning company.	Item	1		
C	The Contractor is to include in his rates for disposing of all materials in accordance with all current environmental and building regulations. Refer to Works Requirements.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 4. u Removing rubbish, protective casings and coverings and cleaning the works on completion **(Cont) Removing rubbish etc.**				
A	The Contractor shall keep the site clean and tidy and make arrangements for the regular removal of rubbish to a properly licensed tip / dump. The Contractor shall clean by brushing and then by hosing all new walkways and roadways used by his crews and vehicles (or those of Specialist Sub-Contractors or Suppliers) at least once per day and as often as necessary to keep the roadways free of dirt, dust and mud. Contractors will provide their own hoses and connections to water supply points approved by the Employer. The Contractor will be required to clear away any builders rubble, debris or waste upon completion of the contract works to a properly licensed tip / dump and make good and reinstate to their original condition any areas during the course of construction.	Item	1		
B	Provide for removing all rubbish, protective casings and coverings etc. arising from his own or any of his sub-contractors operations from the site daily, to a properly licensed tip / dump	Item	1		
C	Provide for cleaning the works on completion, inside and out, removing stains, washing all floors and glass and leaving the whole of the works clean and fit for immediate occupation, to the satisfaction of the Employer's Representative.	Item	1		
D	Further to the cleaning of the building at handover stage, the Contractor is to remove and replace all light bulbs with new or make a reasonable financial offer to the Client for same.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 4. u Removing rubbish, protective casings and coverings and cleaning the works on completion				
	Clearance of Site				
A	On completion of the Works and as and when directed by the Employer's Representative, the Contractor shall clear away and remove from the site all constructional plant, surplus materials, rubbish and temporary works of every kind and leave the whole of the site and Works clean and in a workmanlike condition to the satisfaction of the Employer's Representative	Item	1		
	4. v Compliance with Waste Management statutory obligations				
	Waste Management				
B	Prior to Contract award, the Contractor shall prepare a comprehensive waste management plan (WMP). If during the course of the works, the Contractor becomes aware of changing circumstances or wishes to make changes to the waste management arrangement, then the Contractor will revise the waste management plan (WMP) in advance of the changes taking effect.	Item	1		
C	The Site/Waste Manager will carefully record details of each and every load of waste leaving the site. This is to ensure that there is full traceability of all material to its final destination. This sheet will be completed daily by the Contractor. If there are days that no waste was transported off site, then the contractor is requested to insert "NIL" in the sheets.	Item	1		
D	Please note that the Contractor will obtain signed copies of receipts from the waste facility for each and every load (note that this is the waste facility that accepted the waste).	Item	1		
E	These records will be maintained on site and will be available to the Employers Representative on request	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 4. v Compliance with Waste Management statutory obligations				
	(Cont) Waste Management				
A	The Contractor is required to make the following waste returns to the ER. If the Contractor proposes to reuse materials from the site e.g. reuse of crushed concrete, he shall submit his proposals in writing to the ER and await a response from the ER before taking any of this material off site. The ER may direct the Contractor to prepare an Article 27 Declaration and submit same to the EPA. No direction from the ER may be taken as relieving the Contractor of his obligation to comply with the law of the land. The ER is under no obligation to accept the Contractors proposals and no additional costs/charges shall be due to the Contractor under the Contract as a result of a refusal or delay by the ER in accepting the proposal.	Item	1		
B	The Contractor shall prepare and implement a Construction Waste Management Plan, including segregation, tracking and compliance with statutory requirements.	Item	1		
	Construction and Waste Levy				
C	The Contractor shall comply with the Waste Management (landfill levy) Regulations 2002. These Regulations (the landfill levy) came into force on 1 June 2002. It applies to wastes delivered for disposal at landfill sites, including C & D wastes. C & D Waste which is used in landfill site engineering, restoration or remediation purposes, is exempt from the levy when it is non-hazardous comprising of concrete, bricks, tiles, road planings or other similar materials and is particle size or less than 150mm. Excavation spoil which is used for landfill site engineering, restoration or remediation purposes is exempt from the levy when it is comprised of clay, sand, gravel or stone. The desposition in a quarry is exempt, where such material is in a chemically unaltered state.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 4. v Compliance with Waste Management statutory obligations **(Cont) Construction and Waste Levy**				
A	The Contractor shall liaise with the Environment Section of relevant Local Authority to agree a location for the proper and safe disposal of all waste and excavated materials resulting from the proposed works.	Item	1		
	Construction Phase				
B	The Contractor shall ensure that no appreciable negative environmental impacts occur because of the construction works associated with this development. The Contractor shall give particular attention to dust, noise, odour, litter, dirt on public roads, surface water runoff, spillage of fuel oils. Operations liable to produce dust shall be screened and dust suppression devices used where appropriate. Fuel oils shall be adequately bunded, with bunds having volumes of at least 110% of the volume of fuel stored. Prior to commencement of Contractor shall submit to the Planning Authority for written agreement, details outlining how these issues are to be addressed	Item	1		
C	The Contractor shall ensure that any excavated material stockpiled on site during construction shall be held in a manner such as to ensure that no silt or run-off from these stockpiles enters any watercourse.	Item	1		
D	Tree felling and clearing of vegetation shall take place outside of the bird nesting season.	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) 4. v Compliance with Waste Management statutory obligations **(Cont) Construction Phase**				
A	All solid wastes arising on the site shall be recycled as far as possible. Materials exported from the site for recovery, recycling or disposal shall be managed at an approved facility. Adequate on site arrangements shall be made to the satisfaction of the Planning Authority for the storage of recyclable materials prior to collection. The Contractor shall ensure that the site and its environs are maintained at all times in a clean and tidy condition. The Contractor shall maintain a register of waste material disposed from the site and records shall be made available for inspection by the Local Authority at all reasonable times.	Item	1		
B	Construction waste such as wood, metal, and cardboard, shall be segregated and submitted for recycling. Waste Gypsum shall be segregated and delivered to an appropriate facility. Hazardous construction waste such as paint, lubricants, oil, lighting, wood preservative shall be segregated and disposed of at an authorised facility.	Item	1		
C	Prior to commencement of the Works the Contractor shall submit to the ER & Planning Authority for agreement, details of proposals for dealing with excess soil arising from the excavation and construction works associated with this development.	Item	1		
	4. w Drying of the works				
	Drying out				
D	Dry out the works as required to facilitate progress and to prevent damage to or deterioration of the works	Item	1		
E	Control humidity as required to facilitate progress and to prevent damage to or deterioration of the works	Item	1		
F	The permanent heating installation may not be used for drying out the works	Item	1		

To Collection € **NIL**

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	4. x Temporary fencing, hoardings, gates, doors, screens, fans, planked footways, guardrails, gantries, floor, stair, roof edge protection, and protection of openings, safety nets and similar items				
A	The Contractor shall comply with all statutory regulations to ensure the safety and protection of all employees, subcontractors, suppliers, consultants and all other third parties involved in or likely to be connected with the Works any way whatsoever.	item	1		
	4. y Control of noise, pollution and compliance with statutory obligations				
	Control of noise, pollution etc.				
B	Take adequate precautions to protect persons and property from damage or nuisance caused by water, smoke, dust, noise, rubbish and otherwise.	Item	1		
C	The Contractor shall include for compliance with BS 5228- Noise and Vibration Control on Construction Sites, and for compliance with all current Health and Safety Regulations. Fit all compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools or vehicles. The Contractor will be required to liaise closely with the employer so as to minimise the nuisance caused by noise and no extra cost will be recoverable for compliance therewith.	Item	1		
D	Noise during site clearance and construction shall not exceed 65 dB (A), Leq 30minutes and the peak noise shall not exceed 75 dB (A), when measured at any point off site.	Item	1		
	Environmental Controls (Noise, Dust, Vibration)				
E	The Contractor shall comply with all noise, dust and vibration limits, including monitoring, reporting and implementation of mitigation measures.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	4. z Protection of the works				
	Protecting				
A	Allow for protecting the whole of the work during the duration of the Contract and carry out cleaning down of the Works by a professional cleaning company and leave perfect on completion.	Item	1		
B	The works shall be protected at all times against damage from inclement weather, impact, or any other cause and the Contractor shall provide waterproof and frost-proof coverings, temporary shelters, temporary drainage and any other necessary protection for this purpose. He shall provide also watching and temporary lighting, hoarding etc., necessary for the protection of the public and for the protection of the site and the Works against trespass and interference.	Item	1		
	CONTRACTORS REQUIREMENTS IN RESPECT OF COVID-19				
C	The contractor is to fully consider the effects of the Covid-19 pandemic and its effect on their operation of the project, the contractor is to take into consideration the implications of The Return to Work Safely Protocol published on the 9th May 2020 by the Department of Business, Enterprise and Innovation and the Department of Health in consultation with the Labour Employer Economic Forum and the Guidance on Protocol Measures in Live and Future Tenders issued by the OGP dated 23rd July 2020				

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	CONTRACTORS REQUIREMENTS IN RESPECT OF COVID-19				
	The Contractor is to fully consider the effects of the Covid-19 pandemic and its effect on their operation of the project, the contractor is to take into consideration the implications of The Return to Work Safely Protocol published on the 9th May 2020 by the Department of Business, Enterprise and Innovation and the Department of Health in consultation with the Labour Employer Economic Forum and the Guidance on Protocol Measures				
	Tenders submitted must include for the following;				
A	augmenting site infrastructure and welfare facilities, including but not limited to toilets; canteens; isolation spaces; access, egress and circulation routes that meet the standards set out in the Protocol	item	1		
B	Cleaning to the standard required in the Protocol.	item	1		
C	Covid-19 supervisor role(s) as necessary to meet the requirements of the Protocol.	item	1		
D	Covid-19 Personal Protective Equipment (PPE) to meet the requirements of the Protocol.	item	1		
E	Social distancing to meet the requirements of the Protocol.	item	1		
F	provision of sufficient information technology to facilitate remote meetings, site inspections and the like necessary to minimise risk to all stakeholders	item	1		
G	the specific risks associated with the Covid-19 pandemic contained in the Preliminary Safety and Health Plan prepared by the PSDP and issued as additional information to the tendering contractors	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) CONTRACTORS REQUIREMENTS IN RESPECT OF COVID-19				
	(Cont) The Contractor is to fully consider the effects of the Covid-19 pandemic and its effect on their operation of the project, the contractor is to take into consideration the implications of The Return to Work Safely Protocol published on the 9th May 2020 by the Department of Business, Enterprise and Innovation and the Department of Health in consultation with the Labour Employer Economic Forum and the Guidance on Protocol Measures				
	(Cont) Tenders submitted must include for the following;				
A	provision of sufficient and adequate on-site facilities, adequate management and supervision to ensure safe working, full induction and training for all personnel, including sub-contractors,suppliers and visitors to the site to minimise risk to all stakeholders	item	1		
B	Contractors Safety Statement, risk assessments and method statements to comply with all Covid-19 Requirements	item	1		
C	the Contract Sum will be deemed to include for the implementation of all measures - including hygiene, access management, materials procurement and delivery, work sequencing and work practices - required to construct the work safely and to minimise the risk of disease contagion for the Contractors Personnel, the Employers Representative, Employer	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) CONTRACTORS REQUIREMENTS IN RESPECT OF COVID-19 **(Cont) The Contractor is to fully consider the effects of the Covid-19 pandemic and its effect on their operation of the project, the contractor is to take into consideration the implications of The Return to Work Safely Protocol published on the 9th May 2020 by the Department of Business, Enterprise and Innovation and the Department of Health in consultation with the Labour Employer Economic Forum and the Guidance on Protocol Measures**				
	(Cont) Tenders submitted must include for the following;				
A	where the project involves an extension and/or alterations to an existing live occupied building, additional precautions will be required in relation to Covid-19 to ensure the safety of existing live building personnel (e.g. if access is shared between the existing live buildings personnel and Contractors personnel, if Contractors personnel are required to enter the building area, either internally or externally, for particular tasks, or if Contractors personnel have to undertake works in the live building after their normal working hours). Such precautions would involve, at a minimum, maintaining social distancing between Contractors personnel and live buildings personnel, wearing of appropriate PPE and sanitising any work areas in the live building on a daily basis in preparation for live buildings activities on the following morning	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) CONTRACTORS REQUIREMENTS IN RESPECT OF COVID-19				
	(Cont) The Contractor is to fully consider the effects of the Covid-19 pandemic and its effect on their operation of the project, the contractor is to take into consideration the implications of The Return to Work Safely Protocol published on the 9th May 2020 by the Department of Business, Enterprise and Innovation and the Department of Health in consultation with the Labour Employer Economic Forum and the Guidance on Protocol Measures				
	(Cont) Tenders submitted must include for the following;				
A	costs associated with compliance with the Government Guidelines, Health (Preservation and Protection and other Emergency measures in the Public Interest) Act 2020 and to the Health Act 1947 (Section 31A-Temporary Restrictions) (Covid-19) Regulations 2020), HSE Guidelines and CIF Standard Operating Procedures in relation to Covid 19; the contractor should included herein for all costs associated with the introduction of all necessary operating procedures and control measures to allow for the safe operation of the works and to follow best practice relative to the site to ensure safety of all personnel on site and visiting the site, including but not limited to restrictions due to social distancing, additional reports on work practices, additional supervision and additional signage	item	1		
	HANDOVER DOCUMENTS				
	Handover Documents				
B	The Contractor shall provide the Employer's Representative with the Contractor's documents before Substantial Completion as set out in the definitions clause 1.1 of the conditions.	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) HANDOVER DOCUMENTS **(Cont) Handover Documents**				
A	The Contractor shall include for all commissioning, demonstration, training of Employer personnel, provision of as-built drawings, operation and maintenance manuals, and all documentation required for BCAR compliance and certification.	item	1		
	BCAR Records & Documentation (Handover / Quality Assurance)				
B	The Contractor shall maintain comprehensive inspection and progress records, including photographs, test results, certificates and reports, and provide these in an organised digital format for BCAR handover.	Item	1		
	Commission/Records				
C	The Contractor shall develop for each element and sub-contractor a system of commissioning and furnishing records. This system shall be subject to the approval of the Employers Representative.	Item	1		
D	The individual commissioning and record requirement shall be based on the relevant IS and/or BS standard specifications and the information contained in the Preambles and Specification for the Contract.	Item	1		
E	The Contractors plan for commissioning and records shall be agreed prior to commencement of the particular section of the works involved. The plan shall fully describe the methods, resources and documentation for the implementation of the commissioning and records. The plan shall include provision and procedures under the following headings: - a: Method Statement b: Progress, Review and Control System c: Schedule of Documentation.	Item	1		
F	The Contractor shall provide for complying with the full requirements of commissioning and furnishing records as set out in this section and as fully detailed in the Preambles and Specification.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) HANDOVER DOCUMENTS				
	Systems Integration, Testing & Commissioning				
A	The Contractor shall allow for full coordination, integration, testing and commissioning of all building systems including mechanical, electrical, lift, fire alarm, access control and security systems, including tie-ins to existing systems, to ensure complete and functional operation at handover. Commissioning shall include validation of system performance in line with energy efficiency requirements and design intent.	Item	1		
	Energy Performance / Metering (ISO 50001 Alignment) - M&E Services / Commissioning				
B	The Contractor shall allow for the provision, coordination and commissioning of energy metering and sub-metering systems appropriate to the building layout and Significant Energy Uses (SEUs), to support monitoring of Energy Performance Indicators (EnPIs). The Contractor shall provide all necessary data, technical information and settings to enable integration of metering systems into the Employer's energy management systems. Energy performance shall be considered as part of commissioning, with systems set up and demonstrated to operate in accordance with design intent and energy efficiency requirements.	Item	1		
	Doors, Access Control & Fire Alarm Integration				
C	The Contractor shall allow for full coordination and integration of all door systems, including fire-rated doors, access-controlled doors, and doors connected to fire alarm and security systems, including all associated wiring, interfaces, controls, ironmongery and commissioning	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) HANDOVER DOCUMENTS				
	Quality Assurance & Testing (All Works)				
A	The Contractor shall allow for all inspection, testing, sampling and reporting required for the Works, including structural, civil and building services elements, and provision of all associated records and certification.	Item	1		
	The Contractor is to furnish all Certificates of Compliance with the Handover Documents				
	Method Statement				
B	The Contractor shall allocate a named member of his staff the responsibility for agreeing the Method Statement for each item to be commissioned and records to be provided and include for managing the work of the various sub-contractors involved.	Item	1		
C	Include for review and agreement between all parties to the final satisfaction of the ER. The Method Statement provided shall detail all aspects of technique, resources, setting to work, instructing the Clients personnel, special instruments, etc.	Item	1		
D	The Contractor will provide all method statements required for the execution of the works as requested in the Architectural , Structural and Services Engineers documents.	item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) HANDOVER DOCUMENTS				
	Progress Review and Control System				
A	The Method Statement shall be periodically and systematically reviewed by the Contractor to ensure its success. The ER shall be informed of discussions on progress by copy of relevant minutes of meetings, correspondence, etc. The Contractor shall ensure, as far as possible that the commissioning and records are fully available at the date of certification of Substantial Completion by the ER, but no later than four weeks after that date.	Item	1		
	Project Reporting				
B	The main Contractor shall provide regular reports to the ER on the progress of the works. The reports should include:	Item	1		
C	Safety/Risk Assessment	Item	1		
D	Statement of overall progress versus project programme	Item	1		
E	Status of material deliveries	Item	1		
F	Labour/Plant	Item	1		
G	Outstanding Design Information	Item	1		
H	Areas of Concern	Item	1		
J	Air tightiness Tests to show how filled joints and service penetrations meet the requirements	item	1		
	THE BUILDING MANUAL				
	GENERALLY				

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) THE BUILDING MANUAL				
A	The Building Manual (incorporating the Safety and Health File and subtitled accordingly) is to be a comprehensive information source and guide for the Employer and end users providing a complete understanding of the buildings and their systems to enabling them to be operated and maintained efficiently and safely. The Contractor as the Planning Supervisor is required to obtain or prepare all the information to be included in the Manual, produce the required number of copies of the Manual and submit them to the Employers Representitive for delivery to the Employer.	Item	1		
B	The Manual is to consist of the following three parts, subsectioned as appropriate:	Item	1		
C	Part 1: General Information: Content as defined herein.	Item	1		
D	Part 2: Building Fabric Information: Content as defined herein.	Item	1		
E	Part 3: Building Services Information: Content as defined herein.	Item	1		
F	The presentation of the Manual is to be as set out herein. A complete draft of the manual must be submitted not less than 4 weeks before the date for submission of the final copies of the manual. Amend the draft manual in the light of any comments and resubmit to the ER. Do not proceed with production of the final copies of the manual until authorised to do so by the Employers Representitive.	Item	1		
G	Final copies of the manual: Provide the ER with 4 nr copies not less than 4 weeks before Substantial Completion.	Item	1		
H	As-built drawings: Provide 4 nr copies.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) THE BUILDING MANUAL				
A	The Safety and Health File is an information source and guide for the Employer and end users providing an understanding of the buildings and their systems and enabling them to be operated and maintained safety. Provide the Planning Supervisor, with 4 nr copies of the information required below not less than 4 weeks before Substantial Completion in the format set out in the Health and Safety section of this document.	Item	1		
B	* Details of construction methods and materials which may present significant residual hazards with respect to cleaning, maintenance or demolition for all Contractor designed work.	Item	1		
C	* A full description of each of the building services systems installed, written to ensure that the Employer's staff fully understand the scope and facilities provided.	Item	1		
D	* Operating and maintenance instructions for all equipment and systems installed.	Item	1		
E	*Copies of manufacturer's current technical literature for all materials, plant and equipment selected by the Contractor.	Item	1		
F	* General maintenance instructions for all items of Contractor designed work.	Item	1		
G	*As-built drawings recording details of construction for all Contractor designed work.	Item	1		
H	THE BUILDINGS MANUAL PART 1: GENERAL INFORMATION must include:	Item	1		
J	* A description of the buildings.	Item	1		
K	* Details of ownership and all consultants and designers.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) THE BUILDING MANUAL				
A	* Details of all Authorities plus copies of all consents and approvals obtained.	Item	1		
B	* Names, addresses, telephone and fax numbers of all contractors, subcontractors, suppliers and manufacturers.	Item	1		
C	* Any operational requirements and constraints of a general nature which are not relevant to other parts of the Building Manual.	Item	1		
D	* The fire safety strategy for the building(s) including drawings showing emergency escape routes, location of emergency and fire fighting systems, services shut-off valves, switches, etc.	Item	1		
E	THE BUILDINGS MANUAL PART 2: BUILDING FABRIC INFORMATION must include:	Item	1		
F	* Design criteria including floor loadings, loading restrictions, insulation values and other performance requirements.	Item	1		
G	* A detailed description of the methods and materials used for the construction of the building(s).	Item	1		
H	* Details of construction methods and materials which may present significant residual hazards with respect to cleaning, maintenance or demolition.	Item	1		
J	* As-built drawings recording details of construction, together with an index.	Item	1		
K	* General maintenance instructions including access provisions for maintenance of the building fabric.	Item	1		
L	* Copies of all guarantees, warranties and maintenance agreements offered by subcontractors and manufacturers.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) THE BUILDING MANUAL				
A	* Copies of manufacturers current literature for all products, listed in common arrangement order and manufacturers recommendations for cleaning and maintenance.	Item	1		
B	* Schedules of all fixtures and fittings including maintenance agreements offered by subcontractors and manufacturers.	Item	1		
C	* Copies of all test certificates and reports required in the specification.	Item	1		
D	THE BUILDING MANUAL PART 3: BUILDING SERVICES INFORMATION must include:	Item	1		
E	* A full description of each of the systems installed, written to ensure the Employer's staff fully understand the scope and facilities provided.	Item	1		
F	* A description of the mode of operation of all systems including services capacity and restrictions.	Item	1		
G	* Diagrammatic drawings of each system indicating principal items of plant, equipment valves, etc.	Item	1		
H	* A photo-reduction of all record drawings to A3 size together with an index.	Item	1		
J	* Legend for all colour-coded services.	Item	1		
K	* Schedules (system by system) of plant, equipment, valves, etc. stating their locations, duties and performance figures. Each item must have a unique number cross-referenced to the record and diagrammatic drawings and schedules.	Item	1		
L	* The name, address and telephone number of the manufacturer of every item of plant and equipment together with catalogue list numbers.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) THE BUILDING MANUAL				
A	* Manufacturers technical literature for all items of plant and equipment assembled specifically for the project, excluding irrelevant matter and including detailed drawings, electrical circuit details and operating and maintenance instructions.	Item	1		
B	* A copy of all Test Certificates (including but not limited to electrical circuit tests, corrosion tests, type tests, work tests, start and commissioning tests) for the installations and plant, equipment, valves, etc used in the installations.	Item	1		
C	* A copy of all manufacturer's guarantees, warranties and maintenance agreements offered by subcontractors and manufacturers.	Item	1		
D	* Starting up, operating and shutting down instructions for all equipment and systems installed.	Item	1		
E	* Control sequences for all systems installed.	Item	1		
F	* Schedules of all fixed and variable equipment settings established during commissioning.	Item	1		
G	* Procedures for seasonal changeovers.	Item	1		
H	* Recommendations as to the preventative maintenance frequency and procedures to be adopted to ensure the most efficient operation of the systems.	Item	1		
J	* Lubrication schedules for all lubricated items.	Item	1		
K	* A list of normal consumable items.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) THE BUILDING MANUAL				
A	* A list of recommended spares to be kept in stock by the Employer, being those items subject to wear or deterioration and which may involve the Employer in extended deliveries when replacements are required at some future date.	Item	1		
B	* Procedures for fault finding.	Item	1		
C	* Emergency procedures, including telephone numbers for emergency services.	Item	1		
	PRESENTATION OF BUILDING MANUAL:				
D	The manual is to be contained in a series of A4 size, plastic covered, loose leaf, four ring binders with hard covers, each indexed, divided and appropriately cover titled. Selected drawings needed to illustrate or locate items mentioned in the Manual, where larger than A4, are to be folded and accommodated in the binders so that they may be unfolded without being detached from the rings. The main set(s) of as-built drawings may form annex(es) to the Manual.	Item	1		
	DIGITAL COPIES:				
E	Provide two digital copies of the building Manual and Safety and Health File on compact disc with all drawings copied in CAD format.	Item	1		
	PROVISIONAL INFORMATION ON SERVICES:				
F	Provide the ER with relevant drawings and preliminary performance data at the commencement of commissioning to enable the Employer's staff to familarise themselves with the installation.	Item	1		

	(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)				
	(Cont) THE BUILDING MANUAL				
	TRAINING OF EMPLOYER'S STAFF:				
A	Before Substantial Completion explain and demonstrate to the Employer's maintenance staff the purpose, function and operation of the installations including all items and procedures listed in the Building Manual. Include for not less than 5 operating days for this purpose.	Item	1		
	SPARE PARTS:				
B	At least 4 weeks before Substantial Completion submit to the ER a schedule of spare parts that the Contractor recommends should be obtained and kept in stock by the Employer for maintenance of the services installations. State against each item the manufacturers current price, including packaging and delivery to site.	Item	1		
	SPARE PARTS:				
C	Within 4 weeks of request submit to the ER a quotation, priced in detail for the initial supply of spare parts to the Employer, and including for:	Item	1		
D	* Checking receipt, marking and numbering in accordance with the schedule of spare parts.	Item	1		
E	* Referencing to the plant and equipment list in Part 3 of the Building Manual.	Item	1		
F	* Painting, greasing, etc. and packing to prevent deterioration during storage.	Item	1		
	TOOLS:				
G	At Substantial Completion provide two complete sets of tools and portable indicating instruments for the operation and maintenance of all services plant and equipment together with suitable means of identifying, storing and securing same.	Item	1		

(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)

COLLECTION

Page No. BQ/1				NIL
Page No. BQ/2				NIL
Page No. BQ/3				NIL
Page No. BQ/4				NIL
Page No. BQ/5				NIL
Page No. BQ/6				NIL
Page No. BQ/7				NIL
Page No. BQ/8				NIL
Page No. BQ/9				NIL
Page No. BQ/10				NIL
Page No. BQ/11				NIL
Page No. BQ/12				NIL
Page No. BQ/13				NIL
Page No. BQ/14				NIL
Page No. BQ/15				NIL
Page No. BQ/16				NIL
Page No. BQ/17				NIL
Page No. BQ/18				NIL
Page No. BQ/19				NIL
Page No. BQ/20				NIL
Page No. BQ/21				NIL
Page No. BQ/22				NIL
Page No. BQ/23				NIL

(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)

COLLECTION

Page No. BQ/24	NIL
Page No. BQ/25	NIL
Page No. BQ/26	NIL
Page No. BQ/27	NIL
Page No. BQ/28	NIL
Page No. BQ/29	NIL
Page No. BQ/30	NIL
Page No. BQ/31	NIL
Page No. BQ/32	NIL
Page No. BQ/33	NIL
Page No. BQ/34	NIL
Page No. BQ/35	NIL
Page No. BQ/36	NIL
Page No. BQ/37	NIL
Page No. BQ/38	NIL
Page No. BQ/39	NIL
Page No. BQ/40	NIL
Page No. BQ/41	NIL
Page No. BQ/42	NIL
Page No. BQ/43	NIL
Page No. BQ/44	NIL
Page No. BQ/45	NIL
Page No. BQ/46	NIL

(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)

COLLECTION

Page No. BQ/47	NIL
Page No. BQ/48	NIL
Page No. BQ/49	NIL
Page No. BQ/50	NIL
Page No. BQ/51	NIL
Page No. BQ/52	NIL
Page No. BQ/53	NIL
Page No. BQ/54	NIL
Page No. BQ/55	NIL
Page No. BQ/56	NIL
Page No. BQ/57	NIL
Page No. BQ/58	NIL
Page No. BQ/59	NIL
Page No. BQ/60	NIL
Page No. BQ/61	NIL
Page No. BQ/62	NIL
Page No. BQ/63	NIL
Page No. BQ/64	NIL
Page No. BQ/65	NIL
Page No. BQ/66	NIL
Page No. BQ/67	NIL
Page No. BQ/68	NIL
Page No. BQ/69	NIL

(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)

COLLECTION

Page No. BQ/70	NIL
Page No. BQ/71	NIL
Page No. BQ/72	NIL
Page No. BQ/73	NIL
Page No. BQ/74	NIL
Page No. BQ/75	NIL
Page No. BQ/76	NIL
Page No. BQ/77	NIL
Page No. BQ/78	NIL
Page No. BQ/79	NIL
Page No. BQ/80	NIL
Page No. BQ/81	NIL
Page No. BQ/82	NIL
Page No. BQ/83	NIL
Page No. BQ/84	NIL
Page No. BQ/85	NIL
Page No. BQ/86	NIL
Page No. BQ/87	NIL
Page No. BQ/88	NIL
Page No. BQ/89	NIL
Page No. BQ/90	NIL
Page No. BQ/91	NIL
Page No. BQ/92	NIL

(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)

COLLECTION

Page No. BQ/93	NIL
Page No. BQ/94	NIL
Page No. BQ/95	NIL
Page No. BQ/96	NIL
Page No. BQ/97	NIL
Page No. BQ/98	NIL
Page No. BQ/99	NIL
Page No. BQ/100	NIL
Page No. BQ/101	NIL
Page No. BQ/102	NIL
Page No. BQ/103	NIL
Page No. BQ/104	NIL
Page No. BQ/105	NIL
Page No. BQ/106	NIL
Page No. BQ/107	NIL
Page No. BQ/108	NIL
Page No. BQ/109	NIL
Page No. BQ/110	NIL
Page No. BQ/111	NIL
Page No. BQ/112	NIL
Page No. BQ/113	NIL
Page No. BQ/114	NIL
Page No. BQ/115	NIL

(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS (Cont)

COLLECTION

Page No. BQ/116	NIL
Page No. BQ/117	NIL
Page No. BQ/118	NIL
Page No. BQ/119	NIL
Page No. BQ/120	NIL
Page No. BQ/121	NIL
Page No. BQ/122	NIL
Page No. BQ/123	NIL
Page No. BQ/124	NIL
Page No. BQ/125	NIL
Page No. BQ/126	NIL
Page No. BQ/127	NIL
(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS Carried to Summary	**NIL**

SECTION 2.0

Bill of Quantities

Building Works & External Works — Measured Works

	(10) BUILDING SUBSTRUCTURE (PLASTERING)				
	(10) BUILDING SUBSTRUCTURE				
A	It will be deemed that the Contractor has inspected the drawings and site and has consulted available information concerning sub-soil conditions before submitting his tender.	item	1		
B	The contractor's attention is drawn to the fact that earthwork support is deemed to be included in Excavation and Earthworks under the Agreed Rules of Measurement.	item	1		
C	Where concrete in foundations, beds etc. is measured as cast against the faces of the excavations; and should the Contractor opt to use shuttering the following rates for concrete shall be deemed to include for all such shuttering.	item	1		
D	By pricing these works the Contractor will be held to have visited the site and formed his own opinion as to the extent of the actual work involved, including for all temporary works over and above those measured below, and for monitoring the adjacent buildings for both movement and vibration, as necessary to properly carry out the works.	item	1		
E	The quantities for excavation items are based on the volume as per the substructure design and no allowance is made for overdig, the contractor's operational requirements or temporary works when excavating other than as required in the Agreed Rules of Measurement e.g. working space and formwork to bulk concrete blinding.	item	1		
F	The Contractor shall ensure that he has allowed either in the preliminaries section or in the various rates in his pricing document for all costs associated with achieving the airtightness requirements. It should be noted that taping, sealants and seals are generally not specifically itemised in the pricing document but should be included for in the rates for the various elements or in the preliminaries section.	item	1		

	(10) BUILDING SUBSTRUCTURE (PLASTERING) (Cont)				
	(Cont) (10) BUILDING SUBSTRUCTURE				
A	Starting level for measurement purposes is taken from formation level. All works in association with works to formation are taken within the Prepared Site Element of the Bill of Quantities.	item	1		
B	For details of ground conditions see the Site Investigation Report	item	1		
C	The Contractor shall have overall responsibility for all necessary tempory works required for the excavation / protection / maintenance of adjacent embankments	item	1		
D	The Contractor shall note the position of all existing underground and overground services within and adjacent to the site.	item	1		
E	The Contractor shall be deemed to have allowed for all excavation, filling, compaction and ground preparation works in accordance with the specification and site conditions, including any measures required to achieve formation levels and bearing capacity.	item	1		
	EXCAVATION AND EARTHWORKS				
	Excavation				
	Excavation; at formation level; depth				
F	< or = 2.00m in foundation trenches including associated pads	m3	335		
G	< or = 2.00m in isolated pits	m3	27		
H	< or = 2.00m in soft spots	m3	10		
	Extra over excavating items irrespective of depth for:				
J	around existing services; parallel to excavations	m	10		
K	around existing services crossing excavations	nr	5		
L	being next to existing buildings	m2	56		

	(10) BUILDING SUBSTRUCTURE (PLASTERING) (Cont)				
	(Cont) EXCAVATION AND EARTHWORKS				
	(Cont) Excavation				
	Disposal of water				
A	surface	item	1		
B	ground	item	1		
	Disposal of excavated material				
C	off site	m3	372		
	Filling				
	Hardcore filling to be SR21-Annex 1 hardcore material; T.2 Permeable:4/40mm Gas Permeable layer (Radon) Min depth 200mm.; Radon sump to be positioned in this layer; laid and compacted in 225mm layers as per Engineers Specification and Drawings				
	To excavations				
D	> 250mm	m3	22		
	To make up levels under slab				
E	< 250mm	m3	89		
	T.3 Blinding: 0/4mm blinding layer for T.2 max depth 50mm max. This layer is to protect radon membrane from damage; laid on hardcore base as per Engineers Specification and Drawings				
F	50 mm thick	m2	393		
	CONCRETE WORK				
	Insitu Concrete				
	Plain, in-situ concrete, grade C16/20 (IS EN 206), poured on or against earth or unblinded hardcore as outlined in Engineers Specification				
G	Blinding below foundations and associated pads	m3	272		
H	Blinding below isolated pads	m3	10		

	(10) BUILDING SUBSTRUCTURE (PLASTERING) (Cont)				
	(Cont) CONCRETE WORK				
	(Cont) Insitu Concrete				
	(Cont) Plain, in-situ concrete, grade C16/20 (IS EN 206), poured on or against earth or unblinded hardcore as outlined in Engineers Specification				
A	Soft Spots	m3	5		
	Reinforced, In-situ concrete, grade C30/37 (to ISEN 206), exposure class XC2 / XC4; minimum cement content of 320 kg/m3; poured on or against earth or unblinded hardcore and well vibrated around reinforcement in:				
B	Foundations and associated pads	m3	87		
C	Isolated foundations	m3	3		
D	Isolated foundations, pads to to C3 columns as per Engineers Drawing 0110	m3	1		
E	Beds, > 150mm	m3	99		
F	Walls, > 150mm (lift core)	m3	3		
G	Column casings, cross sectional area > 0.10m2	m3	9		
	Sundries				
	Designed joints				
	Form saw cut joint to concrete slab, saw cut 5 x 25mm deep filled with two part polysulphate sealant as per Engineers Drawings				
H	depth < or = to 150mm	m	200		
	Form isolation joint to concrete slab and column encasement, 10mm Flexcell filled with two part polysulphate sealant as per Engineers Drawings				
J	depth < or = to 150mm	m	62		

	(10) BUILDING SUBSTRUCTURE (PLASTERING) (Cont)				
	(Cont) CONCRETE WORK				
	(Cont) Sundries				
	Joints				
	Internally cast waterstop, type HD240, having heat welded butt joints in the running length, include for formwork and supporting in position sealing joint with two part expoxy sulphide sealant all in accordance with manufacturers instructions.				
A	at junction of foundation and concrete walls, 250mm thick	m	9		
B	extra over for bends	nr	4		
	Surface finishes				
C	power floating beds	m2	437		
	Reinforcement				
	Reinforcement bars; high yield type 2 deformed steel bars to BS 4449 and BS 8666				
	Bar; straight or bent (Spacers and chairs at contractors discretion)				
D	nominal size > 12 < or = to 25 mm diameter (Pads as per Engineers rebar schedules)	t	1.02		
E	nominal size > 12 < or = to 25 mm diameter (Slabs as per Engineers rebar schedules)	t	0.38		
F	nominal size > 12 < or = to 25 mm diameter (FN1 at 100kg/m3)	t	0.3		
G	nominal size > 12 < or = to 25 mm diameter (Walls x 65kg/m3)	t	0.2		
	Reinforcement mesh fabric; BS 4483;				
	Reference A393 (6.16kg/m2); 300mm minimum side and end laps				
H	horizontal to strip foundations (x 2 layer)	m2	187		

	(10) BUILDING SUBSTRUCTURE (PLASTERING) (Cont)				
	(Cont) CONCRETE WORK				
	(Cont) Reinforcement				
	(Cont) Reinforcement mesh fabric; BS 4483;				
A	horizontal to foundations (x 1 layer), pads to C3 columns	m2	1		
B	horizontal to slab	m2	873		
	Reference D49 (0.77kg/m2); 300mm minimum side and end laps				
C	vertical wrapping around structure members at column locations	m2	59		
	Ancon Eazistrip or equivalent continuity reinforcement system cast into concrete wall				
D	EX-190-12/200	m	9		
	Formwork				
	Formwork surface finish to concrete; Type "Ordinary" finish as defined in Section 1.9 of the National Structural Concrete Specification (NSCS) 4th edition				
	Sides of foundations				
E	height, > 250 < or = to 500mm, to strip foundations	m	241		
F	height, > 250 < or = to 500mm, to pad foundations	m	247		
	Formwork surface finish to concrete; Type "Plain" finish as defined in Section 1.9 of the National Structural Concrete Specification (NSCS) 4th edition				
	Edges of beds				
G	height, < or = to 250mm	m	96		
	Kickers				
H	columns, rectangular size 600 x 600mm	nr	31		
J	walls	m	9		
	Walls				

	(10) BUILDING SUBSTRUCTURE (PLASTERING) (Cont)				
	(Cont) CONCRETE WORK				
	(Cont) Formwork				
	(Cont) Formwork surface finish to concrete; Type "Plain" finish as defined in Section 1.9 of the National Structural Concrete Specification (NSCS) 4th edition				
A	vertical	m2	19		
	Columns				
B	isolated, rectangular	m2	59		
	Extra on any of the foregoing formwork categories for:				
C	form 150 x 150 x 150mm sump in base of lift shaft	nr	1		
	BRICKWORK AND BLOCKWORK:				
	Blockwork				
	Solid concrete blockwork to BS EN 771-3:2011+A1:2015, Group 1 configuration, minimum density 2000 kg/m3 compressive strength of 7.5 N/mm2, laid in stretcher bond, as Architects Specification 6.0 EW9016/JC; bedded and jointed in mortar with compressive strength class M6, masonry cement:sand mix 1:4 to 5 , designation (iii) and to the requirements of SR 18 on the use of IS EN 13139:2002 in:-				
	Walls in trenches				
D	100 mm thick, in cavities at edge of slab	m2	14		
E	215 mm thick	m2	110		
F	450 mm thick	m2	50		

	(10) BUILDING SUBSTRUCTURE (PLASTERING) (Cont)				
	(Cont) BRICKWORK AND BLOCKWORK:				
	(Cont) Blockwork				
	(Cont) Solid concrete blockwork to BS EN 771-3:2011+A1:2015, Group 1 configuration, minimum density 2000 kg/m3 compressive strength of 7.5 N/mm2, laid in stretcher bond, as Architects Specification 6.0 EW9016/JC; bedded and jointed in mortar with compressive strength class M6, masonry cement:sand mix 1:4 to 5 , designation (iii) and to the requirements of SR 18 on the use of IS EN 13139:2002 in:-				
A	extra over 215mm thick blockwork above for 1 nr courses of blocks laid on flat at internal walls, as per Detail on Engineers Drawing 0110 with Autoclaved aerated concrete thermal blockwork to BS EN 771-4 with thermal conductivity of 0.33 W/mK, solid configuration, minimum density 760 kg/m3 compressive strength of 7.5 N/mm2 as Architects Specification F10	m	139		
B	extra over 450mm thick blockwork above for 1 nr courses of blocks laid on flat at external walls, as per Detail on Engineers Drawing 0110 with Autoclaved aerated concrete thermal blockwork to BS EN 771-4 with thermal conductivity of 0.33 W/mK, solid configuration, minimum density 760 kg/m3 compressive strength of 7.5 N/mm2 as Architects Specification F10	m	64		
	Labours				
C	on blockwork	item	1		

	(10) BUILDING SUBSTRUCTURE (PLASTERING) (Cont)				
	(Cont) BRICKWORK AND BLOCKWORK:				
	Ancillaries to Blockwork				
	Forming cavities; stainless steel type wall ties complete with tie mounted insulation retaining clips embedded in mortar joints min 50mm; evenly spaced in non staggered horizontal and vertical rows at 600mm c/c horizontal spacing and 450mm c/c vertical spacing, with additional ties as required, all in accordance with Architects Specification, built in				
	Between new walls and edge of concrete slab				
A	150 mm wide; full filled with and including 150mm thick high performance XPS insulation board with tongued and grooved jointing system (Thermal Conductivity 0.036W/mK) as per Architects Drawing 6101 & Specification F1/344	m2	14		
	Damp Proof Course				
	Damp proof courses; polyethylene continuous, as Architects Specification and Architects Drawing Nr. 6101 with minimum 100 mm laps; no allowance in measurement for laps				
B	Horizontal, < or = to 225mm wide.	m	139		
C	Horizontal / raking in cavity trays, > 225mm wide dressed over cavity	m2	51		
	Sundries				
	Forming ventilation ope for radon exhaust, in concrete block wall, necessary precast concrete lintels				
D	size 225 mm x 150 mm in 215 mm concrete block wall, including filling openings around pipe with expanding foam	nr	7		

	(10) BUILDING SUBSTRUCTURE (PLASTERING) (Cont)				
	(Cont) BRICKWORK AND BLOCKWORK:				
	(Cont) Ancillaries to Blockwork				
	(Cont) Forming ventilation ope for radon exhaust, in concrete block wall, necessary precast concrete lintels				
A	size 225 mm x 150 mm in 550 mm concrete block wall, including filling openings around pipe with expanding foam	nr	1		
	Forming ope for services, in concrete block wall, necessary precast concrete lintels				
B	size 225 mm x 225 mm in 215 mm concrete block wall, including filling openings around pipe with expanding foam	nr	5		
C	size 225 mm x 225 mm in 450 mm concrete block wall, including filling openings around pipe with expanding foam	nr	2		

	(10) BUILDING SUBSTRUCTURE (PLASTERING) (Cont)				
	ROOFING CLADDING AND WATERPROOFING				
	Mastic Asphalt, Waterproof and Gas Proof Non Metal Flexible Sheet Coverings				
	Tanking				
	Allow for the supply and installation (including all testing requirements) Delta Dual Proof or equivalent approved tanking system DMS 480 comprising of soft PVC membrane + PP non-woven, 1.9mm thick to Class E: Fire resistance; all specifically designed for waterproofing and the protection of concrete slabs and below ground concrete walls poured in confined space conditions; lapped 75mm at all joints; taped at all joints with / using Delta Double-Sided Tape, Heat welded or DualProof Polymer adhesive (CEM 805) and compressed using a wooden roller, all fixed to reinforced concrete floor bases & walls; all in accordance with manufacturers instructions; as per Engineers Specification as outlined on Drawing M237-KCSE-XX-XX-M3-S-0400 and NBS J40/130 Specification				
A	horizontal, girth > 300 mm to underside of lift foundation; as per Engineers Detail on Drawing Nr. 0120	m2	9		
B	vertical, girth < or = to 300 mm, dressed up foundation; as per Engineers Detail on Drawing Nr. 0121	m2	8		
C	vertical, girth > 300 mm, dressed up foundation and up concrete lift shaft wall; as per Engineers Detail on Drawing Nr. 0120	m2	10		
D	extra over for tilting fillet	m	21		

To Collection € **NIL**

	(10) BUILDING SUBSTRUCTURE (PLASTERING) (Cont)				
	(Cont) ROOFING CLADDING AND WATERPROOFING				
	(Cont) Mastic Asphalt, Waterproof and Gas Proof Non Metal Flexible Sheet Coverings				
	Delta Geo Drain Quattro 9mm thick, protection board or equivalent approved DMS 006 with a Compressive Strength: >400 kN/m2: Comprising of a compact four-layer external drainage and protection membrane of a perforated sliding film, drainage fleece, dimpled sheet and laminated geotextile all to protect tanking membranes and sub-structure; in accordance with the requirements of BS 8102:1990; fixed over tanking membrane; as per Engineers Specification and NBS J40/295 Specification				
A	horizontal, girth > 300 mm to underside of lift foundation; as per Engineers Detail on Drawing Nr. 0120	m2	9		
B	vertical, girth < or = to 300 mm, dressed up foundation; as per Engineers Detail on Drawing Nr. 0121	m2	8		
C	vertical, girth > 300 mm, dressed up foundation and up concrete lift shaft wall; as per Engineers Detail on Drawing Nr. 0120	m2	10		
	Polythene sheeting				
	Gauge 500 slip separation membrane layer; laid on insulation; all joints lapped minium 150 mm and sealed with approved tape and mastic; all in accordance with the manufacturer's written instructions and Architects Specification				
D	horizontal, girth > 300 mm	m2	418		
	Radon Tests				
E	Contractor to perform and provide post mitigation testing and monitoring as per Architects Specification	item	1		

	(10) BUILDING SUBSTRUCTURE (PLASTERING) (Cont)				
	(Cont) ROOFING CLADDING AND WATERPROOFING				
	(Cont) Mastic Asphalt, Waterproof and Gas Proof Non Metal Flexible Sheet Coverings				
	Monarflex RMB 350 or equivalent reinforced polyethylene gas retardant / damproof membrane with HPDE grid; 0.40mm thick, 407 g/m2 weight, reduce and maintain concentration levels below 200 Bq/m3; lapped 150mm at all joints on sand blinded base; sealed with two strips of 30mm radon resistant sealant tape and mastic sealer; all in accordance with Architects Specification D21 (measured nett).				
	Gas Proofing				
A	horizontal, girth > 300mm, including for all lapping, taping and sealing.	m2	418		
B	horizontal / vertical, girth > 300 mm and dressed over blockwork with radon fixing straps; as per Architects Detail on Drawing Nr. 6101 - 6110, including for all lapping, taping and sealing	m2	104		
	Sundries.				
	Seal around service pipe penetrations with universal approved top hat pipe seals; fixed with retension clips and 30mm radon resistant sealant tape; all in accordance manufactures written instructions.				
C	holes, < or = to 0.50m girth	nr	25		
	Sumps.				
	Supply and fit propriety prefabricated uPVC Necoflex or equivalent radon Monarflex Easi-Sump; laid horizontal under floor slab; ventilation sump for radon barrier; all in accordance with the manufactures written instructions and Architects Specification D21				
D	Sump size 458mm diameter, 225mm high.	nr	3		

	(10) BUILDING SUBSTRUCTURE (PLASTERING) (Cont)				
	(Cont) ROOFING CLADDING AND WATERPROOFING				
	(Cont) Mastic Asphalt, Waterproof and Gas Proof Non Metal Flexible Sheet Coverings				
	Easi sump cap link, consisting of 166 x 146mm cover and frame, gas seals, coupling fixed to end of pipe,as per Architects Specification D21 at external path level at manufactures instructions.				
A	Size 166 x 166 x 151mm.	nr	1		
	WOODWORK:				
	Ironmongery, Accessories and Sundries				
	Insulation				
	25 mm thick rigid floil faced floor insulation with maximum thermal conductivity of 0.021 w/mK laid and butt jointed with taped joints as per manufactures instructions in preparation for the concrete slab, all as per Architects Specification				
B	vertical, girth < or = to 300 mm and dressed to internal face of blockwork	m	85		
C	vertical, girth < or = to 300 mm at junction with existing including sealing	m	30		
	Kingspan Thermafloor TF70 or equivalent rigid PIR foil faced floor insulation; 50mm thick; with maximum thermal conductivity of 0.022 w/mK laid in 2 nr 100mm layers and butt jointed with taped joints as per manufactures instructions in preparation for the concrete slab, all as per Specification				
D	horizontal, girth >300mm	m2	418		

	(10) BUILDING SUBSTRUCTURE (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Ironmongery, Accessories and Sundries				
	Kore XPS pressure resistant thermal insulation board or equivalent extruded polystryrene foam with square edge; 30mm thick; with maximum thermal conductivity of 0.033 - 0.036 w/mK laid and butt jointed with taped joints as per manufactures instructions, all as per Specification F1/344				
A	vertical, girth > 300 mm, dressed up foundation and up concrete lift shaft wall; as per Engineers Detail on Drawing Nr. 0120	m2	10		
B	vertical < or = to 300mm dressed up edge of slabs	m2	5		
C	vertical < or = to 300mm dressed up edge of slabs (100mm thick)	m2	5		
	Ravago Styrock board faced XPS insulation base plinth or equivalent 130mm Ravatherm XPS insulation glued to a 15mm thick, lightweight concrete board; with maximum thermal conductivity of 0.029 - 0.035 w/mK; as per manufactures instructions, all as per Specification F1/344				
D	vertical, girth > 300 mm, dressed up foundation and up concrete lift shaft wall; as per Engineers Detail on Drawing Nr. 0120	m2	10		
E	vertical, girth > 300 mm;	m2	51		
	DRAINAGE:				
	Below Ground				
	Excavating trenches; grading bottom; earthwork support; backfilling with granular material, Annex E; compacting; disposing of surplus excavated material off site				
	Pipes < or = to 250 nominal diameter				
F	average depth of trench < or = to 500mm, radon pipes	m	34		

	(10) BUILDING SUBSTRUCTURE (PLASTERING) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) Below Ground				
	Granular material; Type B Granular material, Pea Gravel well compacted graded from 9.5mm to 4.75mm to Engineers Specification				
	Beds and surrounds (minimum sizes)				
A	460 x 460 thick; to 110 nominal diameter pipe	m	34		
	uPvc U pipe, horizontal, under floor slabs, ventilation pipework for radon barrier, as per manufactures written instructions and Architects Specification D21.				
B	100mm diameter pipe.	m	34		
C	100mm bend.	nr	4		

(10) BUILDING SUBSTRUCTURE (PLASTERING) (Cont)				
COLLECTION				
Page No. BQ/134				NIL
Page No. BQ/135				NIL
Page No. BQ/136				NIL
Page No. BQ/137				NIL
Page No. BQ/138				NIL
Page No. BQ/139				NIL
Page No. BQ/140				NIL
Page No. BQ/141				NIL
Page No. BQ/142				NIL
Page No. BQ/143				NIL
Page No. BQ/144				NIL
Page No. BQ/145				NIL
Page No. BQ/146				NIL
Page No. BQ/147				NIL
Page No. BQ/148				NIL
Page No. BQ/149				NIL
(10) BUILDING SUBSTRUCTURE (PLASTERING) Carried to Summary				**NIL**

	(21) EXTERNAL WALLS (PLASTERING)				
	(21) EXTERNAL WALLS				
	CONCRETE WORK:				
	Precast Concrete				
	Precast concrete, prestressed concrete bearing pads 200mm deep to Engineers Specification and approval, standard or stock pattern units; include for hoisting into position, bedding in cement mortar (1:3) and temporary propping in:-				
	Lintels				
	215mm x 65mm				
A	1450 mm long	nr	1		
B	3450 mm long	nr	1		
	Precast concrete units rebated, weathered, throated; bedded and jointed in cement mortar complete, mitred joints at corners with approved polymer-modified grout seal, as Architects Specification and Drawings				
	Cills; 225mm deep x 140mm high (100mm face)				
C	773mm long	nr	5		
	BRICKWORK AND BLOCKWORK:				
	Brickwork				
	Dark-tone blue / black clay facing bricks to BS EN 771-1; wire-cut smooth-dragfaced, in selected texture and colour; laid in half-stretcher type bond, bedded and jointed in coloured mortar cement, lime and sand mix 1:1:6, neatly pointing one side with 'bucket recessed joints, keep brickwork free from mortar splashes as work proceeds, as Architects Specification F1, F10 & Z21				
	Walls				
D	102.5mm thick, in cavity walls	m2	123		

	(21) EXTERNAL WALLS (PLASTERING) (Cont)				
	(Cont) BRICKWORK AND BLOCKWORK:				
	(Cont) Brickwork				
	(Cont) Dark-tone blue / black clay facing bricks to BS EN 771-1; wire-cut smooth-dragfaced, in selected texture and colour; laid in half-stretcher type bond, bedded and jointed in coloured mortar cement, lime and sand mix 1:1:6, neatly pointing one side with 'bucket recessed joints, keep brickwork free from mortar splashes as work proceeds, as Architects Specification F1, F10 & Z21				
A	Extra over for special bricks; reveals	m	41		
B	Labours on brickwork	item	1		
	Blockwork				
	Kilsaren E Block or equivalent solid concrete blockwork to BS EN 771-3:2011+A1:2015, Group 1 configuration, minimum density 2000 kg/m3 compressive strength of 7.5 N/mm2, laid in stretcher bond; bedded and jointed in mortar with compressive strength class M6, masonry cement:sand mix 1:4 to 5 , designation (iii) and to the requirements of SR 18 on the use of IS EN 13139:2002 in; as Architects Specification F10 & Z21:-				
	Walls				
C	thickness 100 mm (top of 215mm walls as per Architects Drawing Nr. 6203)	m2	2		
D	thickness 215 mm (top of 215mm walls as per Architects Drawing Nr. 6208)	m2	4		
E	thickness 215 mm (Plinth as per Drawing Nr. 5001)	m2	5		
F	thickness 100 mm, in cavities	m2	159		
G	extra over for fair facing and recessed pointed blockwork	m2	149		
H	thickness 215 mm, in cavities	m2	114		
J	extra over for fair facing and recessed pointed blockwork	m2	103		

	(21) EXTERNAL WALLS (PLASTERING) (Cont)				
	(Cont) BRICKWORK AND BLOCKWORK:				
	(Cont) Blockwork				
	(Cont) Kilsaren E Block or equivalent solid concrete blockwork to BS EN 771-3:2011+A1:2015, Group 1 configuration, minimum density 2000 kg/m3 compressive strength of 7.5 N/mm2, laid in stretcher bond; bedded and jointed in mortar with compressive strength class M6, masonry cement:sand mix 1:4 to 5 , designation (iii) and to the requirements of SR 18 on the use of IS EN 13139:2002 in; as Architects Specification F10 & Z21:-				
A	extra over 215mm thick blockwork above for one courses of blocks laid on edge at junction with existing as per Architects Drawing Nr. 6401 & 6507, with Autoclaved aerated concrete thermal blockwork to BS EN 771-4 with thermal conductivity of 0.33 W/mK, solid configuration, minimum density 760 kg/m3 compressive strength of 7.5 N/mm2 as Architects Specification F1/308	m	24		
B	extra over 215mm thick blockwork above for one courses of blocks laid on flat at junction with existing as per Architects Drawing Nr. 6401 & 6507, with Autoclaved aerated concrete thermal blockwork to BS EN 771-4 with thermal conductivity of 0.33 W/mK, solid configuration, minimum density 760 kg/m3 compressive strength of 7.5 N/mm2 as Architects Specification F1/308	m	8		
	Labours				
C	on blockwork	item	1		

To Collection € **NIL**

	(21) EXTERNAL WALLS (PLASTERING) (Cont)				
	(Cont) BRICKWORK AND BLOCKWORK:				
	(Cont) Blockwork				
	Bonding to other work				
	Ancon Staifix stainless steel wall starter system or equal approved; screw fixed to precast panel of existing building and other end built into new blockwork as work proceeds, including for filling joint with Hydrocell or equivalent approved joint filler and pointing one side for a depth of 20 mm with 2 part polysulphide pointing mastic; all in accordance with the manufacturers instructions.				
A	100 mm thick walls at 225 mm centres; vertically	m	3		
	SPE / 125mm or equivalent stainless steel frame cramp, with debonding sleeve, having one end fixed to structural steel with 6 mm self drilling tapping screws and other end built into blockwork as work proceeds; all in accordance with the manufacturers instructions and as per Engineers Specification and approval				
B	215 mm thick walls at 225 mm centres; vertically to wind post	m			
	Ancillaries to Blockwork				
	Forming cavities; Ancon Staifix RT2 or equivalent stainless steel type wall ties complete with tie mounted insulation retaining clips embedded in mortar joints min 50mm; evenly spaced in non staggered horizontal and vertical rows at 600mm c/c horizontal spacing and 450mm c/c vertical spacing, with additional ties as required, all in accordance with Architects Drawings and Specification F1 & F10, built in				
	Between new walls (masonry and masony)				

	(21) EXTERNAL WALLS (PLASTERING) (Cont)				
	(Cont) BRICKWORK AND BLOCKWORK:				
	(Cont) Ancillaries to Blockwork				
	(Cont) Forming cavities; Ancon Staifix RT2 or equivalent stainless steel type wall ties complete with tie mounted insulation retaining clips embedded in mortar joints min 50mm; evenly spaced in non staggered horizontal and vertical rows at 600mm c/c horizontal spacing and 450mm c/c vertical spacing, with additional ties as required, all in accordance with Architects Drawings and Specification F1 & F10, built in				
A	150 mm wide (EWS-01); including 100mm thick high performance foil-faced Polyisocyanates (PIR) partial fill insulation board with tongued and grooved jointing system (Thermal Conductivity 0.021W/mK) as per Architects Drawings 6001 and Architects Specification F1	m2	69		
B	110 mm wide (EWS-02); including 110mm thick high performance foil-faced Polyisocyanates (PIR) full fill insulation board with tongued and grooved jointing system (Thermal Conductivity 0.021W/mK) as per Architects Drawings 6001 and Architects Specification F1	m2	93		
C	125 mm wide (EWS-03); including 125mm thick high performance foil-faced Polyisocyanates (PIR) full fill insulation board with tongued and grooved jointing system (Thermal Conductivity 0.021W/mK) as per Architects Drawings 6001 and Architects Specification F1	m2	32		

	(21) EXTERNAL WALLS (PLASTERING) (Cont)				
	(Cont) BRICKWORK AND BLOCKWORK:				
	(Cont) Ancillaries to Blockwork				
	Forming cavities; Ancon SDB frame clamp stainless steel clamp ties complete fixed to reinforced concrete wall one side and embedded in mortar joints min 50mm; evenly spaced in non staggered horizontal and vertical rows at 600mm c/c horizontal spacing and 450mm c/c vertical spacing, with additional ties as required, all in accordance with Architects Drawings and Specification F1 & F10, built in				
	Between new walls (blockwork and concrete)				
A	150 mm wide (EWS-04); including 150mm thick full-fill mineral wool cavity wall insulation (Thermal Conductivity 0.037W/mK) as per Architects Drawings 6001 and Architects Specification F1	m2	15		
	Closing cavity; Rockwool FirePro Linear Firestop or equivalent PIR insulation batt with integrated DPC, across face of cavity, include for all necessary straps and fittings; as per Architects Drawings and Specification F1				
B	250 x 50 mm wide; horizontally to head of opening	m	1		
C	250 x 50 mm wide; vertically at jambs / reveals of opening as per Architects Drawing 6401 - 6408	m	17		
D	100 x 50 mm wide; vertically at jambs / reveals of opening as per Architects Drawing 6404 - 6406	m	42		
E	130 x 30 mm wide; horizontal to sill of Ope, as Architects Drawing Nr. 6110	m	3		
F	100 x 50 mm wide; vertical to sill of opening, as Architects Drawing Nr. 6110	m	3		
G	100 x 50 mm wide; verticall to sill of opening, as Architects Drawing Nr. 6206	m	1		

To Collection € **NIL**

	(21) EXTERNAL WALLS (PLASTERING) (Cont)				
	(Cont) BRICKWORK AND BLOCKWORK:				
	(Cont) Ancillaries to Blockwork				
	Airtight sealing, as Architects Air Tightness Performance Specification				
A	Heads of Ope, girth < or = 300mm,	m	1		
B	Horizontal to sill of Ope, girth < or = 300mm,	m	4		
C	Vertical to jamb/reveal of Ope, girth < or = 300mm,	m	59		
D	Horizontal at junction of floor and wall at perimeter, girth < or = to 300mm,	m			
E	Horizontal at junction of floor and wall at thresholds, girth < or = to 300mm,	m			
F	Horizontal at junction of roof cladding / flashing and external wall, girth < or = to 300mm,	m			
	Damp proof courses, tourch-on bitumen DPC to Architects Specification				
	Wrapping to base, rear and sides of concrete cills as Architects Drawings and Architects Specification F1				
G	width > 225 mm	m2	2		
	Damp proof courses; polyethylene continuous, with minimum 100 mm laps; no allowance in measurement for laps; as Architects Drawings and Architects Specification F1				
	Vertical				
H	width < or = 225 mm	m	59		
	Cavity trays; at head of openings				
J	width > 225 mm,	m2	1		
	Cavity trays; other cavity bridgings, stepped				

	(21) EXTERNAL WALLS (PLASTERING) (Cont)				
	(Cont) BRICKWORK AND BLOCKWORK:				
	(Cont) Ancillaries to Blockwork				
	(Cont) Damp proof courses; polyethylene continuous, with minimum 100 mm laps; no allowance in measurement for laps; as Architects Drawings and Architects Specification F1				
A	width > 225 mm as per Architects Drawing Nr. 6204	m2	20		
	Cavity Fire & Acoustic Barriers				
	Provide and install proprietary Rockwool SCB sleeved cavity barrier with non-combustible mineral wool board with integrated DPC, certified to provide 30 minute integrity and 15 minute insulation fire resistance, as per Architects Specification F1 & P12				
B	vertical, size 65 x 200mm built into walls as per Architects Drawing Nr. 6402	m	3		
C	vertical, size 160 x 200mm built into walls in 150mm wide cavity, as per Architects Drawing Nr. 6403	m	3		
D	vertical, size 190 x 200mm built into walls in cavity, as per Architects Drawing Nr. 6411	m	3		
E	horizontal, size 120 x 200mm built into walls in 110mm wide cavity, as per Architects Drawing Nr. 6204	m	33		
	Linear firestop strip; size 215 x 102.5 mm thick, continuous to achieve 60 / 60 rating; include for one part water based acrylic acoustic intumescent seal both sides; as per Architects Specification F1 & P12				
F	fixed between top of 215 mm concrete block wall and underside of structure as per Architects Drawing Nr. 6203 & 6208	m	57		

	(21) EXTERNAL WALLS (PLASTERING) (Cont)				
	(Cont) BRICKWORK AND BLOCKWORK:				
	(Cont) Ancillaries to Blockwork				
	Designed Joints				
	Movement joints; PPS wall movement system; with PP21 225mm long wall type 2 ties; with debonding sleeve built into concrete blockwork wall as work proceeds at 450mm centres; filled with 20mm flexible closed cell polyethylene board and proprietary seal				
A	100 mm thick cavity blockwork walls, vertically	m	10		
	Designed Joints				
	Expansion joints; 10 mm thick to blockwork walls with and including for filling joint with Hydrocell or equivalent approved joint filler and pointing one side for a depth of 20 mm with 2 part polysulphide pointing mastic				
	Walls				
B	100 mm thick	m	10		
C	215 mm thick	m	10		
	Weep Holes				
D	Form in outer leaf of cavity wall, external openings and stepped dpc's at 450mm centres with translucent plastic proprietary perpend units to match height of standard all in accordance with manufacturers instructions. as Architects Specification F30	nr	33		

	(21) EXTERNAL WALLS (PLASTERING) (Cont)				
	(Cont) BRICKWORK AND BLOCKWORK:				
	STRUCTURAL:				
	Steelwork				
	Lintels				
	Insulated proprietary stainless steel lintols for cavity wall construction; designed to accomodate dead=2.0kM/m live=0.75kN/m, provide, install and include for installation in accordance with manufacturers instructions, including for all necessary temporary propping and hoisting as required.				
A	size 1450 mm overall long; 450 mm cavity wall construction (100mm brickwork / 125mm cavity / 215mm blockwork - ref. EXT.00.004)	nr	1		

To Collection € **NIL**

(21) EXTERNAL WALLS (PLASTERING) (Cont)				
COLLECTION				
Page No. BQ/151				NIL
Page No. BQ/152				NIL
Page No. BQ/153				NIL
Page No. BQ/154				NIL
Page No. BQ/155				NIL
Page No. BQ/156				NIL
Page No. BQ/157				NIL
Page No. BQ/158				NIL
Page No. BQ/159				NIL
Page No. BQ/160				NIL
(21) EXTERNAL WALLS (PLASTERING) **Carried to Summary**				**NIL**

	(22) INTERNAL WALLS PARTITIONS (PLASTERING)				
	(22) INTERNAL WALLS PARTITIONS				
	CONCRETE WORK:				
	In-Situ Concrete				
	Precast				
	Precast concrete, prestressed concrete lintel, standard or stock pattern units; include for hoisting into position, bedding in cement mortar (1:3) and temporary propping in:-				
	Lintels				
	215mm x 65mm				
A	1450 mm long	nr	3		
B	1250 mm long	nr	1		
C	1950 mm long	nr	2		
D	2550 mm long	nr	1		
	Precast concrete, prestressed concrete bearing pads 200mm deep to Engineers Specification and approval, standard or stock pattern units; include for hoisting into position, bedding in cement mortar (1:3) and temporary propping in:-				
E	Bearing Pads (in isolated locations)				
F	450 x 215mm wide x 200mm deep as per Engineers Drawing	nr	10		

	(22) INTERNAL WALLS PARTITIONS (PLASTERING) (Cont)				
	BRICKWORK AND BLOCKWORK:				
	Blockwork				
	Solid fairfaced concrete blockwork to BS EN 771-3:2011+A1:2015 and shall have a air tightness properties better that 3m3/hr/m2 at 50 Pascals, Group 1 configuration, minimum density 1900 kg/m3 compressive strength of 7.5 N/mm2, laid in stretcher bond, as Architects Specification 04 20 00 and BLK-003; bedded and jointed in mortar with compressive strength class M4, masonry cement:sand mix 1:4 to 5, designation (iii) and to the requirements of SR 18 on the use of IS EN 13139:2002 in:-				
	Walls				
A	thickness 215 mm (gf)	m2	77		
B	thickness 215 mm (staircore)	m2	88		
C	thickness 215 mm (at existing gridline gf & ff)	m2	161		
D	extra over for fair facing and recessed pointed blockwork	m2	652		
E	thickness 215 mm (rebuild at at existing gridline gf & ff)	m2	82		
F	extra over for fair facing and recessed pointed blockwork	m2	82		
	Labours				
G	on blockwork	item	1		
	Fire proofing				
	Stopseal LJS fire resistant linear joint sealing system strip; size 129 x 100 mm thick, continuous to achieve fire rating; include for one part water based acrylic acoustic intumescent seal both sides; as per Architects Specification P12				
H	fixed between top of 215 mm concrete block wall and underside of slab	m	49		

	(22) INTERNAL WALLS PARTITIONS (PLASTERING) (Cont)				
	(Cont) BRICKWORK AND BLOCKWORK:				
	(Cont) Blockwork				
	(Cont) Stopseal LJS fire resistant linear joint sealing system strip; size 129 x 100 mm thick, continuous to achieve fire rating; include for one part water based acrylic acoustic intumescent seal both sides; as per Architects Specification P12				
A	fixed between top of 215 mm concrete block wall and underside of roof	m	41		
	Provide and install proprietary Rockwool SCB sleeved cavity barrier with non-combustible mineral wool board with integrated DPC, certified to provide 30 minute integrity and 15 minute insulation fire resistance, as per Architects Specification F1 & P12				
B	vertical, size 150 x 100mm built into walls between new blockwork and existing precast facade as per Architects Drawing Nr. 6401, 6501 & 6507	m	40		
C	horizontal, size 130 x 100mm between new concrete slab and existing precast facade, as per Architects Drawing Nr. 6201	m	30		
D	vertical, size 150 x 100mm built into stud walls between new stud and window as per Architects Drawing Nr. 6506	m	10		
E	horizontal, size 100 x 100mm between new concrete slab and blockwork, as per Architects Drawing Nr. 6202	m	10		
	WOODWORK:				
	Structural and first fixings				
	The following shall be sawn white deal softwood unless otherwise stated; structural grade Class C; vac - vac treated; include for all necessary fixings.				
	First fixings; grounds				
F	70 x 50 mm around perimeter of door	m	70		

	(22) INTERNAL WALLS PARTITIONS (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Structural and first fixings				
	(Cont) The following shall be sawn white deal softwood unless otherwise stated; structural grade Class C; vac - vac treated; include for all necessary fixings.				
A	70 x 50 mm fitted between vertical metal studs	m	163		
B	70 x 50 mm long shot fixed to concrete floor between vertical channel	m	163		
	Boarding and Second Fixings				
	WBP plywood; 18 mm thick; fixed to metal studs at 600 mm centres; include for all necessary fixings.				
	Boarding and sheeting; walls				
C	> 300 mm wide; vertically.	m2	196		
	FLOOR, WALL AND CEILING FINISHINGS:				
	Stud Partitions				
	GypWall or equivalent hot dipped galvanised mild steel stud partition system; consisting of stud partition system consisting of 70 C 50 mm vertical studs at 600 mm centres; fitted between and including 72 FEC 50 mm wide deep flange floor and ceiling channels, include for all necessary intermediate noggings, bearers, GSF1 fixing straps and 99FC50 channels; assemble, erect, plug and screw fix to concrete floor slab at base and underside of concrete floor slab at top; leave ready for plasterboard (plasterboard m/e); as per Architects Details on Drawings Nr. 6002 and Specification Section K10.				
	Partitions				
D	height 3450 mm (IWS-02 - ground floor)	m	5		
	Extra over for				
E	abutments with other finishes	nr	4		

	(22) INTERNAL WALLS PARTITIONS (PLASTERING) (Cont)				
	(Cont) FLOOR, WALL AND CEILING FINISHINGS:				
	(Cont) Stud Partitions				
	(Cont) Extra over for				
A	forming opening; 1000 mm wide x 2100 mm high (door).	nr	2		
	Partitions				
B	height average between 3450 / 3850 mm (IWS-02, 03 & 04 - first floor)	m	64		
	Extra over for				
C	angles to partitions	nr	4		
D	three-way intersection	nr	5		
E	abutments with other finishes	nr	8		
F	forming opening; 1000 mm wide x 2100 mm high (door).	nr	4		
G	forming opening; 1500 mm wide x 2100 mm high (door).	nr	3		
	Shaftwall CH stud system hot dipped galvanized mild steel; consisting of stud partition system consisting of CH90 / 0.7mm (B) studs at 600 mm centres; fitted between and including flange floor and ceiling channels, include for all necessary intermediate noggings; starter channels, fixing angle, 6mm bead of acoustic sealant, silicone, assemble, erect, plug and screw fix to top of concrete blocwork at base and underside of roof cladding at head; leave ready for plasterboard (plasterboard m/e); as outlined in Architects Specification K10				
	Partitions				
H	height average between 3450 / 3850 mm (IWS-05 - first floor)	m	5		
J	height 850 mm (IWS-05 - first floor - as per Architects Drawing Nr. 6301)	m	29		

	(22) INTERNAL WALLS PARTITIONS (PLASTERING) (Cont)				
	(Cont) FLOOR, WALL AND CEILING FINISHINGS:				
	(Cont) Stud Partitions				
	Extra over for				
A	angles to partitions	nr	1		
B	abutments with other finishes	nr	2		
C	abutments with other finishes (850mm high)	nr	2		
	Labours				
	Making good and / or cutting around obstructions				
D	girth < or = to 300 mm	nr	25		
E	girth 300 mm - 1.00m	nr	10		
	GypLyner IWL or equivalent hot dipped galvanised mild steel stud system; consisting of stud partition system consisting of 70 I 50 mm vertical studs at 600 mm centres; fitted between and including 72 DC 60 mm wide deep flange floor and ceiling channels, include for all necessary intermediate noggings, bearers, GSF1 fixing straps and 99FC50 channels; assemble, erect, plug and screw fix to concrete floor slab at base and underside of concrete floor slab at top; leave ready for plasterboard (plasterboard m/e); as per Architects Details on Drawings Nr. 6002 and Specification Section K10.				
	Partitions				
F	height 3450 mm (ILS-01 - ground floor)	m	13		
	Extra over for				
G	angles to partitions	nr	1		
H	abutments with other finishes	nr	8		
J	forming opening; 1000 mm wide x 2700 mm high (West elevation - door opening).	nr	1		

	(22) INTERNAL WALLS PARTITIONS (PLASTERING) (Cont)				
	(Cont) FLOOR, WALL AND CEILING FINISHINGS:				
	(Cont) Stud Partitions				
	Partitions				
A	height average between 3450 / 3850 mm (ILS-01 - first floor)	m	5		
	Extra over for				
B	abutments with other finishes	nr	4		
C	forming opening; 980 mm wide x 2500 mm high (West elevation - window opening).	nr	1		
D	forming opening; 1570 mm wide x 2500 mm high (West elevation - window opening).	nr	1		
	Sundries to partitions:-				
E	Seal faces around perimeter of metal stud partition system at junction with concrete / blockwork with one part water based acrylic acoustic intumescent sealant; as per Architects Specification K10	m	341		
	Fire stopping				
F	70 mm wide x 19 mm thick coreboard firestop with rockwool 70 x 200mm deep trapezoidal firestrip to match profile of metal decking in forming deflection head between top of stud partition and underside floor; to achieve 30 / 30 rating; include for one part water based acrylic acoustic intumescent seal both sides; as per Architects Details on Drawing and Specification	m	5		
G	70 mm wide x 19 mm thick coreboard firestop with firestrip forming deflection head between top of stud partition and underside of roof cladding / floor; to achieve 30 / 30 rating; include for one part water based acrylic acoustic intumescent seal both sides; as per Architects Details on Drawing and Architects Specification	m	64		

	(22) INTERNAL WALLS PARTITIONS (PLASTERING) (Cont)				
	(Cont) FLOOR, WALL AND CEILING FINISHINGS:				
	(Cont) Stud Partitions (Cont) Fire stopping				
A	70 mm wide x 19 mm thick coreboard firestop with firestrip forming deflection head between top of liner system and underside of roof cladding / concrete floor; to achieve 30 / 30 rating; include for one part water based acrylic acoustic intumescent seal both sides; as per Architects Details on Drawing and Architects Specification	m	19		
B	90 mm wide x 19 mm thick coreboard firestop with firestrip forming deflection head between top of stud partition and underside of roof cladding; to achieve 30 / 30 rating; include for one part water based acrylic acoustic intumescent seal both sides; as per Architects Details on Drawing and Architects Specification	m	34		
	Insulation				
	Mineral wool acoustic insulation (16kg/m3); but jointed tightly packed into partition wall cavity between vertical studs and noggings etc, including taping / fastening to retain insulation and prevent slumping; as per Architects Details and Specification K10				
C	50 mm thick	m2	320		
D	50 mm thick around openings	m2	7		

	(22) INTERNAL WALLS PARTITIONS (PLASTERING) (Cont)				
	(Cont) FLOOR, WALL AND CEILING FINISHINGS:				
	(Cont) Stud Partitions				
	Access panels				
A	Plaster finished access panel; 60 / 60 fire rated; size 300 x 300 mm; 1.2mm zintec electro galvanised mild steel frame and door with 50mm wide profile and perforated frame finished in polyester powder coat in selected RAL;door tray shall encapsulate 1 layer of 12.50mm plasterboard with a skim finish; door to include metal earthing tags; factory fitted piano hinge / removable plate with inserted steel pins; square drive operated lock with consealed keyhole; screw fixed frame to ceiling and apply 6mm continuous intumescent acoustic mastic sealant around perimeter of of frame; include for all necessary additional supports, fixings and hangers; in accordance with Manufacturers Instructions	nr	5		

(22) INTERNAL WALLS PARTITIONS (PLASTERING) (Cont)				
COLLECTION				
Page No. BQ/162				NIL
Page No. BQ/163				NIL
Page No. BQ/164				NIL
Page No. BQ/165				NIL
Page No. BQ/166				NIL
Page No. BQ/167				NIL
Page No. BQ/168				NIL
Page No. BQ/169				NIL
Page No. BQ/170				NIL
(22) INTERNAL WALLS PARTITIONS (PLASTERING) Carried to Summary				**NIL**

	(23) FLOORS AND GALLERIES & (27) ROOF STRUCTURE (PLASTERING)				
	FLOOR STRUCTURE				
	CONCRETE WORK:				
	In-Situ Concrete				
	Reinforced, In-situ concrete, grade C30/37 (to ISEN 206), exposure class X0 & XC2 / XC4; minimum cement content 320 kg/m3; filled in between formwork and well vibrated around reinforcement in:				
	Screed				
A	< or = to 150 mm (75 mm thick screed to lift core roof)	m3	1		
	Slabs on decking				
B	> 150 mm	m3	72		
	Walls				
C	> 150 mm	m3	17		
	Sundries				
	Designed joints				
	Formed isolation joint to concrete slab with approved joint filler to a depth of 250mm, mesh to have 50mm cover filled with 10mm proporietary joint filler sealed with a bitumen sealent.				
D	150- 300mm deep (200mm thick slab) at junction with concrete walls	m	10		
E	150- 300mm deep (200mm thick slab) at junction with steel columns	m	17		
	Formed induced movement joint to concrete slab, saw cut 5 x 20mm deep filled with two part polysulphate sealant similar to Engineers details and Specification				
F	depth 150 - 300mm (200mm thick slab)	m	25		
	Surface Finish				
G	Powerfloat unset concrete screed to approval (lift core roof).	m2	7		

	(23) FLOORS AND GALLERIES & (27) ROOF STRUCTURE (PLASTERING) (Cont)				
	(Cont) CONCRETE WORK:				
	(Cont) Sundries				
	(Cont) Surface Finish				
A	Powerfloat unset concrete floors to approval.	m2	386		
B	Powerfloat unset concrete suspended slabs to approval.	m2			
	Labours				
	Forming holes, recesses and the like; including all necessary formwork				
C	100 mm diameter opening	nr	5		
D	150 mm diameter opening	nr	5		
E	250 mm diameter opening	nr	5		
	Firestopping to holes				
	Ablative coated batt fire stop to openings; 50mm thick; consisting of high density 160 kg/m3 stone wool core, precoated on both sides with high preformace ablative coating; clean opening and remove any dust and debris, cut to shape aand tightly fit and sealing around edge of opening and service penitration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Specification				
F	100 mm diameter opening	nr	5		
G	150 mm diameter opening	nr	5		
H	250 mm diameter opening	nr	5		
	Reinforcement				
	Reinforcement mesh fabric; BS 4483;				
	Reference A142 (3.02kg/m2); 300mm minimum side and end laps				
J	horizontal to 75mm thick screed	m2	7		

	(23) FLOORS AND GALLERIES & (27) ROOF STRUCTURE (PLASTERING) (Cont)				
	(Cont) CONCRETE WORK:				
	(Cont) Reinforcement				
	(Cont) Reinforcement mesh fabric; BS 4483;				
	Reference A393 (6.16kg/m2); 300mm minimum side and end laps				
A	horizontal to floor	m2	386		
	Formwork				
	Formwork surface finish to concrete; Type "Special" classification as defined in Section 8.6 of the National Structural Concrete Specification (NSCS) 4th edition				
	Edges of screed				
B	< or = to 250mm high	m	10		
	Walls				
C	vertical, height > 4.00 m (lift shaft)	m2	130		
	Edges of openings in walls				
D	area of opening, > 1.00 < or = to 5.00 m2	nr	2		
	Extra on any of the foregoing formwork categories for:				
E	20 x 20mm chamfer to exposed wall corners	m	30		
	Backpropping of Upper Floor Slabs				
F	Allow for Backpropping of Slab to Engineers Requirements all as Detailed on Engineers drawings and specification	item	1		

To Collection € **NIL**

	(23) FLOORS AND GALLERIES & (27) ROOF STRUCTURE (PLASTERING) (Cont)				
	(Cont) CONCRETE WORK:				
	Precast Concrete				
	Ducon or equally approved precast prestressed hollow core slab units; capable of supporting design loads as specified with the Engineers Specification; fixed in accordance with the manufacturers instructions including all raking cutting for reinforcing slots, angles, intersections, joint filler, shear key connectors across joints at mid spans; to suit unit layout. Include for all necessary propping, hoisting and placing in position all to Engineers Drawings, Specification and approval				
	Floors				
A	150 mm deep precast units; span < or = to 5.00m (Lift core roof)	m2	6		
	ROOFING, CLADDING AND WATERPROOFING:				
	Rigid Sheet Coverings and Decking				
	Decking				
	ComFlor 80+ x 1.2mm thick profiled steel floor decking; lapped, jointed and fixed in accordance with the manufacturers instructions; fixing to steel supports; drilling and tapping steelwork as necessary				
	Slabs on decking				
B	horizontal, > 300mm	m2	386		
C	Extra over last for taping and sealing all side and end laps of the decking	m2	386		
D	Extra over last for proprietary profiled void filler blocks size 51 x 40/15mm to dovetails throats	nr	50		
E	150mm high edge trim closer piece including restrainer straps at 500mm centres	m	98		

	(23) FLOORS AND GALLERIES & (27) ROOF STRUCTURE (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Rigid Sheet Coverings and Decking				
	Allow shear studs on steelwork for decking connection;				
A	19mm diameter x 100mm high Nelson type through deck shear studs to EN 1994-1-1, welded to beam flange at 300mm c/c stated centres	nr	641		
	WOODWORK:				
	Structural and First Fixings				
	The following shall be sawn white deal softwood unless otherwise stated; structural grade Class C16; Vac-Vac treated; include for all necessary fixings.				
	Carcassing; flat roofs				
B	175 x 44 mm roof joists	m	84		
C	175 x 44 mm joists to cubicles	m	281		
D	225 x 44 mm timber runner fixed to concerete with post fixed anchors as per FM01-04	m	25		
E	38 x 38 mm noggings (Architects Detail Drawing Nr. 6204)	m	51		
	Carcassing; walls				
F	150 x 50mm head plate (Upstand to flat roof - Architects Detail Drawing Nr. 6204)	m	26		
G	150 x 50mm sole plate (Upstand to flat roof - Architects Detail Drawing Nr. 6204)	m	26		
H	150 x 50mm studs at 400mm c/c (Upstand to flat roof - Architects Detail Drawing Nr. 6204)	m	32		
J	150 x 50mm head plate (Upstand to flat roof - Architects Detail Drawing Nr. 6209)	m	6		

	(23) FLOORS AND GALLERIES & (27) ROOF STRUCTURE (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Structural and First Fixings				
	(Cont) The following shall be sawn white deal softwood unless otherwise stated; structural grade Class C16; Vac-Vac treated; include for all necessary fixings.				
A	150 x 50mm sole plate (Upstand to flat roof - Architects Detail Drawing Nr. 6209)	m	6		
B	150 x 50mm studs at 400mm c/c (Upstand to flat roof - Architects Detail Drawing Nr. 6209)	m	7		
C	175 x 25 mm fixed to sheeting rails (shim packer as per Architects Drawing Nr. 6412)	m	212		
	Boarding and Second Fixings				
	WBP plywood; 18 mm thick; fixed to metal studs at 600 mm centres; include for all necessary fixings.				
	Boarding and sheeting; floors				
D	> 300 mm wide; horizontally to top of cubicles	m2	100		
E	> 300 mm wide; horizontally to underside of cubicles	m2	100		
F	> 300 mm wide; horizontally to (temporay protection / guard to prevent foot traffic on cavity barrier as per Architect Drawing Nr. 6203)	m2	19		
	Ironmongery, Accessories and Sundries				
	Accessories				
	Galvanised pressed metal joist hangers,include for setting in mortar joint of blockwork.				
G	Hangers, suitable for ends of 175 x 44mm thick joists.	nr	65		
H	Hangers, suitable for ends of 175 x 44mm thick joists to cubicles.	nr	146		

	(23) FLOORS AND GALLERIES & (27) ROOF STRUCTURE (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Ironmongery, Accessories and Sundries				
	Closure flashing				
A	1.20mm galvanised closure flashing 1 times cranked , or = to 150mm girth overall installed complete with all necessary drillings, fixings, seals, etc. (As per Architects Drawing Nr. 6209)	m	9		
B	1.20mm galvanised closure flashing 1 times cranked , or = to 150mm girth overall installed complete with all necessary drillings, fixings, seals, etc. (As per Architects Drawing Nr. 6510)	m	10		
	STRUCTURAL:				
	Steelwork				
	The following shall be fabricated steel grade S355 to BS EN 10025 hot rolled sections and plates; all joints V-butt welded joints prepared and ground flush; include for all site welding and adjustments; shot blast clean to remove all traces of loose rust, grit etc; apply blast primer at the workshop, site holding primer and spot prime after erection; include for all site fixing, forming mortice and all necessary bolts, all to the Engineers Drawings, Specification and approval,				
	Fabricated members; stanchions; < or = to 25kg/m member profile.				
C	203 x 102 x 23 kg/m UB (C06)	t	0.68		
	Fabricated members; stanchions; > 25 < or = to 50 kg/m member profile.				
D	203 x 203 x 46 kg/m UB (C01)	t	2.52		
E	305 x 127 x 48 kg/m UB (C02)	t	5.77		
	Fabricated members; beams; < or = to 25kg/m member profile.				

	(23) FLOORS AND GALLERIES & (27) ROOF STRUCTURE (PLASTERING) (Cont)				
	(Cont) STRUCTURAL:				
	(Cont) Steelwork				
	(Cont) The following shall be fabricated steel grade S355 to BS EN 10025 hot rolled sections and plates; all joints V-butt welded joints prepared and ground flush; include for all site welding and adjustments; shot blast clean to remove all traces of loose rust, grit etc; apply blast primer at the workshop, site holding primer and spot prime after erection; include for all site fixing, forming mortice and all necessary bolts, all to the Engineers Drawings, Specification and approval,				
A	203 x 102 x 23 kg/m UB (B01)	t	7.83		
B	305 x 102 x 25 kg/m UB (B04)	t	1.48		
C	203 x 102 x 23 kg/m UB (L1)	t	0.13		
	Fabricated members; beams; > 25 < or = to 50 kg/m member profile.				
D	305 x 165 x 46 kg/m UB (B02)	t	5.05		
E	203 x 203 x 46 kg/m UC (B07)	t	0.34		
	Fabricated members; beams; > 50 < or = to 100 kg/m member profile.				
F	254 x 254 x 89 kg/m UC (B03)	t	7.09		
G	457 x 191 x 98 kg/m UB (B05)	t	3.96		
	Fabricated members; circular hollow sections; < or = to 25kg/m member profile.				
H	88.9 x 6.3 x 12.8 kg/m CHS (B06)	t	1.51		
	Fabricated members; channels; < or = to 25kg/m member profile.				
J	200 x 75 x 23 kg/m PFC (B10)	t	2.27		
K	200 x 75 x 23 kg/m PFC (C08)	t	0.13		
	Fabricated members; square hollow sections; < or = to 25kg/m member profile.				

	(23) FLOORS AND GALLERIES & (27) ROOF STRUCTURE (PLASTERING) (Cont)				
	(Cont) STRUCTURAL:				
	(Cont) Steelwork				
	(Cont) The following shall be fabricated steel grade S355 to BS EN 10025 hot rolled sections and plates; all joints V-butt welded joints prepared and ground flush; include for all site welding and adjustments; shot blast clean to remove all traces of loose rust, grit etc; apply blast primer at the workshop, site holding primer and spot prime after erection; include for all site fixing, forming mortice and all necessary bolts, all to the Engineers Drawings, Specification and approval,				
A	80 x 80 x 8 x 17.5 kg/m SHS (C03)	t	0.58		
B	100 x 100 x 8 x 22.6 kg/m SHS (C04)	t	0.1		
	Fabricated members; equal angle; > 25 < or = to 50 kg/m member profile.				
C	150 x 150 x 12 x 27.3 kg/m, fixed to concrete lift core at 300mm c/c, design of post fixed anchors BHY Specialist supplier in accordance with FM01-01 (35 nr. bolts)	t	0.26		
	Fabricated members; plates; > 25 < or = to 50 kg/m member profile.				
D	400 x 15 x 47.1 kg/m plate welded to steel beam to support blockwork as per Engineers Drawing Nr. 0111	t	0.32		
	Fabricated members; fittings				
E	allow for all necessary caps, bases, haunches, gussets, end plates, splice plates, cleats, brackets, stiffeners, distance pieces and the like as required.	t	5.99		
F	350 x 200 x 12 mm end plate with 200 x 150 x 12 fin plate, fixed to RC wall with 4 nr. post fixed anchors and fixed to purlin with 2 nr. M16 bolts, as per Engineers Drawings Nr. 0111 and FM01-03	nr	6		

	(23) FLOORS AND GALLERIES & (27) ROOF STRUCTURE (PLASTERING) (Cont)				
	(Cont) STRUCTURAL:				
	(Cont) Steelwork				
	Cold rolled members				
	Multi beam hot dipped galvanised steel purlins / sheeting rails to BS EN 10326 with and including necessary sag rods and ties as specificed members; bolted on site.				
	Cold rolled members; purlins / cladding rails; < or = to 10 kg/m				
A	M175/065/140 roof purlins (@ 1200 c/c); with tie holes - roof rails (double span)	m	374		
B	M145/065/120 side rail purlins (@ 1200 c/c); with tie holes - wall rails (double span)	m	212		
C	Cleats bolted to structural steel with 2no. M12 HSA anchors include for all necessary drilling (S.R.)	nr	288		
D	350 x 200 x 12mm mild steel end plate with with 200 x 150 x 12 fin plate to support purlin at lift shart, with 2 nr/ M16 bolts to support purlin and fixed to reinforced concrete wall with 4nr post fixed anchors; as per Engineers Detail on Drawing 0111	nr	6		
	Wire, Cables, Rods and Bars				
E	tubular struts fixed horizontally between rails	m	25		
F	diagonal tie wire; fixed through rails	m	25		
G	proprietary stays, 60 x 60 x 5mm RSA with M16 bolts, fixed to structural steel and rails	nr	50		

	(23) FLOORS AND GALLERIES & (27) ROOF STRUCTURE (PLASTERING) (Cont)				
	(Cont) STRUCTURAL: **(Cont) Steelwork**				
	Protective coatings				
A	Surface treatment off site; shot blast to BS7079 and cleaning to remove all traces of loose rust, grit etc to SA 2.5 of Sweedish Standard IS EN ISO 8501, 8502, 8504 and apply airless spray coat of two pack epoxy zinc rich primer to a dry film thickness of 25 microns, spot priming after fabrication, and apply one coat high build zinc Phosphate Epoxy primer to a dry film thickness of 75 microns (and apply a second cost of high build epoxy MIO to a dry film thickness of 100microns to fully/partially external steel), to Engineers Specification and approval	t	45.91		
B	extra over for surface treatment off site; shot blast and cleaning to remove all traces of loose rust, grit etc to Sa 2.5 standard of cleanness as specified in ISO 8501-1, and apply one full coat of two pack epoxy holding (pre-fabrication) primer to NDFT 25 microns, one full coat high build two pack epoxy zinc rich phosphate modified alkyd primer to NDFT 80 microns, apply one or more coats of intumescent painting to meet the required NDFT to achieve 60 minute fire protection in accordance with IS EN ISO 12944 and to Engineers Specification and approval (483m2)	t	25.45		
	Holding down bolt assemblies.				
C	Ref. C01 base plate bolted to reinforced concrete base with 4 no grade 8.8 M20 holding down bolts (60mm min treaded protection), minimum 320mm embedment into pads 500mm deep bedded on 20mm non shrink 5 star grout , 70 x 70 x 6mm RSA steel restraints to bolts set in 75mm diameter steel tubes grout all as detailed on Engineers Drawing Nr. 0110	nr	13		

	(23) FLOORS AND GALLERIES & (27) ROOF STRUCTURE (PLASTERING) (Cont)				
	(Cont) STRUCTURAL:				
	(Cont) Steelwork				
	(Cont) Holding down bolt assemblies.				
A	Ref. C02 base plate bolted to reinforced concrete base with 4 no grade 8.8 M20 holding down bolts (60mm min treaded protection), minimum 320mm embedment into pads 500mm deep bedded on 20mm non shrink 5 star grout , 70 x 70 x 6mm RSA steel restraints to bolts set in 75mm diameter steel tubes grout all as detailed on Engineers Drawing Nr. 0110	nr	17		
B	Ref. C04 base plate bolted to reinforced concrete base with 4 no grade 8.8 M20 holding down bolts (60mm min treaded protection), minimum 320mm embedment into pads 500mm deep bedded on 20mm non shrink 5 star grout , 70 x 70 x 6mm RSA steel restraints to bolts set in 75mm diameter steel tubes grout all as detailed on Engineers Drawing Nr. 0110	nr	1		
	Bolts				
C	M16 grade 8.8 expanding resin chemical anchor bolts; include for bolting up on completion (bolting Columns (C3); 250 x 250 x 12mm bases to reinforced concrete pad and foundations), as per Details on Engineers Drawing Nr. 0110	nr	36		
D	M16 grade 8.8 expanding resin chemical anchor bolts; include for bolting up on completion (bolting Columns (C08); as per Details on Engineers Drawing Nr. 0110	nr	8		
	Shimming and grouting.				
E	Grout under 250 x 250mm 12mm thick base plates with 25 mm thick non shrink grout; include for all necessary formwork etc. (bolting Columns (C3); 250 x 250 x 12mm bases to reinforced concrete pad and foundations), as per Details on Engineers Drawing Nr. 0110	nr	9		

	(23) FLOORS AND GALLERIES & (27) ROOF STRUCTURE (PLASTERING) (Cont)				
	(Cont) STRUCTURAL:				
	(Cont) Steelwork				
	(Cont) Shimming and grouting.				
A	Grout under 250 x 250mm 12mm thick base plates with 25 mm thick non shrink grout; include for all necessary formwork etc. (bolting Columns (C8); 250 x 250 x 12mm bases to reinforced concrete pad and foundations), as per Details on Engineers Drawing Nr. 0110	nr	4		
	Sundries; drilling / forming holes in other construction for fixings.				
B	150 mm deep into reinforced in-situ concrete pads / foundations ; including for all necessary grouting and resin	nr	36		
C	150 mm deep into reinforced in-situ concrete floor slab; including for all necessary grouting and resin	nr	8		
	Bearing pads				
D	100 x 500 x 215mm concrete bearing pads	nr	5		
E	215 x 500 x 215mm concrete bearing pads	nr	5		

	(23) FLOORS AND GALLERIES & (27) ROOF STRUCTURE (PLASTERING) (Cont)				
	PAINTING AND DECORATING:				
	Painting				
	Surface treatment on site, after erection, touch up and patch prime apply Shot blast to Sa 2.5 (maximum surface profile 100 microns) and paint with Hempadur Primer 1557 (Hempels Industrial Coatings) to a minimum dry film thickness of 50 microns. (b) Apply one intermediate coat of Hampadur LTC 4514 to a minimum dry film thickness of 200 microns. (c) Apply one top coat of Hempathene Enamel 5510 to a minimum dry film thickness of 50 microns to Architects colour requirement.by airless spray to structural steelwork and to Engineers Specification and approval				
	Structural metalwork				
A	general surfaces; girth > 300 mm girth	item	1		
	Surface treatment on site, after erection, touch up and patch prime apply; shot blast and cleaning to remove all traces of loose rust, grit etc to Sa 2.5 standard of cleanness as specified in ISO 8501-1, and apply one full coat of two pack epoxy holding (pre-fabrication) primer to NDFT 25 microns, one full coat high build two pack epoxy zinc rich phosphate modified alkyd primer to NDFT 80 microns, apply one or more coats of intumescent painting to meet the required NDFT to achieve 60 minute fire protection in accordance with IS EN ISO 12944 and to Engineers Specification and approval				
	Structural metalwork				
B	general surfaces; girth > 300 mm girth	item	1		

(23) FLOORS AND GALLERIES & (27) ROOF STRUCTURE (PLASTERING) (Cont)

COLLECTION

Page No. BQ/172	NIL
Page No. BQ/173	NIL
Page No. BQ/174	NIL
Page No. BQ/175	NIL
Page No. BQ/176	NIL
Page No. BQ/177	NIL
Page No. BQ/178	NIL
Page No. BQ/179	NIL
Page No. BQ/180	NIL
Page No. BQ/181	NIL
Page No. BQ/182	NIL
Page No. BQ/183	NIL
Page No. BQ/184	NIL
Page No. BQ/185	NIL
(23) FLOORS AND GALLERIES & (27) ROOF STRUCTURE (PLASTERING) Carried to Summary	**NIL**

	(24) STAIRS, RAMPS (PLASTERING)				
	(24) STAIRS, RAMPS				
	CONCRETE WORK:				
	In - Situ Concrete				
	Reinforced, in-situ concrete; grade C32/40N (to IS EN 206); exposure class XC1; poured against formwork; well vibrated around reinforcement:				
	Screed				
A	< or = 150mm (75mm screed)	m3	1		
	Sundries				
	Surface finishes				
B	power floating	m2	4		
	Reinforcement				
	Reinforcement fabric; BS 4483; hard drawn mild steel wire to BS 4482				
	Fabric; reference A142 (2.22 kg/m2); 450mm side and end laps				
C	horizontal	m2	4		
	Formwork				
	Formwork surface finish to concrete; type "Plain Finish" as per P8.6 of NSCS 4th Edition				
	Edges of screed				
D	< or = 250mm	m	11		

	(24) STAIRS, RAMPS (PLASTERING) (Cont)				
	(Cont) CONCRETE WORK:				
	Precast Concrete / Composite Construction				
	Prestressed precast concrete components; stairs and landings: to be supplied by an approved supplier; include for all necessary support angles; hoisting, placing and propping into position and the like; bedding ends in sand cement mortar; to the satisfaction of the Engineer and the design intent on the Architects Drawings				
	Staircase flights				
A	1200 mm wide; 250mm waist; in 1 nr stairflights (30 degree pitch), with 8 nr risers 170 mm high with a going of 300mm wide; junction with wall one side; include for grouting / filling at joints and ends of units; and all necessary formwork; all as per the manufacturers instructions (Main Stairs).	nr	1		
B	1200 mm wide; 250mm waist; in 1 nr stairflights (30 degree pitch), with 2 nr risers 170 mm high with a going of 300mm wide; junction with wall one side; include for grouting / filling at joints and ends of units; and all necessary formwork; all as per the manufacturers instructions (Main Stairs).	nr	1		
C	1200 mm wide; 250mm waist; in 1 nr stairflights (30 degree pitch), with 10 nr risers 170 mm high with a going of 300mm wide; junction with wall one side; include for grouting / filling at joints and ends of units; and all necessary formwork; all as per the manufacturers instructions (Main Stairs).	nr	1		
	Staircase landings				
D	Quarter landings approximate size 1700 x 1200 x 300 mm thick; include for grouting / filling at joints and ends of units; and all necessary formwork; all as per the manufacturers instructions (Main Stairs).	nr	1		

	(24) STAIRS, RAMPS (PLASTERING) (Cont)				
	(Cont) CONCRETE WORK:				
	(Cont) Precast Concrete / Composite Construction				
	(Cont) Staircase landings				
A	Quarter landings approximate size 1200 x 1200 x 300 mm thick; include for grouting / filling at joints and ends of units; and all necessary formwork; all as per the manufacturers instructions (Main Stairs).	nr	1		
	Fixings				
B	Grout and fix base of precast concrete stairs to in-situ concrete ground floor slab with 2 Nr T16 dowel bars 250 mm long; dowels anchored into floor slab with HIT-HY 150 injection mortar and grout in position with 10 mm thick 5 star non shrink grout; allow for 2 nr 22 mm diameter holes to be drilled into the base of the precast concrete stairs off site by the precast manufacturer; all to the satisfaction of the Engineer	nr	1		
	STRUCTURAL:				
	Steelwork				
	The following shall be fabricated steel Grade S355 JOH to BS EN 10210-1 hollow structural sections; all joints v-butt welded, prepared and ground flush; include for all site welding and adjustments; include for all site fixing, forming mortice and all necessary bolts, all to Engineers approval				
	Fabricated members; angles; 25 to 50 kg/m member profile.				
C	150 x 150 x 12 x 27.30kg/m	t	0.25		

	(24) STAIRS, RAMPS (PLASTERING) (Cont)				
	(Cont) STRUCTURAL:				
	(Cont) Steelwork				
	Protective coatings				
A	Surface treatment off site; shot blast and cleaning to remove all traces of loose rust, grit etc to BS 7079 Part A1 (SA 2.5), and apply one coat high build two pack epoxy zinc phosphate modified alkyd primer to B.S.5493 standard SF6, 75 um d.f.t., all applied by airless spray to structural steelwork.	t	0.25		
	Bolts				
B	M16 HSA expanding anchor bolts; include for bolting up on completion.	nr	5		
	Sundries; drilling / forming holes in other construction for fixings.				
C	150 mm deep into reinforced in-situ concrete / blockwork; including for all necessary grouting and resin HIT-HY 150 injection mortar	nr	5		
	PAINTING AND DECORATING:				
	Painting				
	Clean and apply Firetex C69, Macropoxy fast-track blast primer coat by an approved intumescent coating manufacturer and finish with a top coat of Firetex FX6002 or equivalent intumescent paint (white in colour) to a minimum DFT 300 microns (400-1840max um) by airless spray to provide 2 hour fire resistance to CF5644 certification and tested to BS 476 Part 20/21 and according to EN 16623, including EN 13381 parts 8 & 9 all in accordance with manufacturers written instructions and Engineers Specification.				
D	Structural metalwork				
E	general surfaces; girth > 300 mm girth	m2	5		

(24) STAIRS, RAMPS (PLASTERING) (Cont)				
COLLECTION				
Page No. BQ/187				NIL
Page No. BQ/188				NIL
Page No. BQ/189				NIL
Page No. BQ/190				NIL
(24) STAIRS, RAMPS (PLASTERING) **Carried to Summary**				**NIL**

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING)				
	EXTERNAL WALL COMPLETIONS:				
	METALWORK:				
	Non - Structural				
A	The prices hereunder shall include for all work in the design, supply, delivery, erection and protection of the following composite double glazed windows and door units	Note			
B	The prices below are deemed to include for all profit, ironmongery, mastic sealing, general and special attendance.	Note			
C	All work shall be carried out in accordance with Architects Drawings, Schedules & Specifications.	Note			
D	Door leaves together with associated frames are collectively described as doorsets and enumerated	Note			
E	All glazing to be kitemark certified	Note			
F	All units are to be cleaned on completion and all protective films are to be removed	Note			
G	The Contractors rates & prices are deemed to include for all necesssary ventilation to comply with the Building Regulations, as noted in the Architects Drawings.	item	1		
H	Allow for submitting proposals including data sheets and sample for approval of windows and doorsets	item	1		
J	The Contractor shall allow for full coordination and integration of all door systems, including fire-rated doors, access-controlled doors, and doors connected to fire alarm and security systems, including all associated wiring, interfaces, controls, ironmongery and commissioning.	Item	1		

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) Non - Structural				
A	The Contractor shall allow for full design coordination, supply, installation and integration of curtain walling, window systems and spandrel panels, including all interfaces with structure, weathering, roofing, doors and building services.	Item	1		

To Collection € **NIL**

(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
(Cont) Non - Structural				
Composite items; curtain walling				

(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)

(Cont) Non - Structural
(Cont) Composite items; curtain walling

Proprietary thermally broken polyester powder coated extruded aluminium curtain walling; Reynaers or equivalent approved double glazed (with 2no. Panes Annealed Laminated Safety Glass) Aluminium CW 50 Stick Curtain Wall stick system, pressure equalised; polyester powder coating to BS 6496 minimum 60 micrometres thick in selected RAL colour 7021/matt including all necessary anodised aluminium ironmongery; external face glass: 24mm thick insulated glass unit argon filled, to IGU configuration - Refer to Architects Specification Item L40/655; Whole window U-value: External Windows TGD Part L Targeted U-Value = 1.60 W/m2K or better to EN 12631:2012; Acoustic performance RW (C;Ctr) = 33 (-1; -4) dB / 60 (-2; -6) dB, depending on glazing or panel type to EN ISO 10140-2; EN ISO 717-1; Air tightness A4 (600 Pa); AE 1200 (1200 Pa); AE 1950 (1950 Pa) to EN 12153, EN 12152; Water tightness R7 (600 Pa); RE 1200 (1200 Pa); RE 1950 (1950 Pa) to EN 12155; EN 12154 and Wind load resistance maximum test pressure 2000 Pa; 2400Pa to EN 12179, EN 13116; toggle mullion drained curtain wall frame system (extruded aluminium alloy profiles to BS 1474 : mullions shall be square cut and profiles shall be joined with jointing spigots, transoms shall be notched to ensure weather proof joint and screw fixed to the mullion, all loads are transferred back to the main building structure, fixing brackets to be supplied by curtain wall contractor to the approval of the employers representative; glass shall be set in position with hex head fixing screws against extruded gaskets internally which are fitted into gasket grooves in the mullions and transoms; including all necessary fixings, straps, clips, brackets, lugs, screws, nuts, bolts, rivets, metal washers, shim, flashing and sealing; insulated flashing at base (ref. Drg Nr. ZZ-SH-A-7002 & 7004); all as per Architects Curtain Walling Specification H11/110 & L40/370 and as detailed on Architects Drawings.

(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)

(Cont) Non - Structural

(Cont) Composite items; curtain walling

(Cont) Proprietary thermally broken polyester powder coated extruded aluminium curtain walling; Reynaers or equivalent approved double glazed (with 2no. Panes Annealed Laminated Safety Glass) Aluminium CW 50 Stick Curtain Wall stick system, pressure equalised; polyester powder coating to BS 6496 minimum 60 micrometres thick in selected RAL colour 7021/matt including all necessary anodised aluminium ironmongery; external face glass: 24mm thick insulated glass unit argon filled, to IGU configuration - Refer to Architects Specification Item L40/655; Whole window U-value: External Windows TGD Part L Targeted U-Value = 1.60 W/m2K or better to EN 12631:2012; Acoustic performance RW (C;Ctr) = 33 (-1; -4) dB / 60 (-2; -6) dB, depending on glazing or panel type to EN ISO 10140-2; EN ISO 717-1; Air tightness A4 (600 Pa); AE 1200 (1200 Pa); AE 1950 (1950 Pa) to EN 12153, EN 12152; Water tightness R7 (600 Pa); RE 1200 (1200 Pa); RE 1950 (1950 Pa) to EN 12155; EN 12154 and Wind load resistance maximum test pressure 2000 Pa; 2400Pa to EN 12179, EN 13116; toggle mullion drained curtain wall frame system (extruded aluminium alloy profiles to BS 1474 : mullions shall be square cut and profiles shall be joined with jointing spigots, transoms shall be notched to ensure weather proof joint and screw fixed to the mullion, all loads are transferred back to the main building structure, fixing brackets to be supplied by curtain wall contractor to the approval of the employers representative; glass shall be set in position with hex head fixing screws against extruded gaskets internally which are fitted into gasket grooves in the mullions and transoms; including all necessary fixings, straps, clips, brackets, lugs, screws, nuts, bolts, rivets, metal washers, shim, flashing and sealing; insulated flashing at base (ref. Drg Nr. ZZ-SH-A-7002 & 7004); all as per Architects Curtain Walling Specification H11/110 & L40/370 and as detailed on Architects Drawings.

A ^^^to suit overall structural opening

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont) **(Cont) Non - Structural** **(Cont) Composite items; curtain walling** (Cont) Proprietary thermally broken polyester powder coated extruded aluminium curtain walling; Reynaers or equivalent approved double glazed (with 2no. Panes Annealed Laminated Safety Glass) Aluminium CW 50 Stick Curtain Wall stick system, pressure equalised; polyester powder coating to BS 6496 minimum 60 micrometres thick in selected RAL colour 7021/matt including all necessary anodised aluminium ironmongery; external face glass: 24mm thick insulated glass unit argon filled, to IGU configuration - Refer to Architects Specification Item L40/655; Whole window U-value: External Windows TGD Part L Targeted U-Value = 1.60 W/m2K or better to EN 12631:2012; Acoustic performance RW (C;Ctr) = 33 (-1; -4) dB / 60 (-2; -6) dB, depending on glazing or panel type to EN ISO 10140-2; EN ISO 717-1; Air tightness A4 (600 Pa); AE 1200 (1200 Pa); AE 1950 (1950 Pa) to EN 12153, EN 12152; Water tightness R7 (600 Pa); RE 1200 (1200 Pa); RE 1950 (1950 Pa) to EN 12155; EN 12154 and Wind load resistance maximum test pressure 2000 Pa; 2400Pa to EN 12179, EN 13116; toggle mullion drained curtain wall frame system (extruded aluminium alloy profiles to BS 1474 : mullions shall be square cut and profiles shall be joined with jointing spigots, transoms shall be notched to ensure weather proof joint and screw fixed to the mullion, all loads are transferred back to the main building structure, fixing brackets to be supplied by curtain wall contractor to the approval of the employers representative; glass shall be set in position with hex head fixing screws against extruded gaskets internally which are fitted into gasket grooves in the mullions and transoms; including all necessary fixings, straps, clips, brackets, lugs, screws, nuts, bolts, rivets, metal washers, shim, flashing and sealing; insulated flashing at base (ref. Drg Nr. ZZ-SH-A-7002 & 7004); all as per Architects Curtain Walling Specification H11/110 & L40/370 and as detailed on Architects Drawings. A ^^^to suit overall structural opening			

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) Non - Structural				
	Composite items; windows				
	Thermally broken aluminium double glazed window system Reynaers MasterWall or equivalent approved; thermal performance (U-Value maximum) Part L Target - U-1.60 W/m2K (Area-Weighted Average) or better. MasterWall High Insulation: Uf = 1.3 W/m2K. Standard MasterWall: Utj = 2.1 W/m2; aluminium sections with polyester powder coated to BS EN 12206-1 RAL 7021 in matt finish, Polyester powder coated finishes shall be electro statically applied in factory to a film thickness of 60 microns standard manufacturer-selected ironmongery to suit sash arrangements (outward opening windows to be fitted with a handle-operated adjustable friction brake); double glazed thermally broken units to IGU configuration - Refer to Architects Specification Item L40/655, comprising of 2no. Panes Annealed Laminated Safety Glass with low "E" Argon filled cavity (90%), including all necessary trickle vents, fixings, sealing, glazing beads and neoprene gaskets; bedded in mastic bed, and EPDM tape-seal bonded to structure to detail, safety restrictors to all windows above ground floor level; all fixed complete in accordance with the manufacturers written instructions and (ref. Drg Nr. ZZ-SH-A-7002 & 7004); all as per Architects Window Specification HL10/330 & L40/370 and as detailed on Architects Drawings 25002-AFEC-01-ZZ-DR-A-4001, 4002 and 25002-AFEC-01-ZZ-SH-A 7002 & 7004				
A	to suit overall structural opening size 573 x 3650mm high; complete with 2nr. solid spandrel panels (measured elsewhere) fixed to top and bottom of 1 nr. fixed safety glazing panel window; size 573 x 750mm ref. Architect's Drawing Nr. ZZ-SH-A-7004, Window Type 1 (WIN-00-001 to 005).	nr	5		

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) Non - Structural				
	(Cont) Composite items; windows				
	(Cont) Thermally broken aluminium double glazed window system Reynaers MasterWall or equivalent approved; thermal performance (U-Value maximum) Part L Target - U-1.60 W/m2K (Area-Weighted Average) or better. MasterWall High Insulation: Uf = 1.3 W/m2K. Standard MasterWall: Utj = 2.1 W/m2; aluminium sections with polyester powder coated to BS EN 12206-1 RAL 7021 in matt finish, Polyester powder coated finishes shall be electro statically applied in factory to a film thickness of 60 microns standard manufacturer-selected ironmongery to suit sash arrangements (outward opening windows to be fitted with a handle-operated adjustable friction brake); double glazed thermally broken units to IGU configuration - Refer to Architects Specification Item L40/655, comprising of 2no. Panes Annealed Laminated Safety Glass with low "E" Argon filled cavity (90%), including all necessary trickle vents, fixings, sealing, glazing beads and neoprene gaskets; bedded in mastic bed, and EPDM tape-seal bonded to structure to detail, safety restrictors to all windows above ground floor level; all fixed complete in accordance with the manufacturers written instructions and (ref. Drg Nr. ZZ-SH-A-7002 & 7004); all as per Architects Window Specification HL10/330 & L40/370 and as detailed on Architects Drawings 25002-AFEC-01-ZZ-DR-A-4001, 4002 and 25002-AFEC-01-ZZ-SH-A 7002 & 7004				
A	to suit overall structural opening size 5500 x 1200mm high; complete with 1nr. solid spandrel panel (measured elsewhere) fixed to side of window with 4 nr. fixed safety glazing panel window; size 650 x 1200mm and 5nr. Top Hung Opening Sash Windows (Opens Out at the Bottom of Window) with and including trickle vents; size 450 x 1200mm ref. Architect's Drawing Nr. ZZ-SH-A-7004, Window Type 2 (WIN-01-001).	nr	1		

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) Non - Structural				
	(Cont) Composite items; windows				
	(Cont) Thermally broken aluminium double glazed window system Reynaers MasterWall or equivalent approved; thermal performance (U-Value maximum) Part L Target - U-1.60 W/m2K (Area-Weighted Average) or better. MasterWall High Insulation: Uf = 1.3 W/m2K. Standard MasterWall: Utj = 2.1 W/m2; aluminium sections with polyester powder coated to BS EN 12206-1 RAL 7021 in matt finish, Polyester powder coated finishes shall be electro statically applied in factory to a film thickness of 60 microns standard manufacturer-selected ironmongery to suit sash arrangements (outward opening windows to be fitted with a handle-operated adjustable friction brake); double glazed thermally broken units to IGU configuration - Refer to Architects Specification Item L40/655, comprising of 2no. Panes Annealed Laminated Safety Glass with low "E" Argon filled cavity (90%), including all necessary trickle vents, fixings, sealing, glazing beads and neoprene gaskets; bedded in mastic bed, and EPDM tape-seal bonded to structure to detail, safety restrictors to all windows above ground floor level; all fixed complete in accordance with the manufacturers written instructions and (ref. Drg Nr. ZZ-SH-A-7002 & 7004); all as per Architects Window Specification HL10/330 & L40/370 and as detailed on Architects Drawings 25002-AFEC-01-ZZ-DR-A-4001, 4002 and 25002-AFEC-01-ZZ-SH-A 7002 & 7004				
A	extra over last for Manual Handwinder	nr	1		
B	to suit overall structural opening size 8250 x 1200mm high; complete with 2nr. solid spandrel panel (measured elsewhere) fixed to window with 6 nr. fixed safety glazing panel window; size 650 x 1200mm and 7nr. Top Hung Opening Sash Windows (Opens Out at the Bottom of Window) with and including trickle vents; size 450 x 1200mm ref. Architect's Drawing Nr. ZZ-SH-A-7004, Window Type 3 (WIN-01-002).	nr	1		

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) Non - Structural				
	(Cont) Composite items; windows				
	(Cont) Thermally broken aluminium double glazed window system Reynaers MasterWall or equivalent approved; thermal performance (U-Value maximum) Part L Target - U-1.60 W/m2K (Area-Weighted Average) or better. MasterWall High Insulation: Uf = 1.3 W/m2K. Standard MasterWall: Utj = 2.1 W/m2; aluminium sections with polyester powder coated to BS EN 12206-1 RAL 7021 in matt finish, Polyester powder coated finishes shall be electro statically applied in factory to a film thickness of 60 microns standard manufacturer-selected ironmongery to suit sash arrangements (outward opening windows to be fitted with a handle-operated adjustable friction brake); double glazed thermally broken units to IGU configuration - Refer to Architects Specification Item L40/655, comprising of 2no. Panes Annealed Laminated Safety Glass with low "E" Argon filled cavity (90%), including all necessary trickle vents, fixings, sealing, glazing beads and neoprene gaskets; bedded in mastic bed, and EPDM tape-seal bonded to structure to detail, safety restrictors to all windows above ground floor level; all fixed complete in accordance with the manufacturers written instructions and (ref. Drg Nr. ZZ-SH-A-7002 & 7004); all as per Architects Window Specification HL10/330 & L40/370 and as detailed on Architects Drawings 25002-AFEC-01-ZZ-DR-A-4001, 4002 and 25002-AFEC-01-ZZ-SH-A 7002 & 7004				
A	extra over last for Manual Handwinder	nr	1		

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) Non - Structural				
	(Cont) Composite items; windows				
	(Cont) Thermally broken aluminium double glazed window system Reynaers MasterWall or equivalent approved; thermal performance (U-Value maximum) Part L Target - U-1.60 W/m2K (Area-Weighted Average) or better. MasterWall High Insulation: Uf = 1.3 W/m2K. Standard MasterWall: Utj = 2.1 W/m2; aluminium sections with polyester powder coated to BS EN 12206-1 RAL 7021 in matt finish, Polyester powder coated finishes shall be electro statically applied in factory to a film thickness of 60 microns standard manufacturer-selected ironmongery to suit sash arrangements (outward opening windows to be fitted with a handle-operated adjustable friction brake); double glazed thermally broken units to IGU configuration - Refer to Architects Specification Item L40/655, comprising of 2no. Panes Annealed Laminated Safety Glass with low "E" Argon filled cavity (90%), including all necessary trickle vents, fixings, sealing, glazing beads and neoprene gaskets; bedded in mastic bed, and EPDM tape-seal bonded to structure to detail, safety restrictors to all windows above ground floor level; all fixed complete in accordance with the manufacturers written instructions and (ref. Drg Nr. ZZ-SH-A-7002 & 7004); all as per Architects Window Specification HL10/330 & L40/370 and as detailed on Architects Drawings 25002-AFEC-01-ZZ-DR-A-4001, 4002 and 25002-AFEC-01-ZZ-SH-A 7002 & 7004				
A	to suit overall structural opening size 12100 x 1200mm high; complete with 3nr. solid spandrel panel (measured elsewhere) fixed to window with 8 nr. fixed safety glazing panel window; size 650 x 1200mm and 11nr. Top Hung Opening Sash Windows (Opens Out at the Bottom of Window) with and including trickle vents; size 450 x 1200mm ref. Architect's Drawing Nr. ZZ-SH-A-7004, Window Type 4 (WIN-01-003).	nr	1		

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) Non - Structural				
	(Cont) Composite items; windows				
	(Cont) Thermally broken aluminium double glazed window system Reynaers MasterWall or equivalent approved; thermal performance (U-Value maximum) Part L Target - U-1.60 W/m2K (Area-Weighted Average) or better. MasterWall High Insulation: Uf = 1.3 W/m2K. Standard MasterWall: Utj = 2.1 W/m2; aluminium sections with polyester powder coated to BS EN 12206-1 RAL 7021 in matt finish, Polyester powder coated finishes shall be electro statically applied in factory to a film thickness of 60 microns standard manufacturer-selected ironmongery to suit sash arrangements (outward opening windows to be fitted with a handle-operated adjustable friction brake); double glazed thermally broken units to IGU configuration - Refer to Architects Specification Item L40/655, comprising of 2no. Panes Annealed Laminated Safety Glass with low "E" Argon filled cavity (90%), including all necessary trickle vents, fixings, sealing, glazing beads and neoprene gaskets; bedded in mastic bed, and EPDM tape-seal bonded to structure to detail, safety restrictors to all windows above ground floor level; all fixed complete in accordance with the manufacturers written instructions and (ref. Drg Nr. ZZ-SH-A-7002 & 7004); all as per Architects Window Specification HL10/330 & L40/370 and as detailed on Architects Drawings 25002-AFEC-01-ZZ-DR-A-4001, 4002 and 25002-AFEC-01-ZZ-SH-A 7002 & 7004				
A	extra over last for Manual Handwinder	nr	1		
B	to suit overall structural opening size 5050 x 1200mm high; complete with 3nr. solid spandrel panel (measured elsewhere) fixed to window with 2 nr. fixed safety glazing panel window; size 650 x 1200mm and 5nr. Top Hung Opening Sash Windows (Opens Out at the Bottom of Window) with and including trickle vents; size 450 x 1200mm ref. Architect's Drawing Nr. ZZ-SH-A-7004, Window Type 5 (WIN-01-004).	nr	1		

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) Non - Structural				
	(Cont) Composite items; windows				
	(Cont) Thermally broken aluminium double glazed window system Reynaers MasterWall or equivalent approved; thermal performance (U-Value maximum) Part L Target - U-1.60 W/m2K (Area-Weighted Average) or better. MasterWall High Insulation: Uf = 1.3 W/m2K. Standard MasterWall: Utj = 2.1 W/m2; aluminium sections with polyester powder coated to BS EN 12206-1 RAL 7021 in matt finish, Polyester powder coated finishes shall be electro statically applied in factory to a film thickness of 60 microns standard manufacturer-selected ironmongery to suit sash arrangements (outward opening windows to be fitted with a handle-operated adjustable friction brake); double glazed thermally broken units to IGU configuration - Refer to Architects Specification Item L40/655, comprising of 2no. Panes Annealed Laminated Safety Glass with low "E" Argon filled cavity (90%), including all necessary trickle vents, fixings, sealing, glazing beads and neoprene gaskets; bedded in mastic bed, and EPDM tape-seal bonded to structure to detail, safety restrictors to all windows above ground floor level; all fixed complete in accordance with the manufacturers written instructions and (ref. Drg Nr. ZZ-SH-A-7002 & 7004); all as per Architects Window Specification HL10/330 & L40/370 and as detailed on Architects Drawings 25002-AFEC-01-ZZ-DR-A-4001, 4002 and 25002-AFEC-01-ZZ-SH-A 7002 & 7004				
A	extra over last for Manual Handwinder	nr	1		

To Collection € **NIL**

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) Non - Structural				
	Composite items; spandrels panel				
	Aluminium Panel Systems Styroglaze - 25mm thick Glazing infill panel with Colorcoat (R) LG steel faces: Form insulated spandrel panel comprising 2mm pressed aluminium inner and outer faces which encapsulate with XPS rigid insulation. All aluminium surfaces to be powder coated in identical RAL colour 7021 as glazing in which it sits. Spandrel is to be formed so as to fully integrate with aluminium curtain wall & windows and to provide a fully airtight and watertight seal, all as per Architects Specification H11/110, L40/370 & L40/655 and Architects Drawings 25002-AFEC-01-ZZ-DR-A-4001, 4002 and 25002-AFEC-01-ZZ-SH-A 7002 & 7004				
A	Allow for insulated spandrel panel to Window Type 1 (WIN-00-001 to 005); size; 573mm x 725mm high; including associated flashings, trimmings and fixings	nr	5		
B	Allow for insulated spandrel panel to Window Type 1 (WIN-00-001 to 005); size; 573mm x 2175mm high; including associated flashings, trimmings and fixings	nr	5		
C	Allow for insulated spandrel panel to Window Type 2 (WIN-01-001); size; 650mm x 1200mm high; including associated flashings, trimmings and fixings	nr	1		
D	Allow for insulated spandrel panel to Window Type 3 (WIN-01-002); size; 550mm x 1200mm high; including associated flashings, trimmings and fixings	nr	1		
E	Allow for insulated spandrel panel to Window Type 3 (WIN-01-002); size; 650mm x 1200mm high; including associated flashings, trimmings and fixings	nr	1		

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) Non - Structural				
	(Cont) Composite items; spandrels panel				
	(Cont) Aluminium Panel Systems Styroglaze - 25mm thick Glazing infill panel with Colorcoat (R) LG steel faces: Form insulated spandrel panel comprising 2mm pressed aluminium inner and outer faces which encapsulate with XPS rigid insulation. All aluminium surfaces to be powder coated in identical RAL colour 7021 as glazing in which it sits. Spandrel is to be formed so as to fully integrate with aluminium curtain wall & windows and to provide a fully airtight and watertight seal, all as per Architects Specification H11/110, L40/370 & L40/655 and Architects Drawings 25002-AFEC-01-ZZ-DR-A-4001, 4002 and 25002-AFEC-01-ZZ-SH-A 7002 & 7004				
A	Allow for insulated spandrel panel to Window Type 4 (WIN-01-003); size; 650mm x 1200mm high; including associated flashings, trimmings and fixings	nr	3		
B	Allow for insulated spandrel panel to Window Type 5 (WIN-01-004); size; 500mm x 1200mm high; including associated flashings, trimmings and fixings	nr	3		
C	Allow for insulated spandrel panel to Window Type 6 (WIN-00-006); size; 1073mm x 725mm high; including associated flashings, trimmings and fixings	nr	1		
D	Allow for insulated spandrel panel to Curtain Wall (CW-00-001); size; 980mm x 800mm high; including associated flashings, trimmings and fixings	nr	1		
E	Allow for insulated spandrel panel to Curtain Wall (CW-01-001 / Ext-D01); size; 1566mm x 1100mm high; including associated flashings, trimmings and fixings	nr	1		

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) Non - Structural				
	(Cont) Composite items; spandrels panel				
	(Cont) Aluminium Panel Systems Styroglaze - 25mm thick Glazing infill panel with Colorcoat (R) LG steel faces: Form insulated spandrel panel comprising 2mm pressed aluminium inner and outer faces which encapsulate with XPS rigid insulation. All aluminium surfaces to be powder coated in identical RAL colour 7021 as glazing in which it sits. Spandrel is to be formed so as to fully integrate with aluminium curtain wall & windows and to provide a fully airtight and watertight seal, all as per Architects Specification H11/110, L40/370 & L40/655 and Architects Drawings 25002-AFEC-01-ZZ-DR-A-4001, 4002 and 25002-AFEC-01-ZZ-SH-A 7002 & 7004				
A	Allow for insulated spandrel panel to External Door (Ext-D00.003); size; 1023mm x 590mm high; including associated flashings, trimmings and fixings	nr	1		

To Collection € **NIL**

(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
(Cont) Non - Structural				
Composite items; doors				

(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)

(Cont) Non - Structural
(Cont) Composite items; doors

Proprietary thermally broken polyester powder coated extruded aluminium external door integrated into the Curtain Wall System; Reynaers CS77 or equivalent approved double glazed (with 2no. Panes Annealed Laminated Safety Glass) Aluminium External Door system (prewired for automation), pressure equalised; polyester powder coating to BS 6496 minimum 60 micrometres thick in selected RAL colour 7021/matt including all necessary anodised aluminium ironmongery; external face glass: 8mm thick insulated glass unit argon filled, to IGU configuration - Refer to Architects Specification Item L40/655; Whole door/window U-value: External Windows TGD Part L Targeted U-Value = 1.60 W/m2K or better to EN 12631:2012; Thermal Insulation U-value down to 1.2 W/m2K depending on the frame/vent combination and the glass thickness to EN ISO 10077-2; Acoustic performance Rw (C; Ctr) = 36 (-1; -4) dB / 42 (-2; -4) dB, depending on glazing type to EN ISO 140-3; EN ISO 717-1; Air Tightness 4 (600 Pa) to EN 1026; EN 12207; Water tightness E900 (900 Pa) to EN 1027; EN 12208; Wind load resistance maximum test pressure 5 (2000 Pa) relative deformation C (< 1/300) to EN 12211; EN 12210; door frame system (extruded aluminium alloy profiles to BS 1474 : frame shall be square cut and profiles shall be joined with jointing spigots, head of frame shall be notched to ensure weather proof joint and screw fixed in place, all loads are transferred back to the main building structure, fixing brackets to be supplied by curtain wall contractor to the approval of the employers representative; glass shall be set in position with hex head fixing screws against extruded gaskets internally which are fitted into gasket grooves in the door frame mullions and transoms; including all necessary fixings, straps, clips, brackets, lugs, screws, nuts, bolts, rivets, metal washers, shim, flashing and sealing; insulated flashing at base (ref. Drg Nr. ZZ-SH-A-7002 & 7004); all as per

MTU Block A,

To Collection € **NIL**

(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)			
(Cont) Non - Structural **(Cont) Composite items; doors** (Cont) Proprietary thermally broken polyester powder coated extruded aluminium external door integrated into the Curtain Wall System; Reynaers CS77 or equivalent approved double glazed (with 2no. Panes Annealed Laminated Safety Glass) Aluminium External Door system (prewired for automation), pressure equalised; polyester powder coating to BS 6496 minimum 60 micrometres thick in selected RAL colour 7021/matt including all necessary anodised aluminium ironmongery; external face glass: 8mm thick insulated glass unit argon filled, to IGU configuration - Refer to Architects Specification Item L40/655; Whole door/window U-value: External Windows TGD Part L Targeted U-Value = 1.60 W/m2K or better to EN 12631:2012; Thermal Insulation U-value down to 1.2 W/m2K depending on the frame/vent combination and the glass thickness to EN ISO 10077-2; Acoustic performance Rw (C; Ctr) = 36 (-1; -4) dB / 42 (-2; -4) dB, depending on glazing type to EN ISO 140-3; EN ISO 717-1; Air Tightness 4 (600 Pa) to EN 1026; EN 12207; Water tightness E900 (900 Pa) to EN 1027; EN 12208; Wind load resistance maximum test pressure 5 (2000 Pa) relative deformation C (< 1/300) to EN 12211; EN 12210; door frame system (extruded aluminium alloy profiles to BS 1474 : frame shall be square cut and profiles shall be joined with jointing spigots, head of frame shall be notched to ensure weather proof joint and screw fixed in place, all loads are transferred back to the main building structure, fixing brackets to be supplied by curtain wall contractor to the approval of the employers representative; glass shall be set in position with hex head fixing screws against extruded gaskets internally which are fitted into gasket grooves in the door frame mullions and transoms; including all necessary fixings, straps, clips, brackets, lugs, screws, nuts, bolts, rivets, metal washers, shim, flashing and sealing; insulated flashing at base (ref. Drg Nr. ZZ-SH-A-7002 & 7004); all as per Architects Curtain Walling Specification			

A ^^^to suit overall opening size 1566 x

(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)			
(Cont) Non - Structural **(Cont) Composite items; doors** (Cont) Proprietary thermally broken polyester powder coated extruded aluminium external door integrated into the Curtain Wall System; Reynaers CS77 or equivalent approved double glazed (with 2no. Panes Annealed Laminated Safety Glass) Aluminium External Door system (prewired for automation), pressure equalised; polyester powder coating to BS 6496 minimum 60 micrometres thick in selected RAL colour 7021/matt including all necessary anodised aluminium ironmongery; external face glass: 8mm thick insulated glass unit argon filled, to IGU configuration - Refer to Architects Specification Item L40/655; Whole door/window U-value: External Windows TGD Part L Targeted U-Value = 1.60 W/m2K or better to EN 12631:2012; Thermal Insulation U-value down to 1.2 W/m2K depending on the frame/vent combination and the glass thickness to EN ISO 10077-2; Acoustic performance Rw (C; Ctr) = 36 (-1; -4) dB / 42 (-2; -4) dB, depending on glazing type to EN ISO 140-3; EN ISO 717-1; Air Tightness 4 (600 Pa) to EN 1026; EN 12207; Water tightness E900 (900 Pa) to EN 1027; EN 12208; Wind load resistance maximum test pressure 5 (2000 Pa) relative deformation C (< 1/300) to EN 12211; EN 12210; door frame system (extruded aluminium alloy profiles to BS 1474 : frame shall be square cut and profiles shall be joined with jointing spigots, head of frame shall be notched to ensure weather proof joint and screw fixed in place, all loads are transferred back to the main building structure, fixing brackets to be supplied by curtain wall contractor to the approval of the employers representative; glass shall be set in position with hex head fixing screws against extruded gaskets internally which are fitted into gasket grooves in the door frame mullions and transoms; including all necessary fixings, straps, clips, brackets, lugs, screws, nuts, bolts, rivets, metal washers, shim, flashing and sealing; insulated flashing at base (ref. Drg Nr. ZZ-SH-A-7002 & 7004); all as per Architects Curtain Walling Specification			

A ^^^^^^Extra over last for Manifestations

(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)

(Cont) Non - Structural

Composite items; steel doors and frames to include factory fixed butt hinges, the number and size suitable for size and weight of door.

Pre-finished external polyester powder-coated (medium to high risk) mild steel personal door sets; 45 mm thick; "KCC Group / Fireblock" or equivalent and approved steel door sets range consisting of 2 skins of galvanized steel; insulated with Thermal performance (U-value maximum): Whole door U-value: Part L Target - U-1.60 W/m2K (Area-Weighted Average) or better and sound deadened with bonded ceramic boards with acoustic performance to manufacturers standards, mechanical strength to BS EN 1192 Class 4; reinforced pads fitted within the door leaf to suit hardware options; hung on and including pre drilled double rebated steel metal frame, timber subframe and bedded in mastic; door and frames primed and powder coated 40% gloss to RAL Colour 7021 (RAL colour matched to existing external doors in C90/110 Alteration works- Proposed Pipefitting Workshop).; include for rockwool packing to all gaps, frame fixings; mastic pointing,; "liquid plastics Ltd" or equivalent and approved acrylic anti-microbial mastic pointing sealant of selected colour to both sides of frame; all in accordance with the Engineer's Specification and manufacturer's written instructions and as per Architects Specification L480 on Drawing 25002-AFEC-00-ZZ-SH-A-7002 & 25002-AFEC-01-ZZ-DR-A-4001

A Composite items; door and frame sets

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) Non - Structural				
	(Cont) Composite items; steel doors and frames to include factory fixed butt hinges, the number and size suitable for size and weight of door.				
	(Cont) Pre-finished external polyester powder-coated (medium to high risk) mild steel personal door sets; 45 mm thick; "KCC Group / Fireblock" or equivalent and approved steel door sets range consisting of 2 skins of galvanized steel; insulated with Thermal performance (U-value maximum): Whole door U-value: Part L Target - U-1.60 W/m2K (Area-Weighted Average) or better and sound deadened with bonded ceramic boards with acoustic performance to manufacturers standards, mechanical strength to BS EN 1192 Class 4; reinforced pads fitted within the door leaf to suit hardware options; hung on and including pre drilled double rebated steel metal frame, timber subframe and bedded in mastic; door and frames primed and powder coated 40% gloss to RAL Colour 7021 (RAL colour matched to existing external doors in C90/110 Alteration works- Proposed Pipefitting Workshop).; include for rockwool packing to all gaps, frame fixings; mastic pointing,; "liquid plastics Ltd" or equivalent and approved acrylic anti-microbial mastic pointing sealant of selected colour to both sides of frame; all in accordance with the Engineer's Specification and manufacturer's written instructions and as per Architects Specification L480 on Drawing 25002-AFEC-00-ZZ-SH-A-7002 & 25002-AFEC-01-ZZ-DR-A-4001				
A	Single Door & frameset, to suit overall opening size 1023 x 2135mm high; clear opening 915mm x 2080mm; 45 mm thick with panic bar inside (lever handle on outside with dead lock), 1(one) hour Fire Rated, steel doors and frames to include door closers, and butt hinges the number and size suitable for size and weight of door complete (Ref: EXT.00.003 External Steel Door)	nr	1		
B	Extra Over last for	nr	1		

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) Non - Structural				
	(Cont) Composite items; steel doors and frames to include factory fixed butt hinges, the number and size suitable for size and weight of door.				
	(Cont) Pre-finished external polyester powder-coated (medium to high risk) mild steel personal door sets; 45 mm thick; "KCC Group / Fireblock" or equivalent and approved steel door sets range consisting of 2 skins of galvanized steel; insulated with Thermal performance (U-value maximum): Whole door U-value: Part L Target - U-1.60 W/m2K (Area-Weighted Average) or better and sound deadened with bonded ceramic boards with acoustic performance to manufacturers standards, mechanical strength to BS EN 1192 Class 4; reinforced pads fitted within the door leaf to suit hardware options; hung on and including pre drilled double rebated steel metal frame, timber subframe and bedded in mastic; door and frames primed and powder coated 40% gloss to RAL Colour 7021 (RAL colour matched to existing external doors in C90/110 Alteration works- Proposed Pipefitting Workshop).; include for rockwool packing to all gaps, frame fixings; mastic pointing,; "liquid plastics Ltd" or equivalent and approved acrylic anti-microbial mastic pointing sealant of selected colour to both sides of frame; all in accordance with the Engineer's Specification and manufacturer's written instructions and as per Architects Specification L480 on Drawing 25002-AFEC-00-ZZ-SH-A-7002 & 25002-AFEC-01-ZZ-DR-A-4001				
A	Single Door & frameset, to suit overall opening size 1185 x 2135mm high; clear opening 1075mm x 2080mm; 45 mm thick with panic bar inside (lever handle on outside with dead lock), 1(one) hour Fire Rated, steel doors and frames to include door closers, and butt hinges the number and size suitable for size and weight of door complete (Ref: EXT.00.004 External Steel Door)	nr	1		

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) Non - Structural				
	Composite Item; Sectional Doors				
	Electrically operated (with key switch) (manual override by chain hoist) Double skinned insulated steel sectional overhead door with lightweight aluminium sandwich panels - SPU F42 Section window type E Uniform field division by Hormann or equivalent approved 42-mm-thick PU-foamed section with finger trap protection; finished Plastisol to RAL Colour 7021; with a Thermal performance: Whole door U-value: Part L Target - U-1.60 W/m2K (AreaWeighted Average) or better; with and including Standard lift track arrangement or low headroom lift track arrangement - dictated by site soffit height condition; Track system Heavy-gauge cold-rolled galvanized steel; with and including all screws, angles, tracks, lugs, brackets, bolts, drum soffit and head and reveal flashings, EDPM Seals etc as necessary all in accordance with manufacturers instructions.; including all necessary fixings; all in accordance with the manufactures written instructions as per Architects Specification L20/615 and Drawings 25002-AFEC-00-ZZ-SH-A-7002 & 25002-AFEC-01-ZZ-DR-A-4001				
A	EXT.00.002 - Sectional Overhead Door				
B	size 3178 mm wide x 2713 mm high with (3no) Equal sized Vision Panels	nr	1		
	WOODWORK:				
	Structural and first fixings				
	The following shall be sawn white deal softwood unless otherwise stated; structural grade Class C; vac - vac treated; include for all necessary fixings.				
	First fixings; grounds				
C	50 x 25 mm shot fixed to structural steel, concrete and blockwork	m	156		

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	Boarding and Second Fixings				
	The following shall be painted mdf (type H1) in compliance with EN 622 parts 1 & 5 unless otherwise stated; nailed and fixed @ 400mm c/c to structure, include for all necessary timber grounds, fixings, punching heads of nail fixings, plugged and screwed, making good and filling all punch holes as per Architects Specification and Details on Architects Drawing Series 6000				
	Window boards				
A	310 x 25mm, rebated and rounded edge, as per Details on various Architects Drawing Series 6000	m	36		
B	Linings to Opes				
C	200 x 18mm, with square edge, as per Details on various Architects Drawing Series 6000	m	120		
	Ironmongery, Accessories and Sundries (Windows)				
	Composite items; like items; cills				
	Window integrated proprietary extruded aluminium profile cill sheeting; polyester powder coated to selected RAL to match windows; include for all necessary fixings, weathering, sealing, bends, drips, closed ends and grounds; fixed to structure and window; all to Architects approval and all in accordance with the manufacturers instructions.				
D	Integrated aluminium cills as per External Window Schedule on Architect Drawings	m	36		

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	Ironmongery, Accessories and Sundries (Doors)				
	Accessories				
A	Low profile stainless steel external quality threshold weatherstrip, fixed to concrete floor	m	4		
	Supply and Fix the following brushed stainless steel ironmongery to aluminium door & framesets.				
	Hardware Set 11 (External Curtain Wall Leaf & Half Entrance Door (Access Controlled)				
B	Cam-Motion Door Closers.	nr	2		
C	Double Door Mechanical Coordinator.	nr	1		
D	Heavy Duty Electrical Escape Lock (Fail unlock in event of Fire Alarm).	nr	1		
E	SS Euro Single Cylinder & 2 Keys.	nr	1		
F	SS 19mm diameter x 600mm Pull Handle.	nr	1		
G	SS Push Plate - 350 x 80 x 1.2mm (10mm radius Corners).	nr	2		
H	Door Position Switch connected to Security Alarm System.	nr	2		
J	Door to be pre-wired for Automation subject to compliance with TGD M 2022 1.2.4.2 (a) Opening Forces	Item	1		
	Hardware Set 12 (External Leaf & Half Escape Door (Access Controlled)				
K	Cam-Motion Door Closers.	nr	2		
L	Double Door Mechanical Coordinator.	nr	1		
M	Heavy Duty Electrical Escape Lock	nr	1		
N	Panic Bars.	nr	2		
P	SS Euro Single Cylinder & 2 Keys.	nr	1		

To Collection € **NIL**

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Ironmongery, Accessories and Sundries (Doors)				
	(Cont) Supply and Fix the following brushed stainless steel ironmongery to aluminium door & framesets.				
	(Cont) Hardware Set 12 (External Leaf & Half Escape Door (Access Controlled)				
A	SS External Lever Handle on Rose.	nr	1		
B	Door Position Switch connected to Security Alarm System.	nr	2		
C	Door to be pre-wired for Automation subject to compliance with TGD M 2022 1.2.4.2 (a) Opening Forces	Item	1		
	Hardware Set 13 (External Single Escape Door)				
D	Cam-Motion Door Closer	nr	2		
E	Heavy Duty Mechanical Escape Lock with Panic Bar	nr	2		
F	Door Position Switch connected to Security Alarm System	nr	2		
	Manifestations				
G	Manifestation In compliance with TGD Part M and DAC. Refer 25002-AFEC-00-ZZ-SH-A-7002_External Door Schedule; Coatex or equivalent approved; Product Metamark Frost Etch Glass Effect Film to clause 436- 3 layer based - Layer 1: High optical quality polyester with printed design. Layer 2: PS adhesive, glass polymerization within 15 days. Layer 3: Protection release liner disposable after installation; heights set at 850mm approx. & 1475mm above FFL all as per Architects Specification and Drawing 25002-AFEC-00-ZZ-SH-A-7002	nr	12		

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Ironmongery, Accessories and Sundries (Doors)				
	Ironmongery, Accessories and Sundries (Windows & Doors)				
	Sundries				
A	10 mm thick "Compriband" or equivalent and approved compressible filler between window frame and window boards with anti-fungal silicone seal.	m	36		
	Mastic Sealing.				
B	Clean,prepare,prime and point one side in silicone mastic sealer,of a selected colour, joint size 12 x 12mm ,between frame and masonary	m	160		
	AIR TIGHTNESS				
	Air Tightness				
	Air tightness and vapour barrier tape, continuous sealing between curtain walling / glazing and adjacent building component / structure; fixing to internal face of adjacent structure and dressed in frame system to seal junctions, as per Architects Drawing Series 6000 and Specifications				
C	Heads, Vertical Jambs and Horizontal cills of curtain walling / windows / doors, girth < or = 300mm (all 4 sides)	m	160		
	PAINTING AND DECORATING				
	Painting				
	Prepare, knot, prime, stop and apply one coat of primer, one coat of undercoat/ base coat, two finishing coats of Dulux waterborne paint -Dulux diamond satinwood / eggshell to selected RAL colour range; as per Architects Specification M60/150				
	General surfaces; window boards				
D	< or = 300 mm	m	36		

	(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) PAINTING AND DECORATING				
	(Cont) Painting				
	(Cont) Prepare, knot, prime, stop and apply one coat of primer, one coat of undercoat/base coat, two finishing coats of Dulux waterborne paint -Dulux diamond satinwood / eggshell to selected RAL colour range; as per Architects Specification M60/150				
	General surfaces; linings to opes				
A	< or = 300 mm	m	120		

To Collection € **NIL**

(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
COLLECTION				
Page No. BQ/192				NIL
Page No. BQ/193				NIL
Page No. BQ/194				NIL
Page No. BQ/195				NIL
Page No. BQ/196				NIL
Page No. BQ/197				NIL
Page No. BQ/198				NIL
Page No. BQ/199				NIL
Page No. BQ/200				NIL
Page No. BQ/201				NIL
Page No. BQ/202				NIL
Page No. BQ/203				NIL
Page No. BQ/204				NIL
Page No. BQ/205				NIL
Page No. BQ/206				NIL
Page No. BQ/207				NIL
Page No. BQ/208				NIL
Page No. BQ/209				NIL
Page No. BQ/210				NIL
Page No. BQ/211				NIL
Page No. BQ/212				NIL
Page No. BQ/213				NIL
Page No. BQ/214				NIL

(31) EXTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
COLLECTION				
Page No. BQ/215				NIL
Page No. BQ/216				NIL
Page No. BQ/217				NIL
Page No. BQ/218				NIL
Page No. BQ/219				NIL
Page No. BQ/220				NIL
(31) EXTERNAL WALL COMPLETIONS (PLASTERING) Carried to Summary				**NIL**

	(32) INTERNAL WALL COMPLETIONS (PLASTERING)				
	INTERNAL WALL COMPLETIONS				
A	The Contractor shall allow for full coordination and integration of all door systems, including fire-rated doors, access-controlled doors, and doors connected to fire alarm and security systems, including all associated wiring, interfaces, controls, ironmongery and commissioning.	Item	1		
B	The Contractor shall include for all specialist joinery and glazed screen systems, including fire-rated glazed screens, manifestation, interfaces with structure and services, and all associated supports, fixings and making good.	Item	1		
	WOODWORK:				
	Structural And First Fixings				
	The following shall be in wrot vac vac treated red deal unless otherwise stated;; plugged and screwed to composite metal deck/in situ concrete floor; include for all necessary fixings, counter sinking and making good with matching pellates; protected for finishes:				
	First fixings; fixing grounds				
C	32 x 50 mm	m	87		
	Boarding and second fixings				
	WBP plywood; 15 mm thick; fixed to blockwork wall; include for all necessary fixings.				
	Boarding and sheeting; walls				
D	< or = to 300 mm wide, around door openings and glazed screens	m	87		

	(32) INTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Boarding and second fixings				
	The following shall be painted mdf (moisture resistant) in compliance with EN 622 parts 1 & 5 unless otherwise stated; plugged and screwed to blockwork / concrete and stud partitions; include for all necessary fixings and making good to punch holes; as per Architects Specification on Drawing 25002-AFEC-00-ZZ-SH-A-7001				
	Second fixings; architraves				
A	100 x 25 mm, rebated MDF	m	143		
	Second fixings; hardwood quadrants				
B	25 x 25 mm to vision panels & glazed screens	m	68		
	Composite items; Doors & Glazed Screen				
	FD30S: 30 minutes integrity rating in accordance with BS 476 part 8, 20 and 22 and to have a leakage rate not exceeding 3m3 / hour when tested at 25 Pa under BS 476 Section 31.1. 30 minute fire door to have a min. density of 550 kg/cubic metre.	Note			
	FD60S: 60 minutes integrity rating in accordance with BS 476 part 8, 20 and 22 and to have a leakage rate not exceeding 3m3 / hour when tested at 25 Pa under BS 476 Section 31.1. 60 minute fire door to have a min. density of 650 kg/cubic metre.	Note			
	All fire doors and screens shall be tested to B.S.476 p.8.1972, entire door sets to be installed in accordance with Test Certificate issued, a copy of which shall be supplied to the Architect, fire doors shall carry Trada fire door codes for various ratings	Note			
	The following door sets and screens are referenced by types to the Architects drawings mentioned above and schedules and should be read in conjunction with the Architects Specification	Note			

	(32) INTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Composite items; Doors & Glazed Screen				
	Non-Fire Rated Doors				
	KCC Group / Carrolls Joinery 44mm thick Solid - core flush varnished paint grade door; internal single action; with hardwood European Oak veneer (or equivalent) with mechanical strength to 1To BS EN 1192 Class 2-3; Acoustic and Thermal Performances to manufacturers standards; with and including lipping to all edges 44 x 8 mm thick; faced both sides with 5mm hardwood veneered plywood finished as full stain system, as spec section M60; neatly cut and fitted to margins; all glued together and hydraulically pressed to approval nylon sweeps as required to door frame and leaves; (vp glazing and ironmongery measured separately); all in accordance with the Architects Specification as per Drawing 25002-AFEC-00-ZZ-SH-A-7001				
	Door Type 1 (INT-D01)				
	Composite items; single leaf & half doors				
A	to suit overall structural opening size 1510 x 2110mm high; Single Door Leaf size; 926 x 2070 mm high with vision panel; size 200mm x 1350mm high and Solid Half Leaf Door size; 495mm x 2070mm high; 44 mm thick;	nr	1		
	Door Type 3 (INT-D03)				
	Composite items; single doors				
B	to suit overall structural opening size 1010 x 2110mm high; Solid Single Door size; 925 x 2070 mm high; 44 mm thick;	nr	4		
	Door Type 4 (INT-D04)				
	Composite items; single doors				

	(32) INTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Composite items; Doors & Glazed Screen				
	(Cont) KCC Group / Carrolls Joinery 44mm thick Solid - core flush varnished paint grade door; internal single action; with hardwood European Oak veneer (or equivalent) with mechanical strength to 1To BS EN 1192 Class 2-3; Acoustic and Thermal Performances to manufacturers standards; with and including lipping to all edges 44 x 8 mm thick; faced both sides with 5mm hardwood veneered plywood finished as full stain system, as spec section M60; neatly cut and fitted to margins; all glued together and hydraulically pressed to approval nylon sweeps as required to door frame and leaves; (vp glazing and ironmongery measured separately); all in accordance with the Architects Specification as per Drawing 25002-AFEC-00-ZZ-SH-A-7001				
	(Cont) Door Type 4 (INT-D04)				
A	to suit overall structural opening size 1010 x 2110mm high; Solid Single Door size; 925 x 2070 mm high with vision panel; size 546mm x 1350mm high; 44 mm thick;	nr	1		
	Door Type 12 (INT-D12)				
	Composite items; single leaf & half doors				
B	to suit overall structural opening size 1510 x 2110mm high; Single Door Leaf size; 926 x 2070 mm high with vision panel; size 200mm x 1350mm high and Solid Half Leaf Door size; 495mm x 2070mm high; 44 mm thick;	nr	2		

	(32) INTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Composite items; Doors & Glazed Screen				
	30 Minute Fire Rated Doors				
	KCC Group / Carrolls Joinery 44mm thick Solid - core flush varnished paint grade door; internal single action; with hardwood European Oak veneer (or equivalent) with mechanical strength to 1To BS EN 1192 Class 2-3; Acoustic and Thermal Performances to manufacturers standards; with and including lipping to all edges 44 x 8 mm thick; faced both sides with 5mm hardwood veneered plywood finished as full stain system, as spec section M60; neatly cut and fitted to margins; all glued together and hydraulically pressed to approval intumescent strips, smoke seals and nylon sweeps as required to door frame and leaves; with and including 1 number glazed vision panels (various sizes); 20 x 15 mm splayed and rebated wrot hardwood glazing beads fixed, sunk, screwed and pelleted to both sided of door and bedded in intumescent paste; 20 x 4 mm 100 PSA fire seal strips to both sides of glazing to achieve 30 minute fire rating (vp glazing and ironmongery measured separately); all in accordance with the Architects Specification as per Drawing 25002-AFEC-00-ZZ-SH-A-7001				
	Door Type 3 (INT-D03)				
	Composite items; single doors				
A	to suit overall structural opening size 1010 x 2110mm high; Solid Single Door size; 925 x 2070 mm high; 44 mm thick;	nr	1		
	Door Type 4 (INT-D04)				
	Composite items; single doors				
B	to suit overall structural opening size 1010 x 2110mm high; Solid Single Door size; 925 x 2070 mm high with vision panel; size 200mm x 1350mm high; 44 mm thick;	nr	3		

	(32) INTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Composite items; Doors & Glazed Screen				
	Door Type 7 (INT-D07)				
	Composite items; single doors				
A	to suit overall structural opening size 1010 x 2110mm high; Solid Single Door size; 925 x 2070 mm high with vision panel; size 200mm x 1350mm high; 44 mm thick;	nr	1		
	Door Type 9 (INT-D09)				
	Composite items; single leaf & half doors - pivot hinge				
B	to suit overall structural opening size 1510 x 2110mm high; Single Door Leaf size; 926 x 2070 mm high with vision panel; size 200mm x 1350mm high and Solid Half Leaf Door size; 495mm x 2070mm high; 44 mm thick;	nr	1		
	Door Type 10 (INT-D10)				
	Composite items; single doors				
C	to suit overall structural opening size 1110 x 2110mm high; Solid Single Door size; 1020 x 2070 mm high with vision panel; size 200mm x 1350mm high; 44 mm thick;	nr	1		
	Door Type 12 (INT-D12)				
	Composite items; single leaf & half doors				
D	to suit overall structural opening size 1510 x 2110mm high; Single Door Leaf size; 926 x 2070 mm high with vision panel; size 200mm x 1350mm high and Solid Half Leaf Door size; 495mm x 2070mm high; 44 mm thick;	nr	1		

	(32) INTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Composite items; Doors & Glazed Screen				
	60 Minute Fire Rated Doors				
	KCC Group / Carrolls Joinery 56mm thick Solid - core flush varnished paint grade door; internal single action; with hardwood European Oak veneer (or equivalent) with mechanical strength to 1To BS EN 1192 Class 2-3; Acoustic and Thermal Performances to manufacturers standards; with and including lipping to all edges 56 x 8 mm thick; faced both sides with 5mm hardwood veneered plywood finished as full stain system, as spec section M60; neatly cut and fitted to margins; all glued together and hydraulically pressed to approval intumescent strips, smoke seals and nylon sweeps as required to door frame and leaves; with and including 1 number glazed vision panels (various sizes); 20 x 15 mm splayed and rebated wrot hardwood glazing beads fixed, sunk, screwed and pelleted to both sided of door and bedded in intumescent paste; 20 x 4 mm 100 PSA fire seal strips to both sides of glazing to achieve 60 minute fire rating (vp glazing and ironmongery measured separately); all in accordance with the Architects Specification as per Drawing 25002-AFEC-00-ZZ-SH-A-7001				
	Door Type 1 (INT-D01)				
	Composite items; single leaf & half doors				
A	to suit overall structural opening size 1510 x 2110mm high; Single Door Leaf size; 926 x 2070 mm high with vision panel; size 200mm x 1350mm high and Solid Half Leaf Door size; 495mm x 2070mm high; 44 mm thick;	nr	1		

	(32) INTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Composite items; Doors & Glazed Screen				
	Composite Items; Glazed Screens				
	Internal Glazed Screens; fire rated; made up of hardwood frames to match internal door frames (European Oak) 125 x 50mm with hardwood strips to head, jambs and sills; open for glass with (as per Architects Specification L40/505); 60 x 16mm slips and 60 x 16mm rebated glazing beads fixed, sunk and screwed and pelleted, all bedded in intusmescent paste to both sides of frame; include for all necessary frame fixings; steel angles, anchor bolts, intumescent mastic pointing and strips, smoke seals, fillers, mineral rockwool around frame; 25 x 4mm 500 PSA fire seal strips to both sides of glazing to achieve 30 & 60minute fire rating; all in accordance with the Architects Drawings 25002-AFEC-00-ZZ-DR-A-2201 and 25002-AFEC-00-ZZ-SH-A-7003 Internal Glazed Screen Schedule and Specification L10/260				
A	Composite items; Internal Windows / Screens				
B	Glazed Screen & Door ID IGS.00.001 - Type IGS-01 - overall size 1722mm wide x 2425mm high; Fire Rating EI30; comprising of Single leaf door size 1310mm x 2425mm high and side screen size 312mm wide x 2425mm high (Internal Glazed Door Ref: INT-001 - INT.00.017)	nr	1		
C	Screen ID IGS.00.002 - Type IGS-04 - overall size 800mm wide x 1245mm high; Non-Fire Rated (Workshop 2 Office)	nr	1		
D	Screen ID IGS.01.006 - Type IGS-03 - overall size 1832mm wide x 2500mm high; Fire Rating EI30	nr	1		

	(32) INTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Composite items; Doors & Glazed Screen				
	Framing				
	The following shall be in treated hardwood European Oak unless otherwise stated; plugged and screwed to blockwork/stud partitions; include for all necessary fixings, counter sinking and making good with matching pellates; protected for finishes; all in accordance with the Architects Drawings and Specification L20/410:				
	Framing; jambs and heads				
A	126 x 44 mm; 2 times rebated.	m	61		
B	138 x 56 mm; 2 times rebated.	m	11		
	Ironmongery, Accessories and Sundries				
	Provide and fit the following ironmongery to solid doors and frames as per Architects Specification on Drawing 25002-AFEC-00-ZZ-SH-A-7001				
	Hardware Set 1 (Leaf & Half Circulation Door (NFR))				
C	SS Concealed Bearing Hinge with Integral Security Dog Bolt	nr	6		
D	SS 19mm diameter x 600mm Pull Handle	pair	1		
E	SS Push Plate - 350 x 80 x 1.2mm (10mm radius Corners)	pair	1		
F	SS Roller Bolt lock	nr	1		
G	Flush Bolt with Dust Socket for Inactive Leaf.	nr	1		
H	Kickplate - Grade 304 -200mm High - Width to suit door width	nr	4		

	(32) INTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Ironmongery, Accessories and Sundries				
	Hardware Set 2 (Leaf & Half Circulation Door (Fire Rated))				
A	SS Concealed Bearing Hinge with Integral Security Dog Bolt & Intumescent Pads.	nr	6		
B	Cam-Motion Door Closers.	nr	2		
C	Hold Open Devices to be integrated into Fire Alarm System.	nr	2		
D	Double Door Mechanical Coordinator	nr	1		
E	SS 19mm diameter x 600mm Pull Handle.	nr	1		
F	SS Push Plate - 350 x 80 x 1.2mm (10mm radius Corners).	nr	1		
G	SS Roller Bolt lock.	nr	1		
H	Flush Bolt with Dust Socket for Inactive Leaf.	nr	1		
J	Automatic Drop Seal - Concealed.	nr	2		
K	Kickplate - Grade 304 -200mm High - Width to suit door width.	nr	4		
L	75mm Diameter "FIRE DOOR KEEP CLEAR" Sign -Stainless Steel / Blue Disc.	nr	4		
	Hardware Set 3 (Leaf & Half Circulation Door with Double Action Pivot Hinge (Fire Rated))				
M	SS Double Action Pivot Hinge sets.	nr	2		
N	Cam-Motion Door Closers.	nr	2		
P	Hold Open Devices to be integrated into Fire Alarm System.	nr	2		
Q	SS 19mm diameter x 600mm Pull Handle.	nr	2		
R	SS Roller Bolt lock.	nr	1		
S	Flush Bolt with Dust Socket for Inactive Leaf.	nr	1		

	(32) INTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Ironmongery, Accessories and Sundries				
	(Cont) Hardware Set 3 (Leaf & Half Circulation Door with Double Action Pivot Hinge (Fire Rated))				
A	Automatic Drop Seal - Concealed.	nr	2		
B	Kickplate - Grade 304 -200mm High - Width to suit door width.	nr	4		
C	75mm Diameter "FIRE DOOR KEEP CLEAR" Sign -Stainless Steel / Blue Disc.	nr	4		
	Hardware Set 4 (Single Circulation Door (Fire Rated))				
D	SS Concealed Bearing Hinge with Integral Security Dog Bolt & Intumescent Pads.	nr	9		
E	Cam-Motion Door Closers.	nr	3		
F	Hold Open Devices to be integrated into Fire Alarm System.	nr	3		
G	SS 19mm diameter x 600mm Pull Handle.	nr	3		
H	SS Push Plate - 350 x 80 x 1.2mm (10mm radius Corners).	nr	3		
J	SS Roller Bolt lock.	nr	3		
K	Automatic Drop Seal - Concealed.	nr	3		
L	Kickplate - Grade 304 -200mm High - Width to suit door width.	nr	6		
M	75mm Diameter "FIRE DOOR KEEP SHUT" Sign -Stainless Steel / Blue Disc.	nr	6		
	Hardware Set 5 (Single Secure Door - Access Controlled (NFR))				
N	SS Concealed Bearing Hinge with Integral Security Dog Bolt.	nr	3		
P	Heavy Duty Electrical Escape Lock.	nr	1		
Q	SS Euro Single Cylinder & 2 Keys.	nr	1		
R	SS Lever Handle Set on Rose.	nr	1		

	(32) INTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Ironmongery, Accessories and Sundries				
	(Cont) Hardware Set 5 (Single Secure Door - Access Controlled (NFR))				
A	Kickplate - Grade 304 -200mm High - Width to suit door width.	nr	2		
B	75mm Diameter Cleaner's Sign - Stainless Steel. (Cleaner's Store Only)	nr	1		
	Hardware Set 6 (Single Secure Door - Access Controlled (Fire Rated))				
C	SS Concealed Bearing Hinge with Integral Security Dog Bolt & Intumescent Pads.	nr	12		
D	Heavy Duty Electrical Escape Lock & Intumescent Kit.	nr	4		
E	SS Euro Single Cylinder & 2 Keys.	nr	4		
F	SS Lever Handle Set on Rose.	nr	4		
G	Automatic Drop Seal - Concealed.	nr	4		
H	Kickplate - Grade 304 -200mm High - Width to suit door width.	nr	8		
J	75mm Diameter "FIRE DOOR KEEP SHUT" Sign -Stainless Steel / Blue Disc.	nr	8		
	Hardware Set 7 (Leaf & Half Secure Door - Access Controlled (NFR))				
K	SS Concealed Bearing Hinge with Integral Security Dog Bolt.	nr	6		
L	Heavy Duty Electrical Escape Lock.	nr	1		
M	SS Euro Single Cylinder & 2 Keys.	nr	1		
N	SS Lever Handle Set on Rose.	nr	1		
P	Flush Bolt with Dust Socket for Inactive Leaf.	nr	1		
Q	Kickplate - Grade 304 -200mm High - Width to suit door width.	nr	4		

	(32) INTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Ironmongery, Accessories and Sundries				
	Hardware Set 8 (Leaf & Half Secure Door - Access Controlled (Fire Rated))				
A	SS Concealed Bearing Hinge with Integral Security Dog Bolt & Intumescent Pads.	nr	6		
B	Cam-Motion Door Closers.	nr	2		
C	Double Door Mechanical Coordinator.	nr	1		
D	Heavy Duty Electrical Escape Lock & Intumescent Kit.	nr	1		
E	SS Euro Single Cylinder & 2 Keys.	nr	1		
F	SS Lever Handle Set on Rose.	nr	1		
G	Flush Bolt with Dust Socket for Inactive Leaf.	nr	1		
H	Kickplate - Grade 304 -200mm High - Width to suit door width.	nr	4		
J	75mm Diameter "FIRE DOOR KEEP SHUT" Sign -Stainless Steel / Blue Disc.	nr	4		
	Manifestations				
K	Manifestation In compliance with TGD Part M and DAC. Refer 25002-AFEC-00-ZZ-SH-A-7002_External Door Schedule; Coatex or equivalent approved; Product Metamark Frost Etch Glass Effect Film with individual square or circle decals to clause 436- 3 layer based - Layer 1: High optical quality polyester with printed design. Layer 2: PS adhesive, glass polymerization within 15 days. Layer 3: Protection release liner disposable after installation; heights set at 850mm approx. & 1475mm above FFL all as per Architects Specification and Drawing 25002-AFEC-00-ZZ-SH-A-7002 & 7003 (Door & Glazed Screen)	nr	38		

	(32) INTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Ironmongery, Accessories and Sundries				
	Sundries; bedding and pointing				
	Bed door frame in 10 mm thick fire rated intumescent bedding compound to achieve 30 & 60 minute fire rating; include for Tightly Packed Mineral Fibre Capped on Both Sides with a 10mm Depth of Acrylic Intumescent Mastic, Fire Rated for this Application to BS 476: Part 22: 1987 or BS EN 163 -1 or full depth Expanding PU foam, Fire Tested for this Application; to 30 & 60 minutes fire rating to both sides of frame.				
A	door frame 126 mm wide (30min)	m	61		
B	door frame 138 mm wide (60min)	m	11		
C	internal glazed screen frames (30min)	m	16		
	Sundries; seals				
	Mineral "Rockwool" packing to fire rated doors as per manufacturers instructions.				
D	30 minute fire rated door frame 126 mm wide.	m	61		
E	60 minute fire rated door frame 138 mm wide.	m	11		
F	internal glazed screen frames (30min)	m	16		
	Sundries; intumescent seals				
	"Dufaylite" or equal approved intumescent fire seal strip with combined smoke seal; fixed into and including form any necessary groove within the door and door frames for the following:				
G	10 x 5 mm approved smoke seal to achieve 30 & 60 minute fire rating.	m	88		

	(32) INTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Ironmongery, Accessories and Sundries				
	Fixings; drilled				
A	"Hilti" or equally approved expanding anchor bolt set type HT 10 / 92; including for forming mortice in hardwood timber frames and solid concrete blockwork walls; including all necessary drilling and fixing; counter sink and making good and pelleted, maximum 150mm from ends of each jamb and at 600mm maximum centres.	nr	147		
	GLAZING:				
	General glazing (Vision Panels to Doors & Glazed Screens)				
	Non-Fire Rated				
	Non-Fire Rated 2 ply laminated or toughened 6mm clear single Safety Glass for use with certified & tested Doorsets in accordance with BS 6262-4, clear single safety glazing. All glazing = 250mm wide to achieve a 1B1 classification in accordance with IS EN 12600; Manufacturer & Product: Pyrobel by AGC Glass UK Limited or equivalent. Colour: Clear Sealant or equivalent; secured with 25 x 25mm hardwood glazing beads to timber doors / vision panels; all in accordance with Architects Specification L40/410 & L40/250				
B	glazing; area 0.15 - 5.00m2; multiple glazed panes (viewing panels to doors).	m2	1		
C	glazing; area 0.15 - 5.00m2; multiple glazed panes (glazed screens).	m2	1		
D	Fire Rated (30 & 60 minutes)				

	(32) INTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	(Cont) GLAZING:				
	(Cont) General glazing (Vision Panels to Doors & Glazed Screens)				
	Fire Rated EI30 (30/30) 17.3mm thick Pyrobel 16 with 2 ply annealed laminated or toughened glass, All glazing = 250mm wide to achieve a 1B1 classification in accordance with IS EN 12600; Manufacturer & Product: Pyrobel by AGC Glass UK Limited or equivalent in accordance with BS 6262-4, clear fire resisting safety glazing; Colour: Clear Sealant or equivalent; secured with 25 x 25mm hardwood glazing beads to timber doors / vision panels; all to achieve 30 minute fire rating; all in accordance with Architects Specification L40/505				
A	glazing; area 0.15 - 5.00m2; multiple glazed panes (viewing panels to doors).	m2	3		
B	glazing; area 0.15 - 5.00m2; multiple glazed panes (glazed screens).	m2	9		
	Fire Rated EI60 (60/60) 26.6mm thick Pyrobel 25 with 2 ply annealed laminated or toughened glass, All glazing = 250mm wide to achieve a 1B1 classification in accordance with IS EN 12600; Manufacturer & Product: Pyrobel by AGC Glass UK Limited or equivalent in accordance with BS 6262-4, clear fire resisting safety glazing; Colour: Clear Sealant or equivalent; secured with 25 x 25mm hardwood glazing beads to timber doors / vision panels; all to achieve 60 minute fire rating; all in accordance with Architects Specification L40/505				
C	glazing; area 0.15 - 5.00m2; multiple glazed panes (viewing panels to doors).	m2	1		

	(32) INTERNAL WALL COMPLETIONS (PLASTERING) (Cont)				
	PAINTING AND DECORATING:				
	Painting				
	Prepare, knot, prime, stop and apply one coat of primer, one coat of undercoat/ base coat, two finishing coats of Dulux waterborne paint -Dulux diamond satinwood / eggshell to selected RAL colour range; as per Architects Specification M60/150				
	General surfaces; frames to doors				
A	< or = 300 mm	m	72		
	General surfaces; architraves, quadrants / beading				
B	< or = 300 mm	m	211		
	General surfaces; all doors (including vision panels)				
C	> 300 mm	m2	60		
	General surfaces; all Internal Glazed Screens				
D	< or = 300 mm	m2	20		

(32) INTERNAL WALL COMPLETIONS (PLASTERING) (Cont)

COLLECTION

Page No. BQ/223	NIL
Page No. BQ/224	NIL
Page No. BQ/225	NIL
Page No. BQ/226	NIL
Page No. BQ/227	NIL
Page No. BQ/228	NIL
Page No. BQ/229	NIL
Page No. BQ/230	NIL
Page No. BQ/231	NIL
Page No. BQ/232	NIL
Page No. BQ/233	NIL
Page No. BQ/234	NIL
Page No. BQ/235	NIL
Page No. BQ/236	NIL
Page No. BQ/237	NIL
Page No. BQ/238	NIL
Page No. BQ/239	NIL
(32) INTERNAL WALL COMPLETIONS (PLASTERING) Carried to Summary	**NIL**

	(34) STAIRS AND RAMPS COMPLETIONS (PLASTERING)				
	METALWORK				
	Non-Structural				
	Composite Item; Balustrade				
	Mild Steel flat plate and round bar - factory primed and painted on site comprising of; Top and bottom rails - 12 x 40mm mild steel flat. End & intermediate support uprights - 12 x 40mm mild steel flat with Infill uprights - 12mm mild steel round bar, Mounting brackets - 12mm mild steel flat plate. Handrails - 40mm diameter mild steel tube on mounting brackets - 12mm mild steel flat plate mounting brackets with 12mm mild steel round bar stems; Balustrade top rail at 1060mm above pitch line of flight and Balustrade top rail at 1100mm above FFL on landings. Max 99mm between 12mm round bar infill uprights and Handrails at 900mm above pitch line of flight and landings; allow for bolting to concrete stairs include for all necessary assembly, bolts, bolting up, welding, screws, fixings and labours to the satisfaction of the Engineer all as detailed on Architects Drawing ZZ-DR-A-5001 and Specification L30/550				
A	Composite item; balustrade				
B	balustrade; horizontal	m	5		
C	balustrade; raking	m	7		
	Extra on Balustrades for:				
D	ends	nr	2		
E	bends	nr	8		
F	ramps between straight and raking	nr	4		

	(34) STAIRS AND RAMPS COMPLETIONS (PLASTERING) (Cont)				
	(Cont) METALWORK				
	(Cont) Non-Structural				
	Composite item; Handrail				
	40mm diameter mild steel handrail painted, with 12mm diameter mild steel round mounting brackets welded to handrails at 900mm centres fixed to concrete/concrete block wall with 75mm diameter x 10mm galvanised mild steel plate, painted, bolted to concrete stairs by countersunk expansion bolts to engineers details; 900mm above pitch line /1100mm above landings include for all necessary assembly, bolts, bolting up, welding, screws, fixings and labours to the satisfaction of the Architect all as detailed on Architects Drawing ZZ-DR-A-5001 and Specification L30/570				
	Composite item; Handrail				
A	handrails; laid horizontal (landings)	m	6		
B	handrails; laid raking	m	7		
	Extra on Handrails for:				
C	ends	nr	2		
D	bends	nr	8		
E	ramps between straight and raking	nr	4		

(34) STAIRS AND RAMPS COMPLETIONS (PLASTERING) (Cont)				
COLLECTION				
Page No. BQ/241				NIL
Page No. BQ/242				NIL
(34) STAIRS AND RAMPS COMPLETIONS (PLASTERING) Carried to Summary				**NIL**

	(37) ROOF COMPLETIONS (PLASTERING)				
	METALWORK:				
	Non - Structural				
	AUTOMATIC OPENING VENTS				
	Smoke Control Vents / AOV's, Kingspan Optima SHEV or equivalent; automatic hinged smoke vent, complete with manually operated comfort opening mechanism; clear double skin polycarbonate rectangular dome and top and bottom carriages with fixing sleeves fixed to upstand, extruded aluminium curb adaptor and including proprietary insulated preformed upstand kerb; hoisted in place, bedded and fixed at roof level and weathering in accordance with manufacturers instructions including all flashings and steel support angles all as per Details on Architects Drawing 25002-AFEC-01-ZZ-DR-A-6307 and Specification L10/410				
A	size 1200 x 1200mm as per Architects Drawing Nr. 25002-AFEC-01-ZZ-DR-A-6307	nr	3		
	AIR TIGHTNESS				
	Air tightness and vapour barrier tape, continuous sealing between Rooflights/ AOV's and adjacent building component/ structure; fixing to internal face of adjacent structure and to Rooflight/AOV's frame to seal junctions, as per Architects Drawings and specifications				
B	AOV's Roof Lights, girth < or = 300mm (3nr)	m	15		

	(37) ROOF COMPLETIONS (PLASTERING) (Cont)				
	(Cont) Non - Structural				
	EDGE PROTECTION				
	Skyway or equivalent Kee Guard Metal Rooftop Safety Guardrail free standing non-penetrative edge protection galvanised handrail; height at 1.100m; consisting of galvanised steel main and intermediate uprights (2 rail system) at 2500mm centre; galvanised steel cross rails; with removable top riser unit; 20kg PVC counter weight;; include for all necessary galvanised steel grub screws, clinch nuts and fixings; all installed and fixed in position, tested and certified in accordance with the manufacturers written instructions and in accordance with the Architects Drawing 25002-AFEC-01-ZZ-DR-A-2002 and Specifications L35/170				
	Main Roof				
A	railings; laid horizontal	m	25		
B	railings; laid raking	m	25		
	Extra over for railings for:				
C	ends	nr	2		
D	bends	nr	6		
E	Access Gates; size; 950mm wide x 1100mm high with integrated gates - key clamp components.	nr	3		

To Collection € **NIL**

	(37) ROOF COMPLETIONS (PLASTERING) (Cont)				
	(Cont) Non - Structural				
	ACCESS / STEP OVER LADDER				
	Skyway or equivalent Safe Access Stepover Platforms for Working at Height; Nominal 3200mmL x 600mmW x 900mm Rise and 1100 high guarding both sides include for all necessary galvanised steel grub screws, clinch nuts and fixings; all installed and fixed in position, tested and certified in accordance with the manufacturers written instructions and in accordance with the Architects Drawing 25002-AFEC-01-ZZ-DR-A-2002 and Specifications L35/150				
A	4 steps either side	nr	1		
	HARNESS ANCHORS				
	Skyway or equal approved stainless steel Single Point Anchor Post located on top of the Kingspan Trapezoidal roof cladding system; cables to be continuous around corners; all end units, tensioners, intermediate and end brackets to be stainless steel; all installed and fixed in position, tested, weathered, sealed and certified in accordance with manufactures instructions and in accordance with the Architects Drawing 25002-AFEC-01-ZZ-DR-A-2002 and Specifications L35				
B	harness tie-off point for maintenance of AOV and RWO's	nr	3		

	(37) ROOF COMPLETIONS (PLASTERING) (Cont)				
	(Cont) Non - Structural				
	ROOFBOX				
	Powdercoated aluminium finish insulated cladded Modular Roofbox M bespoke service entry box/cabinet consisting of pre-primed base section for quick installation into waterproofing membrane, cover flashing to allow for 150mm (minimum) vertical roof upstand to be finished under integrated cowl, removable access lid to give clear working access, aluminium pull-out panel and protective cowl projecting over vertical aperture for increased weather protection including all necessary frame components, frame bolts, roof closure panels, insulated walls panels, panel flashings, aprons, drilling, fixings, screws, attachments, seals, etc. installed in accordance with the manufacturers recommendations & instructions and Architects Specification H43/110 and Architects Drawings 25002-AFEC-00-ZZ-DR-A-2002 & 4001				
A	overall size; 1200mmW x 1500mmL x 1800mmH with Bepoke Kerb to suit 5 degree pitch trapezoidal metal roof	Item	1		
	ROOF SERVICE ENTRY				
B	Retrofit swan-neck cable penetration system with Dektite EPDM Flashing; service entry consisting of spun aluminium base with large area to bond to the waterproofing, detachable lid for ease of access, sufficient clearance for future re-roofing under existing services and pipe/cable port plate with knock-out holes including all necessary drillings, fixings, attachments, seals, etc. installed in accordance with the manufacturers recommendations and as per the Architects instructions	nr	5		

(37) ROOF COMPLETIONS (PLASTERING) (Cont)				
COLLECTION				
Page No. BQ/244				NIL
Page No. BQ/245				NIL
Page No. BQ/246				NIL
Page No. BQ/247				NIL
(37) ROOF COMPLETIONS (PLASTERING) Carried to Summary				**NIL**

	(41) WALL FINISHES EXTERNALLY (PLASTERING)				
	WALL FINISHES EXTERNALLY				
	FLOOR, WALL AND CEILING FINISHES:				
	Finishes				
	In - situ Finishes.				
	Scud in cement and sand (1:3), apply two coats of cement, lime and sand (1:0.5:4-4.5) undercoat (10mm thick) and one coat of white portland cement, lime and sand (1:0.5:4-4.5) final coat (10mm thick) total thickness 30 mm; finish in selected light-tone pebble a dry dash from an approved source; all in accordance with Architects Specification M20				
	Walls; blockwork base				
A	> 300 mm wide	m2	74		
	Scud in cement and sand (1:3), apply two coats of cement, lime and sand (1:1:5-6) undercoat (10mm thick) and one coat of white portland cement, lime and sand (1:1:5-6) final coat (8mm thick) total thickness 20 mm; finish with a wood float with a fine nap surface all in accordance with Architects Specification M20				
	Walls; blockwork base				
B	< or = to 300 mm; reveals	m	17		
C	extra over last for patent reveals, 80 mm wide and projecting 20 mm over adjoining plaster	m	17		
	Plinths; blockwork base				
D	girth 150 - 300 mm	m	29		

To Collection € **NIL**

	(41) WALL FINISHES EXTERNALLY (PLASTERING) (Cont)				
	(Cont) Finishes				
	(Cont) In - situ Finishes.				
	Expamet, or equivalent approved, austenitic stainless steel expanded metal lathing and beading to BS EN 10088-1, fixed in accordance with the manufacturers instructions using s/s fixings as outlined in Architects Specification 19277_Spec 05 Ref: Item 2.9.6				
A	angle bead; ref. 506	m	23		
B	render stop; ref. 507	m	17		
C	bellcast to plinth	m	29		
D	movement bead: ref.544	m	10		
	Labours				
	Labours; making good, cutting around obstructions				
E	girth; < or = 300 mm	nr	10		
F	girth 300 mm - 1.00m	nr	5		
	PAINTING AND DECORATING:				
	Painting				
	Prepare and paint two coats of Dulux Weathershield or equivalent approved exterior quality paint, in selected colours; all in accordance with the manufactures written instructions.				
	Walls; roughcast plastered base				
G	> 300 mm girth	m2	74		
H	< or = to 300 mm girth, reveals	m	17		
J	< or = to 300 mm girth, plinths	m	29		

(41) WALL FINISHES EXTERNALLY (PLASTERING) (Cont)				
COLLECTION				
Page No. BQ/249				NIL
Page No. BQ/250				NIL
(41) WALL FINISHES EXTERNALLY (PLASTERING) Carried to Summary				**NIL**

	(42) WALL FINISHES INTERNALLY (PLASTERING)				
	WALL FINISHES INTERNALLY				
	FLOOR WALL AND CEILING FINISHES:				
	Board Finishes:				
	2 layers of Gyproc or equivalent plasterboard; consisting of 2 layer of 12.5m thick Soundbloc; including for staggered joints; fixing with gyproc drywall screws to metal framework at 600 mm centres (framework measured elsewhere); include all blocking and bracing as necessary; taped and filled joints and spotting nail holes in preparation for skim finish; "Gypsum" or equivalent plaster skim, 3 mm thick applied to plasterboard base; all as per Architects Specification K10				
	Walls				
A	< or = 300 mm wide (Reveals & Heads)	m2	7		
B	> 300 mm wide (ILS-01)	m2	56		
	2 layers of Gyproc or equivalent plasterboard; consisting of 2 layer of 12.5m thick Soundbloc; including for staggered joints; fixing with gyproc drywall screws to metal framework at 600 mm centres (framework measured elsewhere); include all blocking and bracing as necessary; taped and filled joints and spotting nail holes in preparation for skim finish; "Gypsum" or equivalent plaster skim, 3 mm thick applied to plasterboard base; all as per Architects Specification K10				
	Walls				
C	< or = 300 mm wide (Reveals & Heads)	m2	15		
D	> 300 mm wide (IWS-02, 03 & 04)	m2	463		

	(42) WALL FINISHES INTERNALLY (PLASTERING) (Cont)				
	(Cont) FLOOR WALL AND CEILING FINISHES:				
	(Cont) Board Finishes:				
	Shaftwall Gyproc or equivalent plasterboard; consisting of 2 layer of 12.5m thick Soundbloc and 1 layer of 19mm Gyproc core board; including for staggered joints; fixing with gyproc drywall screws to metal framework at 600 mm centres (framework measured elsewhere); include all blocking and bracing as necessary; taped and filled joints and spotting nail holes in preparation for skim finish; "Gypsum" or equivalent plaster skim, 3 mm thick applied to plasterboard base; all as per Architects Specification K10				
	Walls				
A	< or = to 300mm	m2	5		
B	> 300mm wide (IWS-05 - first floor)	m2	15		
C	> 300mm wide (IWS-05 - first floor - as per Architects Drawing Nr. 6301)	m2	26		
	1 layers of Gyproc or equivalent plasterboard; including for staggered joints; fixing with gyproc drywall screws to 20mm metal tracks with 25mm mineral wool packing; include all blocking and bracing as necessary; taped and filled joints and spotting nail holes in preparation for skim finish; "Gypsum" or equivalent plaster skim, 3 mm thick applied to plasterboard base; all as per Architects Specification K10				
	Walls				
D	< or = 300 mm wide (As per Architects Detail Drawing Nr. 6410 & 6507)	m	32		

	(42) WALL FINISHES INTERNALLY (PLASTERING) (Cont)				
	(Cont) FLOOR WALL AND CEILING FINISHES:				
	(Cont) Board Finishes:				
	Euroform Veraliner cement bonded particleboard sheeting panel; 12mm thick; Class A1 fire resistance; fixing with gyproc drywall screws to and including Gyproc Gypliner or equivalent consisting of GL1 lining channels at 600 mm centres, GL2 / GL9 at 800mm vertical centres along GL1, GL8 tracks, GL3 channel connectors and GL11 anchors for fixings; frame fixed back to structure with approved fixings; include all blocking and bracing as necessary; taped and filled joints and spotting nail holes; all as per Architects Specification				
	Walls				
A	> 300mm wide (as per Architects Detail Drawing Nr. 6111)	m	13		
	Labours				
	Labours; making good and / or cutting around obstructions				
B	girth; < or = 300 mm	nr	25		
C	girth 300 mm - 1000 mm	nr	15		
	Sundries				
	"Expamet" or equal approved galvanized mild steel; expanded metal lathing and beading fixed in accordance with manufacturers instructions				
	Beads				
D	angle bead	m	8		
E	plaster stop bead	m	50		
	Labours				
F	Prime and point in two part polysulphide mastic of selected colour; include for necessary masking in forming joint at junction of plaster stop bead and window frame.	m	86		

	(42) WALL FINISHES INTERNALLY (PLASTERING) (Cont)				
	PAINTING AND DECORATING:				
	Painting				
	Thoroughly clean down; remove any grease or dirt; prepare and apply prior to application of skim finishes to plasterboard 1 coat primer of drywall PVA sealer dilution 5:1 and 1 coat reprime dilution 3:1				
	Walls; plastered base				
A	girth < or = 300 mm	m	10		
B	girth > 300 mm	m2	136		
C	girth > 300 mm in stairwells / airlock void	m2	9		
	Thoroughly clean down; remove any grease or dirt; prepare, apply one preparatory primer undercoat / base coat and two finishing coats of Dulux Diamond Matt or equivalent; emulsion paint finish in selected RAL colour range; all in accordance with the manufacturers written instructions and Architects Specification M60				
	Walls; plastered base				
D	girth < or = 300 mm	m	10		
E	girth > 300 mm	m2	136		
F	girth > 300 mm in stairwells / airlock void	m2	9		
	Walls; blockwork base				
G	girth < or = 300 mm	m	23		
H	girth > 300 mm	m2	263		
J	girth > 300 mm in stairwells / airlock void	m2	140		
	Walls; concrete base				
K	girth < or = 300 mm	m	10		
L	girth > 300 mm	m2	40		

	(42) WALL FINISHES INTERNALLY (PLASTERING) (Cont)				
	(Cont) PAINTING AND DECORATING:				
	(Cont) Painting				
	(Cont) Thoroughly clean down; remove any grease or dirt; prepare, apply one preparatory primer undercoat / base coat and two finishing coats of Dulux Diamond Matt or equivalent; emulsion paint finish in selected RAL colour range; all in accordance with the manufacturers written instructions and Architects Specification M60				
A	girth > 300 mm in stairwells	m2	17		
B	girth > 300 mm - internal face of lift shaft	m2	61		

(42) WALL FINISHES INTERNALLY (PLASTERING) (Cont)

COLLECTION

Page No. BQ/252				NIL
Page No. BQ/253				NIL
Page No. BQ/254				NIL
Page No. BQ/255				NIL
Page No. BQ/256				NIL
(42) WALL FINISHES INTERNALLY (PLASTERING) Carried to Summary				**NIL**

	(43) FLOOR FINISHES (PLASTERING)				
	FLOOR FINISHES				
	INFORMATION				
	Conditions for laying floor coverings				
A	Before laying the floor coverings, their bases shall be swept and porous bases shall be primed as recommended by the Adhesive manufacturer	item	1		
B	In no circumstances should floor hardening solutions be used. Any priming coat should be allowed to dry before the adhesive is used	item	1		
C	When laying flexible P.V.C. coverings, the flooring should be kept at a room temperature of not less than 18 degrees centigrade for at least 24 hours before laying. When laying the material shall be well rolled with a floor roller, weighing approximately 65kg	item	1		
D	All other trades are to be finished	item	1		
E	All lighting and heating to be on	item	1		
F	Humidifiers to be provided	item	1		
G	Allow for protecting all floors with polythene (1000 gauge) covered with hardboard sheet taped and jointed, maintaining, removal and disposal upon completion and making good areas	item	1		
H	Areas to be completely free and protected from dust	item	1		
	New powerfloated and screeded concrete floor slabs are to be finished to an acceptable standard for floor coverings as recommended by the manufactures written instructions of the relevant sheet, tile and brush applied floor coverings and any uneven areas or blemishes are to be made good with a patent levelling screed or ground smooth where necessary at the Contractor own expense.	Note			

	(43) FLOOR FINISHES (PLASTERING) (Cont)				
	DEMOLITION AND ALTERATIONS:				
	Treatment / Repairs				
	Cleaning surfaces				
	Blastrac concrete floor slab to thoroughly clean, dry and remove all laitances, traces of dirt, grease and contaminants etc in preparation for the approved floor sealer in accordance with BS 8203 or DIN 18 365.				
A	concrete floor	m2	474		
	WOODWORK:				
	Boarding and Second Fixings				
	The following shall be painted mdf (type H1) in compliance with EN 622 parts 1 & 5 unless otherwise stated; plugged and screwed to blockwork / concrete and stud partitions; include for all necessary fixings and making good to punch holes; as per Architects Specification and Drawings 25002-AFEC-00-ZZ-DR-A-1004, 2103, 2201, 2202 & 6002				
	Second fixings; skirting				
B	125 x 18 mm, rebated MDF (1 x rebate 5mm x 5mm deep)	m	108		

	(43) FLOOR FINISHES (PLASTERING) (Cont)				
	FLOOR, WALL AND CEILING FINISHES:				
	Flexible sheet finishes:				
	Floor Finish Type 1 - Circulation Areas & Lobbies				
	Homogeneous Rubber Compound vinyl flooring to ASTM F1344 Standards - Norament 926 Grano 5307 or equivalent proprietary vinyl sheet floor covering by Interface Nora or equivalent approved; 3.5 mm thick hammered surface in selected colours; Sound rating 11dB yo ISO 10140-3, Slip Resistance (ASTM D2047) >0.5 dry/wet required, ADA Compliant; with surface roughness (Rz) minimum =20, with acoustic performance to manufacturers standards and fire classification To BS EN 13501-1, Class Bfl-s1 or better. In Ireland, refer to IS EN 13501-1 for the fire classification of construction products and building elements, with vinyl flooring fixed with approved adhesive Nora PU 102 & AC100 and apply Nora nTx 020 1C primer prior to laying vinyl floor finish; hot seam weld all joints as per clause 680 with welding bead to ensure watertight seams, groove cut with approved groove cutting machine with and including all trims and edgings; cemfloor liquid screeds cement base Cemfloor CT C20F4 self levelling compound; on concrete floor with and including for preparing floor level to SR1 finish and dry; and apply two coats water based UV cured sealer and dry buff with nylon pad to a matt finish; clean finished floor on completion; all in accordance with the manufacturers instructions and Architects Specification M50/150 to 895 inclusive and as per Architects Drawings 25002-AFEC-00-ZZ-DR-A-1004, 2103, 2201, 2202 & 6002				
	Floors; concrete base				
A	> 300mm wide	m2	113		

To Collection € **NIL**

	(43) FLOOR FINISHES (PLASTERING) (Cont)				
	(Cont) FLOOR, WALL AND CEILING FINISHES:				
	(Cont) Floor Finish Type 1 - Circulation Areas & Lobbies				
	(Cont) Homogeneous Rubber Compound vinyl flooring to ASTM F1344 Standards - Norament 926 Grano 5307 or equivalent proprietary vinyl sheet floor covering by Interface Nora or equivalent approved; 3.5 mm thick hammered surface in selected colours; Sound rating 11dB yo ISO 10140-3, Slip Resistance (ASTM D2047) >0.5 dry/wet required, ADA Compliant; with surface roughness (Rz) minimum =20, with acoustic performance to manufacturers standards and fire classification To BS EN 13501-1, Class Bfl-s1 or better. In Ireland, refer to IS EN 13501-1 for the fire classification of construction products and building elements, with vinyl flooring fixed with approved adhesive Nora PU 102 & AC100 and apply Nora nTx 020 1C primer prior to laying vinyl floor finish; hot seam weld all joints as per clause 680 with welding bead to ensure watertight seams, groove cut with approved groove cutting machine with and including all trims and edgings; cemfloor liquid screeds cement base Cemfloor CT C20F4 self levelling compound; on concrete floor with and including for preparing floor level to SR1 finish and dry; and apply two coats water based UV cured sealer and dry buff with nylon pad to a matt finish; clean finished floor on completion; all in accordance with the manufacturers instructions and Architects Specification M50/150 to 895 inclusive and as per Architects Drawings 25002-AFEC-00-ZZ-DR-A-1004, 2103, 2201, 2202 & 6002				
	Labours; making good and / or cutting around obstructions				
A	girth < or = to 300mm	nr	20		
B	girth 300 to 1000 mm	nr	10		

	(43) FLOOR FINISHES (PLASTERING) (Cont)				
	(Cont) FLOOR, WALL AND CEILING FINISHES:				
	Mattwell				
	Entrance flooring system; Gradus or equivalent approved; depth 30mm thick (approx); Ref: Esplande 1500; material comprising of rubber with nylon fibres and aluminium strip in a ribbed pattern; closed construction with inset internal arrangement; aluminium frame 30 x 30mm ARF50 matwell frame drilled and plugged to concrete floor with approved fixings; 6mm silicone seal at perimeter of frame; all in accordance with Architects Specification N10/300 and Drawing Nr. 6108				
	Mattwell				
A	2000 x 1599 mm	nr	1		
	Ironmongery, Accessories and Sundries				
	Sundries				
	Airtightness membrane & tape sealing, mastic sealing and expanding foam, to Architects Specification and as detailed on Drawing Series 6000				
B	Horizontal Airtightness tape to create continuous seal between plaster and concrete screed at junction between skirting and floor, girth < or = 300mm,	m	108		
C	Extra over last for mastic bead at junction between skirting and floor	m	108		

	(43) FLOOR FINISHES (PLASTERING) (Cont)				
	(Cont) FLOOR, WALL AND CEILING FINISHES: **(Cont) Ironmongery, Accessories and Sundries**				
	Accessories				
	Gradus or equivalent Proprietary stainless steel with brushed finish; expansion joint cover plate / dividing strips between different floor types; fixed at junction of different floor finishes and plugged and screwed to concrete floors at 600 mm c/c with and including for sealing with a silicone sealant; as per Architects Drawings 6106 & 6202 and Specification M50/740				
A	generally	m	4		
	Testing				
	Slip Resistance Testing				
B	Contractor to allow and provide slip resistance test (Pendulum Test) to all M50/150 Vinyl Sheeting to BS EN 16165 all as outlined in Architects Specification M50/861	Item	1		
	PAINTING				
	Painting				
	To Timber Skirting				
	Prepare, knot, prime, stop and apply one coat of primer, one coat of undercoat/ base coat, two finishing coats of Dulux waterborne paint -Dulux diamond satinwood / eggshell to selected RAL colour range; as per Architects Specification M60/150				
	Second fixing, to timber base				
C	girth < or = to 300 mm, skirtings	m	108		
D	girth < or = to 300 mm, skirtings, primer only to backs of skirtings	m	108		
	Concrete Floor Sealer				

	(43) FLOOR FINISHES (PLASTERING) (Cont)				
	(Cont) PAINTING				
	(Cont) Painting				
	Apply two coats Sika EVERBUILD® 403 Concrete Hardener & Dustproofer or acceptable equivalent; solvent based, clear acrylic resin polymer solution used to cure, harden and seal fresh or hardened concrete; SRV to PTV to BS 7976 =36; all applied in strict accordance with the manufacturer's instructions in preparation for floor coverings as outlined in Architects Specification M60/180				
A	Floors				
B	> 300mm wide	m2	403		
	To Vinyl Finishes				
	Apply two coats dampproof membrane; applied in strict accordance with the manufacturer's instructions in preparation for vinyl floor coverings				
	Floors				
C	> 300mm wide	m2	113		

(43) FLOOR FINISHES (PLASTERING) (Cont)				
COLLECTION				
Page No. BQ/258				NIL
Page No. BQ/259				NIL
Page No. BQ/260				NIL
Page No. BQ/261				NIL
Page No. BQ/262				NIL
Page No. BQ/263				NIL
Page No. BQ/264				NIL
(43) FLOOR FINISHES (PLASTERING) **Carried to Summary**				**NIL**

	(44) STAIRS FINISHES (PLASTERING)				
	(44) STAIRS FINISHES				
	WOODWORK:				
	Boarding and Second Fixings				
	The following shall be painted mdf (type H1) in compliance with EN 622 parts 1 & 5 unless otherwise stated; plugged and screwed to blockwork / concrete and stud partitions; include for all necessary fixings and making good to punch holes; as per Architects Specification and Drawings 25002-AFEC-00-ZZ-DR-A-1004, 2103, 2201, 2202 & 6002				
	Second fixings; skirting				
A	150 x 15 mm, profiled	m	12		

	(44) STAIRS FINISHES (PLASTERING) (Cont)				
	FLOOR, WALL AND CEILING FINISHES:				
	Flexible sheet finishes:				
	Homogeneous Rubber Compound vinyl flooring to ASTM F1344 Standards - Norament 926 Grano 5307 or equivalent proprietary vinyl sheet floor covering by Interface Nora or equivalent approved; 3.5 mm thick hammered surface in selected colours; Sound rating 11dB yo ISO 10140-3, Slip Resistance (ASTM D2047) >0.5 dry/wet required, ADA Compliant; with surface roughness (Rz) minimum =20, with acoustic performance to manufacturers standards and fire classification To BS EN 13501-1, Class Bfl-s1 or better. In Ireland, refer to IS EN 13501-1 for the fire classification of construction products and building elements, with vinyl flooring fixed with approved adhesive Nora PU 102 & AC100 and apply Nora nTx 020 1C primer prior to laying vinyl floor finish; hot seam weld all joints as per clause 680 with welding bead to ensure watertight seams, groove cut with approved groove cutting machine with and including all trims and edgings; cemfloor liquid screeds cement base Cemfloor CT C20F4 self levelling compound; on concrete floor with and including for preparing floor level to SR1 finish and dry; and apply two coats water based UV cured sealer and dry buff with nylon pad to a matt finish; clean finished floor on completion; all in accordance with the manufacturers instructions and Architects Specification M50/150 to 895 inclusive and as per Architects Drawings 25002-AFEC-00-ZZ-DR-A-1004, 2103, 2201, 2202 & 6002				
	Treads and Risers				
A	tread (300mm wide) with 5mm one piece homogeneous rubber compound integral nosing and riser (175mm high) as per Drawing 19277-302	m	23		
	Floors; concrete base				
B	> 300mm wide	m2	5		

To Collection € **NIL**

	(44) STAIRS FINISHES (PLASTERING) (Cont)				
	(Cont) FLOOR, WALL AND CEILING FINISHES:				
	(Cont) Flexible sheet finishes:				
	(Cont) Homogeneous Rubber Compound vinyl flooring to ASTM F1344 Standards - Norament 926 Grano 5307 or equivalent proprietary vinyl sheet floor covering by Interface Nora or equivalent approved; 3.5 mm thick hammered surface in selected colours; Sound rating 11dB yo ISO 10140-3, Slip Resistance (ASTM D2047) >0.5 dry/wet required, ADA Compliant; with surface roughness (Rz) minimum =20, with acoustic performance to manufacturers standards and fire classification To BS EN 13501-1, Class Bfl-s1 or better. In Ireland, refer to IS EN 13501-1 for the fire classification of construction products and building elements, with vinyl flooring fixed with approved adhesive Nora PU 102 & AC100 and apply Nora nTx 020 1C primer prior to laying vinyl floor finish; hot seam weld all joints as per clause 680 with welding bead to ensure watertight seams, groove cut with approved groove cutting machine with and including all trims and edgings; cemfloor liquid screeds cement base Cemfloor CT C20F4 self levelling compound; on concrete floor with and including for preparing floor level to SR1 finish and dry; and apply two coats water based UV cured sealer and dry buff with nylon pad to a matt finish; clean finished floor on completion; all in accordance with the manufacturers instructions and Architects Specification M50/150 to 895 inclusive and as per Architects Drawings 25002-AFEC-00-ZZ-DR-A-1004, 2103, 2201, 2202 & 6002				
	Landings (of stairs)				
A	> 300mm wide	m2	5		
	Labours; making good and / or cutting around obstructions				
B	girth < or = to 300mm	nr	5		
C	girth 300 to 1000 mm	nr	1		

	(44) STAIRS FINISHES (PLASTERING) (Cont)				
	(Cont) FLOOR, WALL AND CEILING FINISHES:				
	(Cont) Flexible sheet finishes:				
	Sundries				
	Nosings & Side Trims				
	Nosings; to be Gradus or equivalent sqaure profile 55mm minimum wear surface to tread; with Mill finish aluminium with pre-bonded PVC bonded mineral aggregate insert with wearing course, slip resistance value - water wet (minimum): PTV of 45 to BS 7976 to tread; all in strict accordance with the Architects Drawing 25002-AFEC-00-ZZ-SH-A-2001 and Specification Section L30/590 & 592				
A	Stair Nosings to Steps	m	23		
	Side Trims; to be Gradus or equivalent; integrated with vinyl finish to precast stairs, square profile with a mill finish aluminium all in strict accordance with the Architects Drawing 25002-AFEC-00-ZZ-SH-A-2001 and Specification Section L30/590 & 592				
B	Side Trims to Stairs	m	7		
	Gradus or equivalent Proprietary stainless steel with brushed finish; E100 / V4A special profile edging dividing strips between different floor types; fixed at junction of different floor finishes and plugged and screwed to concrete floors at 600 mm c/c with and including for sealing with a silicone sealant; as per Architects Specification M50/740				
C	generally	m	3		
	Slip Resistance Testing				
D	Contractor to allow and provide slip resistance test (Pendulum Test) to all M50/150 Vinyl Sheeting to BS EN 16165 all as outlined in Architects Specification M50/861	Item	1		

	(44) STAIRS FINISHES (PLASTERING) (Cont)				
	PAINTING AND DECORATING:				
	Painting				
	Blastrac concrete floor slab to thoroughly clean, dry and remove all laitances, traces of dirt, grease and contaminants etc in preparation for floor universal damp proofing liquid membrane; apply one coat of two-pack flexibilized epoxy based damp proof membrane containing wetting aids and penetrants to maximise adhesion, flow controls agents to minimise pin holes and overlapping platelets; as per Architects Specification				
	Treads				
A	< or = to 300mm wide (300mm wide)	m	23		
	Risers				
B	< or = to 300mm wide (170mm high)	m	23		
	Landings				
C	> 300mm wide	m2	5		
	Prepare, knot, prime, stop and apply one coat of primer, one coat of undercoat/ base coat, two finishing coats of Dulux waterborne paint -Dulux diamond satinwood / eggshell to selected RAL colour range; as per Architects Specification M60/150				
	Second fixing, to timber base				
D	girth < or = to 300 mm, skirtings	m	13		
E	girth < or = to 300 mm, skirtings, primer only to backs of skirtings	m	13		

(44) STAIRS FINISHES (PLASTERING) (Cont)				
COLLECTION				
Page No. BQ/266				NIL
Page No. BQ/267				NIL
Page No. BQ/268				NIL
Page No. BQ/269				NIL
Page No. BQ/270				NIL
(44) STAIRS FINISHES (PLASTERING) Carried to Summary				**NIL**

	(45) CEILING FINISHES (PLASTERING)				
	CEILING FINISHES				
	WOODWORK:				
	Structural And First Fixings				
	The following shall be in wrot vac vac treated red deal unless otherwise stated; plugged and screwed to composite metal deck/in situ concrete floor; include for all necessary fixings, counter sinking and making good with matching pellates; protected for finishes:				
	First fixings; fixing grounds				
A	32 x 50 mm	m	25		
	First fixings; bearers				
B	50 x 50 mm	m	25		
	25 mm WBP plywood panels laid in suspended ceilings in supporting miscellaneous fittings and include for wiring to suspension system.				
	First fixings; bearers				
C	450 x 450 mm panel size	nr	15		
D	600 x 600 mm panel size	nr	25		
	Boarding And Second Fixings				
	T&G flooring grade board, OSB board, 18mm thick, fixed to timbers joists/battens with 50 x 3.35mm galvanised annular shank nails, expansion provision at perimeter, all as per Architects Drawing 25002-AFEC-00-ZZ-DR-A-6204				
E	laid horizontal to Ceiling under Low Level Flat Roof; > 300mm wide	m2	31		

	(45) CEILING FINISHES (PLASTERING) (Cont)				
	(Cont) WOODWORK:				
	Ironmongery, Accessories and Sundries				
	Insulation				
	50mm thick Isover Acoustic Roll (APR 1200) to BS EN 13162 or equivalent glass mineral wool (Thermal Conductivity 0.036 W/mK) insulation to be cut, placed and fixed tightly over metal suspended ceiling frame system including taping same to back of plasterboard and include for acoustic sealant to perimeter as required and fixed as per manufacturers instructions; as per Architects Specification K10/215 and Architects Drawing 25002-AFEC-00-ZZ-DR-A-6003				
A	50mm thick to CLG-04 Ceilings; > 300mm wide	m2	62		
	100mm thick Rockwool Flexi Stone Wool slab infill (min. density 10kg/m3) to BS EN 13162:2012 + A1:2015 or equivalent (Thermal Conductivity 0.038 W/mK); Flexi is non-combustible, achieving a reaction-to-fire classification of A1, as defined in EN 13501-1; insulation is to be cut, placed and friction-fitted tightly between timber joists / frame system and supported with galvanised clips, include for acoustic sealant to perimeter as required and fixed as per manufacturers instructions; as per Architects Drawing 25002-AFEC-00-ZZ-DR-A-6204				
B	100mm thick to Ceiling under Low Level Flat Roof; > 300mm wide	m2	31		

	(45) CEILING FINISHES (PLASTERING) (Cont)				
	FLOOR, WALL AND CEILING FINISHES:				
	Suspended Tile Ceilings				
	Ceiling Type - CLG-01 (Demountable) (GF Office)				
	Suspended ceiling system (to K40/250) To BS EN 13964; Rockfon Chicago Metallice T24 Click 2890 or equivalent, 20mm thick 600mm x 600mm mineral fibre stone wool ceiling tiles / infill units (to K40/265), lay-in grid ceiling, to White RAL Colour 9010; laid into powder coated paint finished (as Z31 at leas 60um thick) 600mm x 600mm x 24mm wide steel 'T' Concealed suspension grid system or equivalent with 32 x 19 x 3050mm steel angle trims (to K40/260), infill units fully demountable with swing down function including matching edge angle trims at perimeters, all fixed with fixing brackets to concrete floor all in accordance with the manufacturers written instructions and Architects Specification K40/250 to 530 inclusive and as per Architects Drawings 25002-AFEC-00-ZZ-DR-A-1004, 2103 & 6003				
	Ceilings; fixed to underside of precast concrete slab; depth of suspension				
A	500mm - 1500mm	m2	12		
	Labours				
B	making good, cutting around obstructions; < or = 300mm	nr	5		
	Sundries				
	Accessories				
C	Rockfon Perimeter trims; 32 x 19 mm steel angle trim, colour and finish to match exposed grid, fixed with BZP raised head screws at 450mm c/c all as per Architect's Suspended Ceiling Specification K40/260	m	14		

	(45) CEILING FINISHES (PLASTERING) (Cont)				
	Suspended Plasterboard Ceilings				
	Bulkheads				
	1 layer of 15mm "Gypsum" or equivalent galvanized mild steel suspended plasterboard tape and jointed ceiling lining system fixed to and including "Casoline" MF grid or equivalent suspension system (Ref: K10 Item 215), with MF7 primary support rails and MF5 ceiling section supports; M 6 perimeter channel , M8 Strap hanger, M 9 connecting clip, M12 Soffit cleat, including all ceiling sections complete with perimeter channels, straps, rigid angle hangers, connecting clips, nuts, bolts, cleats, screws and fixings; suspended from structure; with and including1 layer 12.5mm thick gyprock wall/plasterboard vertically and horizontally, staggered joints, all joints taped and filled; including gyproc drywall primer; fixed to suspension system with approved drywall screws; 15 mm shadow gap at all junctions with walls (shadow line formed with recessed 32 (w) x 69 (h) mm s/w batten - recess 15mm x 20mm) including all proprietary edge beads (beads measured elsewhere); suspension system as recommended by the manufacturer; all fixed to concrete floor slab; all in accordance with the manufacturers written instructions and Architects Specification and Drawings 2103 & 2201				
	Bulkhead;				
A	600-800mm wide bulkhead; including all cutting, any additional support and battens as necessary; generally (Air Lock Lobby)	m2	2		
B	1000-1200mm wide bulkhead; including all cutting, any additional support and battens as necessary; generally (GF Stairs Lobby)	m2	6		
C	600-800mm wide bulkhead; including all cutting, any additional support and battens as necessary; generally (Link Lobby)	m2	2		

	(45) CEILING FINISHES (PLASTERING) (Cont)				
	(Cont) Suspended Plasterboard Ceilings				
	Ceiling Type - CLG-03 (GF Circulation Areas - Lobbies & Corridors)				
	Gyproc Saint-Gobain CasoLine MF Concealed monolithic metal frame suspended ceiling system or equivalent to IS EN 13964 approved to K10/215; complete with M/F ceiling section; primary support channels, strap hangers, rigid angle hangers, connecting clips, nuts, bolts, cleats and screws including all ceiling sections; 1 layers of 15 mm Gypsum wallboard plasterboard type A to BS EN 520 as per K10/401; with Seamless jointing as clause 670; including for staggered joints; fixing with gyproc drywall screws to metal framework; include all blocking and bracing as necessary; taped and filled joints and spotting nail holes in preparation for skim finish; plaster skim, 3 mm thick applied to plasterboard base; as per Architects Specification K10 and Drawing 25002-AFEC-00-ZZ-DR-A-1004, 2103 & 6003				
	Ceilings, to underside of concrete floor				
A	depth of suspension > 500 - 1500mm	m2	41		
B	depth of suspension > 500 - 1500mm underside of stairs landing	m2	5		
	Labours				
	Labours; making good, cutting around obstructions; including all necessary additional hangers and grounds				
C	girth; < or = 300 mm	nr	10		
D	girth 300 mm - 1000 mm	nr	5		
	Sundries				
	Accessories				
E	Gyproc perimeter shadowline trims; fixed to plasterboard all as per Architect's Suspended Ceiling Specification K40	m	49		

	(45) CEILING FINISHES (PLASTERING) (Cont)				
	(Cont) Suspended Plasterboard Ceilings				
	Ceiling Type - CLG-04 (Acoustic Ceiling) (FF Circulation Areas - Lobbies & Corridors)				
	Gyproc Saint-Gobain CasoLine MF Concealed monolithic metal frame suspended ceiling system or equivalent to IS EN 13964 approved to K10/215; complete with M/F ceiling section; primary support channels, strap hangers, rigid angle hangers, connecting clips, nuts, bolts, cleats and screws including all ceiling sections; 1 layers of 12.5 mm Gypsum acoustic perforated plasterboard type D to BS EN 520 Big Quattro 46 to K10/409 & 401; with Seamless jointing as clause 670; including for staggered joints; fixing with gyproc drywall screws to metal framework; include all blocking and bracing as necessary; taped and filled joints and spotting nail holes in preparation for skim finish; plaster skim, 3 mm thick applied to plasterboard base; as per Architects Specification K10 and Drawing 25002-AFEC-00-ZZ-DR-A-1004, 2103 & 6003				
	Ceilings, to underside of roof cladding				
A	depth of suspension > 500 - 1500mm	m2	62		
B	600-800mm wide bulkhead; including all cutting, any additional support and battens as necessary; generally (AOV)	m2	4		
	Labours				
	Labours; making good, cutting around obstructions; including all necessary additional hangers and grounds				
C	girth; < or = 300 mm	nr	10		
D	girth 300 mm - 1000 mm	nr	5		

	(45) CEILING FINISHES (PLASTERING) (Cont)				
	(Cont) Suspended Plasterboard Ceilings				
	(Cont) Ceiling Type - CLG-04 (Acoustic Ceiling) (FF Circulation Areas - Lobbies & Corridors)				
	Sundries				
	Accessories				
A	Gyproc perimeter shadowline trims; fixed to plasterboard all as per Architect's Suspended Ceiling Specification K40	m	60		
	Ceiling Type ILS-01 - (Underside or Stairs)				
	Metal frame suspended ceiling system or equivalent approved; complete with M/F ceiling section; primary support channels, strap hangers, rigid angle hangers, connecting clips, nuts, bolts, cleats and screws including all ceiling sections; 1 layers of 15 mm standard plasterboard; including for staggered joints; fixing with gyproc drywall screws to metal framework; include all blocking and bracing as necessary; taped and filled joints and spotting nail holes in preparation for skim finish; plaster skim, 3 mm thick applied to plasterboard base; as per Architects Specification and Drawing				
	Ceilings, to underside of precast stairs & landings				
B	depth of suspension > 150mm - 500mm	m2	7		

	(45) CEILING FINISHES (PLASTERING) (Cont)				
	(Cont) Suspended Plasterboard Ceilings				
	Ceiling Under Low Level Flat Roof - Refer to Drawing 6204				
	Gyproc Saint-Gobain CasoLine MF Concealed monolithic metal frame suspended ceiling system or equivalent to IS EN 13964 approved to K10/215; complete with M/F ceiling section; primary support channels, strap hangers, rigid angle hangers, connecting clips, nuts, bolts, cleats and screws including all ceiling sections; 2 layers of 12.5mm Gyproc Fireline plasterboard type F to BS EN 520 as per K10/401; with Seamless jointing as clause 670; including for staggered joints; fixing with gyproc drywall screws to metal framework; include all blocking and bracing as necessary; taped and filled joints and spotting nail holes in preparation for skim finish; plaster skim, 3 mm thick applied to plasterboard base; as per Architects Specification K10 and Drawing 25002-AFEC-00-ZZ-DR-A-6204				
	Ceilings, to underside of concrete floor				
A	depth of suspension > 150mm - 500mm	m2	31		
	Labours				
	Labours; making good, cutting around obstructions; including all necessary additional hangers and grounds				
B	girth; < or = 300 mm	nr	10		
C	girth 300 mm - 1000 mm	nr	5		

	(45) CEILING FINISHES (PLASTERING) (Cont)				
	Accessories				
	Access panels - REFER TO M&E DRAWINGS				
A	Plaster finished access panel; 30 / 30 fire rated; size 600 x 600 mm; 1.2mm zintec electro galvanised mild steel frame and door with 50mm wide profile and perforated frame finished in polyester powder coat in selected RAL;door tray shall encapsulate 1 layer of 12.50mm plasterboard with a skim finish; door to include metal earthing tags; factory fitted piano hinge / removable plate with inserted steel pins; square drive operated lock with consealed keyhole; screw fixed frame to ceiling and apply 6mm continuous intumescent acoustic mastic sealant around perimeter of of frame; include for all necessary additional supports, fixings and hangers; in accordance with Manufacturers Instructions and Architects Specification	nr	15		
B	Ditto, size 600 x 1200mm;	nr	6		
	PAINTING				
	Painting				
	Thoroughly clean down; remove any grease or dirt; prepare and apply prior to application of skim finishes to plasterboard 1 coat primer of drywall PVA sealer dilution 5:1 and 1 coat reprime dilution 3:1				
	Walls; plastered base				
C	>300 mm wide (bulkhead)	m2	14		
D	> 300mm wide	m2	146		

	(45) CEILING FINISHES (PLASTERING) (Cont)				
	(Cont) PAINTING				
	(Cont) Painting				
	Thoroughly clean down; remove any grease or dirt; prepare, apply one preparatory undercoat / base coat and two finishing coats of "Dulux" or equivalent approved Waterborne (Water-based washable matt vinyl) paint - Dulux Diamond Matt; in selected RAL colour range; preparation as per Architects Specification M60/110 all in accordance with the manufacturers written instructions and Architects Specification M60/110				
	Ceilings to plastered surfaces / plasterboard base				
A	>300 mm wide (bulkhead)	m2	14		
B	> 300mm wide	m2	146		
	Extra over last for:				
C	Perforated gypsum acoustic boards (Ceilings): Boards should be primed using a suitable drywall primer as specified and paint to be applied using a short hair paint roller. Do not use a spray system; all in accordance with the manufacturers written instructions and Architects Specification M60/110 - Ref: Ceiling Type CLG-04	m2	62		

(45) CEILING FINISHES (PLASTERING) (Cont)				
COLLECTION				
Page No. BQ/272				NIL
Page No. BQ/273				NIL
Page No. BQ/274				NIL
Page No. BQ/275				NIL
Page No. BQ/276				NIL
Page No. BQ/277				NIL
Page No. BQ/278				NIL
Page No. BQ/279				NIL
Page No. BQ/280				NIL
Page No. BQ/281				NIL
(45) CEILING FINISHES (PLASTERING) Carried to Summary				**NIL**

	(47) ROOF FINISHES & CLADDING (PLASTERING)				
	WALL AND ROOF FINISHES:				
	WOODWORK:				
	Structural and First Fixings				
	White deal, structural grade Class SC1, vac -vac treated				
	First fixings				
A	50 x 50 mm grounds	m	160		
B	100 x 50 mm grounds	m	36		
C	215 x 50 mm grounds	m	129		

(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
ROOFING, CLADDING AND WATERPROOFING:				
Rigid Sheet Coverings and Decking				
External Walls - Ref EWS-05 (100mm thick)				

(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont) **(Cont) ROOFING, CLADDING AND WATERPROOFING:** **(Cont) Rigid Sheet Coverings and Decking** Supply and Install "Kingspan" or equivalent Self-supporting, insulated wall cladding; Type QuadCore Evolution Axis Wall Panel or equivalent insulated wall panel, Self-supporting double skin metal faced insulating panels; Colour to RAL 7016; 100mm overall thickness to BS & IS EN 14509 with insulated core of rigid polyisocyanurate foam (PIR) to BS EN 13165 & IS EN 13162 (with 1 hour (60min) FireSafe IPN core as C-s3,d2 or better, Fire Resistance according to DIN EN 13501-1) as required to comply with Building Regulations for heat loss (minimum U-Value to be achieved 0.19 W/m2K) to BS EN ISO 6946 & IS EN ISO 6946, fixed to elsewhere measured steelwork; composite wall panel comprising of external facings / outer skin & internal facing materials to be organically coated steel to BS EN 10169 & IS EN 10088-4 outer skin face finished in flat steel to BS EN 508-1, Grade S280GD, Finish to PUR 55 micrometres PVDF 25-65 micrometres, Colour to RAL 7016; internal facings of panel finished in ribbed steel to BS EN 508-1, Grade S220GD, Finish to SP 15 micrometres, Colour Bright White / RAL 9010; Firesafe FM approved 60 minute fire rating cladding; FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials; including all associated fixings etc.; include for 150mm end laps, include for factory applied weather seal FAWS; include for profile fillers, include for all necessary self-drilling , self-tapping stainless steel primary fasteners high threaded anti corrosion screws with non-ferrous EPDM backed bonded washers with plastic coloured heads, and include for all necessary approved top hat vertical joint section to match main external wall cladding fixed to main structural steel / grid, including for snap-on receiver and cover flashings, insulation and sealing with rubber and gun grade sealant etc. as outlined in Architects Specification H43/110 (external walls) and all in			

(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont) **(Cont) ROOFING, CLADDING AND WATERPROOFING:** **(Cont) Rigid Sheet Coverings and Decking** (Cont) Supply and Install "Kingspan" or equivalent Self-supporting, insulated wall cladding; Type QuadCore Evolution Axis Wall Panel or equivalent insulated wall panel, Self-supporting double skin metal faced insulating panels; Colour to RAL 7016; 100mm overall thickness to BS & IS EN 14509 with insulated core of rigid polyisocyanurate foam (PIR) to BS EN 13165 & IS EN 13162 (with 1 hour (60min) FireSafe IPN core as C-s3,d2 or better, Fire Resistance according to DIN EN 13501-1) as required to comply with Building Regulations for heat loss (minimum U-Value to be achieved 0.19 W/m2K) to BS EN ISO 6946 & IS EN ISO 6946, fixed to elsewhere measured steelwork; composite wall panel comprising of external facings / outer skin & internal facing materials to be organically coated steel to BS EN 10169 & IS EN 10088-4 outer skin face finished in flat steel to BS EN 508-1, Grade S280GD, Finish to PUR 55 micrometres PVDF 25-65 micrometres, Colour to RAL 7016; internal facings of panel finished in ribbed steel to BS EN 508-1, Grade S220GD, Finish to SP 15 micrometres, Colour Bright White / RAL 9010; Firesafe FM approved 60 minute fire rating cladding; FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials; including all associated fixings etc.; include for 150mm end laps, include for factory applied weather seal FAWS; include for profile fillers, include for all necessary self-drilling , self-tapping stainless steel primary fasteners high threaded anti corrosion screws with non-ferrous EPDM backed bonded washers with plastic coloured heads, and include for all necessary approved top hat vertical joint section to match main external wall cladding fixed to main structural steel / grid, including for snap-on receiver and cover flashings, insulation and sealing with rubber and gun grade sealant etc. as outlined in Architects Specification H43/110 (external walls) and all in strict accordance with manufacturers			

(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)

(Cont) ROOFING, CLADDING AND WATERPROOFING:

(Cont) Rigid Sheet Coverings and Decking

(Cont) Supply and Install "Kingspan" or equivalent Self-supporting, insulated wall cladding; Type QuadCore Evolution Axis Wall Panel or equivalent insulated wall panel, Self-supporting double skin metal faced insulating panels; Colour to RAL 7016; 100mm overall thickness to BS & IS EN 14509 with insulated core of rigid polyisocyanurate foam (PIR) to BS EN 13165 & IS EN 13162 (with 1 hour (60min) FireSafe IPN core as C-s3,d2 or better, Fire Resistance according to DIN EN 13501-1) as required to comply with Building Regulations for heat loss (minimum U-Value to be achieved 0.19 W/m2K) to BS EN ISO 6946 & IS EN ISO 6946, fixed to elsewhere measured steelwork; composite wall panel comprising of external facings / outer skin & internal facing materials to be organically coated steel to BS EN 10169 & IS EN 10088-4 outer skin face finished in flat steel to BS EN 508-1, Grade S280GD, Finish to PUR 55 micrometres PVDF 25-65 micrometres, Colour to RAL 7016; internal facings of panel finished in ribbed steel to BS EN 508-1, Grade S220GD, Finish to SP 15 micrometres, Colour Bright White / RAL 9010; Firesafe FM approved 60 minute fire rating cladding; FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials; including all associated fixings etc.; include for 150mm end laps, include for factory applied weather seal FAWS; include for profile fillers, include for all necessary self-drilling , self-tapping stainless steel primary fasteners high threaded anti corrosion screws with non-ferrous EPDM backed bonded washers with plastic coloured heads, and include for all necessary approved top hat vertical joint section to match main external wall cladding fixed to main structural steel / grid, including for snap-on receiver and cover flashings, insulation and sealing with rubber and gun grade sealant etc. as outlined in Architects Specification H43/110 (external walls) and all in strict accordance with manufacturers

A ^^^100mm thick, vertical > 300mm wide;

(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)

(Cont) ROOFING, CLADDING AND WATERPROOFING:

(Cont) Rigid Sheet Coverings and Decking

(Cont) Supply and Install "Kingspan" or equivalent Self-supporting, insulated wall cladding; Type QuadCore Evolution Axis Wall Panel or equivalent insulated wall panel, Self-supporting double skin metal faced insulating panels; Colour to RAL 7016; 100mm overall thickness to BS & IS EN 14509 with insulated core of rigid polyisocyanurate foam (PIR) to BS EN 13165 & IS EN 13162 (with 1 hour (60min) FireSafe IPN core as C-s3,d2 or better, Fire Resistance according to DIN EN 13501-1) as required to comply with Building Regulations for heat loss (minimum U-Value to be achieved 0.19 W/m2K) to BS EN ISO 6946 & IS EN ISO 6946, fixed to elsewhere measured steelwork; composite wall panel comprising of external facings / outer skin & internal facing materials to be organically coated steel to BS EN 10169 & IS EN 10088-4 outer skin face finished in flat steel to BS EN 508-1, Grade S280GD, Finish to PUR 55 micrometres PVDF 25-65 micrometres, Colour to RAL 7016; internal facings of panel finished in ribbed steel to BS EN 508-1, Grade S220GD, Finish to SP 15 micrometres, Colour Bright White / RAL 9010; Firesafe FM approved 60 minute fire rating cladding; FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials; including all associated fixings etc.; include for 150mm end laps, include for factory applied weather seal FAWS; include for profile fillers, include for all necessary self-drilling , self-tapping stainless steel primary fasteners high threaded anti corrosion screws with non-ferrous EPDM backed bonded washers with plastic coloured heads, and include for all necessary approved top hat vertical joint section to match main external wall cladding fixed to main structural steel / grid, including for snap-on receiver and cover flashings, insulation and sealing with rubber and gun grade sealant etc. as outlined in Architects Specification H43/110 (external walls) and all in strict accordance with manufacturers

Extra over for

(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont) **(Cont) ROOFING, CLADDING AND WATERPROOFING:** **(Cont) Rigid Sheet Coverings and Decking** (Cont) Supply and Install "Kingspan" or equivalent Self-supporting, insulated wall cladding; Type QuadCore Evolution Axis Wall Panel or equivalent insulated wall panel, Self-supporting double skin metal faced insulating panels; Colour to RAL 7016; 100mm overall thickness to BS & IS EN 14509 with insulated core of rigid polyisocyanurate foam (PIR) to BS EN 13165 & IS EN 13162 (with 1 hour (60min) FireSafe IPN core as C-s3,d2 or better, Fire Resistance according to DIN EN 13501-1) as required to comply with Building Regulations for heat loss (minimum U-Value to be achieved 0.19 W/m2K) to BS EN ISO 6946 & IS EN ISO 6946, fixed to elsewhere measured steelwork; composite wall panel comprising of external facings / outer skin & internal facing materials to be organically coated steel to BS EN 10169 & IS EN 10088-4 outer skin face finished in flat steel to BS EN 508-1, Grade S280GD, Finish to PUR 55 micrometres PVDF 25-65 micrometres, Colour to RAL 7016; internal facings of panel finished in ribbed steel to BS EN 508-1, Grade S220GD, Finish to SP 15 micrometres, Colour Bright White / RAL 9010; Firesafe FM approved 60 minute fire rating cladding; FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials; including all associated fixings etc.; include for 150mm end laps, include for factory applied weather seal FAWS; include for profile fillers, include for all necessary self-drilling , self-tapping stainless steel primary fasteners high threaded anti corrosion screws with non-ferrous EPDM backed bonded washers with plastic coloured heads, and include for all necessary approved top hat vertical joint section to match main external wall cladding fixed to main structural steel / grid, including for snap-on receiver and cover flashings, insulation and sealing with rubber and gun grade sealant etc. as outlined in Architects Specification H43/110 (external walls) and all in strict accordance with manufacturers				

A ^^^External Pre-Formed 90 degree corner

(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
(Cont) ROOFING, CLADDING AND WATERPROOFING:				
(Cont) Rigid Sheet Coverings and Decking				
Roof & Parapet				

(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont) **(Cont) ROOFING, CLADDING AND WATERPROOFING:** **(Cont) Rigid Sheet Coverings and Decking** Supply and Install "Kingspan" or equivalent Self-supporting, insulated wall cladding; Type QuadCore KS100RW LEC Roof Panel or equivalent insulated roof panel, Self-supporting double skin metal faced insulating panels; Colour to RAL 7016 TBC; 60mm and 100mm overall thickness to BS & IS EN 14509 with insulated core of rigid polyisocyanurate foam (PIR) to BS EN 13165 & IS EN 13162 (with 1 hour (60min) FireSafe IPN core as CROOF(t4) or better, Fire Resistance according to DIN EN 13501-1) as required to comply with Building Regulations for heat loss (minimum U-Value to be achieved 0.18 W/m2K) to BS EN ISO 6946 and IS EN ISO 6946, fixed to elsewhere measured steelwork; composite wall panel comprising of external facings / outer skin & internal facing materials to be organically coated steel to BS EN 10169 & IS EN 10088-4 outer skin face finished in Asymmetrical Trapezoidal profile steel to BS EN 508-1, Grade S280GD, Finish to PUR 70 micrometres, Colour to RAL 7016 TBC; internal facings of panel finished in ribbed steel to BS EN 508-1, Grade S220GD, Finish to SP 15 micrometres, Colour Bright White / RAL 9010; Firesafe FM approved 60 minute fire rating cladding; FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials; including all associated fixings etc.; include for 150mm end laps, include for factory applied weather seal FAWS; include for profile fillers, include for all necessary self-drilling , self-tapping stainless steel primary fasteners high threaded anti corrosion screws with non-ferrous EPDM backed bonded washers with plastic coloured heads, as outlined in Architects Specification H43/110 (roof panel) and all in strict accordance with manufacturers instructions/recommendations . Refer to Architects Elevation Drawings 25002-AFEC-01-ZZ-DR-A-4001 & 4002, 5001 and Section Drawings Series 6000			

(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)

(Cont) ROOFING, CLADDING AND WATERPROOFING:

(Cont) Rigid Sheet Coverings and Decking

(Cont) Supply and Install "Kingspan" or equivalent Self-supporting, insulated wall cladding; Type QuadCore KS100RW LEC Roof Panel or equivalent insulated roof panel, Self-supporting double skin metal faced insulating panels; Colour to RAL 7016 TBC; 60mm and 100mm overall thickness to BS & IS EN 14509 with insulated core of rigid polyisocyanurate foam (PIR) to BS EN 13165 & IS EN 13162 (with 1 hour (60min) FireSafe IPN core as CROOF(t4) or better, Fire Resistance according to DIN EN 13501-1) as required to comply with Building Regulations for heat loss (minimum U-Value to be achieved 0.18 W/m2K) to BS EN ISO 6946 and IS EN ISO 6946, fixed to elsewhere measured steelwork; composite wall panel comprising of external facings / outer skin & internal facing materials to be organically coated steel to BS EN 10169 & IS EN 10088-4 outer skin face finished in Asymmetrical Trapezoidal profile steel to BS EN 508-1, Grade S280GD, Finish to PUR 70 micrometres, Colour to RAL 7016 TBC; internal facings of panel finished in ribbed steel to BS EN 508-1, Grade S220GD, Finish to SP 15 micrometres, Colour Bright White / RAL 9010; Firesafe FM approved 60 minute fire rating cladding; FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials; including all associated fixings etc.; include for 150mm end laps, include for factory applied weather seal FAWS; include for profile fillers, include for all necessary self-drilling , self-tapping stainless steel primary fasteners high threaded anti corrosion screws with non-ferrous EPDM backed bonded washers with plastic coloured heads, as outlined in Architects Specification H43/110 (roof panel) and all in strict accordance with manufacturers instructions/recommendations . Refer to Architects Elevation Drawings 25002-AFEC-01-ZZ-DR-A-4001 & 4002, 5001 and Section Drawings Series 6000

Wall Coverings (Main Building Parapets)

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Rigid Sheet Coverings and Decking				
	(Cont) Supply and Install "Kingspan" or equivalent Self-supporting, insulated wall cladding; Type QuadCore KS100RW LEC Roof Panel or equivalent insulated roof panel, Self-supporting double skin metal faced insulating panels; Colour to RAL 7016 TBC; 60mm and 100mm overall thickness to BS & IS EN 14509 with insulated core of rigid polyisocyanurate foam (PIR) to BS EN 13165 & IS EN 13162 (with 1 hour (60min) FireSafe IPN core as CROOF(t4) or better, Fire Resistance according to DIN EN 13501-1) as required to comply with Building Regulations for heat loss (minimum U-Value to be achieved 0.18 W/m2K) to BS EN ISO 6946 and IS EN ISO 6946, fixed to elsewhere measured steelwork; composite wall panel comprising of external facings / outer skin & internal facing materials to be organically coated steel to BS EN 10169 & IS EN 10088-4 outer skin face finished in Asymmetrical Trapezoidal profile steel to BS EN 508-1, Grade S280GD, Finish to PUR 70 micrometres, Colour to RAL 7016 TBC; internal facings of panel finished in ribbed steel to BS EN 508-1, Grade S220GD, Finish to SP 15 micrometres, Colour Bright White / RAL 9010; Firesafe FM approved 60 minute fire rating cladding; FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials; including all associated fixings etc.; include for 150mm end laps, include for factory applied weather seal FAWS; include for profile fillers, include for all necessary self-drilling , self-tapping stainless steel primary fasteners high threaded anti corrosion screws with non-ferrous EPDM backed bonded washers with plastic coloured heads, as outlined in Architects Specification H43/110 (roof panel) and all in strict accordance with manufacturers instructions/recommendations . Refer to Architects Elevation Drawings 25002-AFEC-01-ZZ-DR-A-4001 & 4002, 5001 and Section Drawings Series 6000				
A	^^^60mm thick, vertical > 300mm wide;	m2	57		

MTU Block A, Apprenticeship Expansion, MTU Campus, Cork. BQ/293 To Collection € NIL

(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont) **(Cont) ROOFING, CLADDING AND WATERPROOFING:** **(Cont) Rigid Sheet Coverings and Decking** (Cont) Supply and Install "Kingspan" or equivalent Self-supporting, insulated wall cladding; Type QuadCore KS100RW LEC Roof Panel or equivalent insulated roof panel, Self-supporting double skin metal faced insulating panels; Colour to RAL 7016 TBC; 60mm and 100mm overall thickness to BS & IS EN 14509 with insulated core of rigid polyisocyanurate foam (PIR) to BS EN 13165 & IS EN 13162 (with 1 hour (60min) FireSafe IPN core as CROOF(t4) or better, Fire Resistance according to DIN EN 13501-1) as required to comply with Building Regulations for heat loss (minimum U-Value to be achieved 0.18 W/m2K) to BS EN ISO 6946 and IS EN ISO 6946, fixed to elsewhere measured steelwork; composite wall panel comprising of external facings / outer skin & internal facing materials to be organically coated steel to BS EN 10169 & IS EN 10088-4 outer skin face finished in Asymmetrical Trapezoidal profile steel to BS EN 508-1, Grade S280GD, Finish to PUR 70 micrometres, Colour to RAL 7016 TBC; internal facings of panel finished in ribbed steel to BS EN 508-1, Grade S220GD, Finish to SP 15 micrometres, Colour Bright White / RAL 9010; Firesafe FM approved 60 minute fire rating cladding; FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials; including all associated fixings etc.; include for 150mm end laps, include for factory applied weather seal FAWS; include for profile fillers, include for all necessary self-drilling , self-tapping stainless steel primary fasteners high threaded anti corrosion screws with non-ferrous EPDM backed bonded washers with plastic coloured heads, as outlined in Architects Specification H43/110 (roof panel) and all in strict accordance with manufacturers instructions/recommendations . Refer to Architects Elevation Drawings 25002-AFEC-01-ZZ-DR-A-4001 & 4002, 5001 and Section Drawings Series 6000 Wall Coverings (Main Building Lift				

(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)

(Cont) ROOFING, CLADDING AND WATERPROOFING:

(Cont) Rigid Sheet Coverings and Decking

(Cont) Supply and Install "Kingspan" or equivalent Self-supporting, insulated wall cladding; Type QuadCore KS100RW LEC Roof Panel or equivalent insulated roof panel, Self-supporting double skin metal faced insulating panels; Colour to RAL 7016 TBC; 60mm and 100mm overall thickness to BS & IS EN 14509 with insulated core of rigid polyisocyanurate foam (PIR) to BS EN 13165 & IS EN 13162 (with 1 hour (60min) FireSafe IPN core as CROOF(t4) or better, Fire Resistance according to DIN EN 13501-1) as required to comply with Building Regulations for heat loss (minimum U-Value to be achieved 0.18 W/m2K) to BS EN ISO 6946 and IS EN ISO 6946, fixed to elsewhere measured steelwork; composite wall panel comprising of external facings / outer skin & internal facing materials to be organically coated steel to BS EN 10169 & IS EN 10088-4 outer skin face finished in Asymmetrical Trapezoidal profile steel to BS EN 508-1, Grade S280GD, Finish to PUR 70 micrometres, Colour to RAL 7016 TBC; internal facings of panel finished in ribbed steel to BS EN 508-1, Grade S220GD, Finish to SP 15 micrometres, Colour Bright White / RAL 9010; Firesafe FM approved 60 minute fire rating cladding; FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials; including all associated fixings etc.; include for 150mm end laps, include for factory applied weather seal FAWS; include for profile fillers, include for all necessary self-drilling , self-tapping stainless steel primary fasteners high threaded anti corrosion screws with non-ferrous EPDM backed bonded washers with plastic coloured heads, as outlined in Architects Specification H43/110 (roof panel) and all in strict accordance with manufacturers instructions/recommendations . Refer to Architects Elevation Drawings 25002-AFEC-01-ZZ-DR-A-4001 & 4002, 5001 and Section Drawings Series 6000

A	^^^60mm thick, vertical > 300mm wide;	m2	8		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont) **(Cont) ROOFING, CLADDING AND WATERPROOFING:** **(Cont) Rigid Sheet Coverings and Decking** (Cont) Supply and Install "Kingspan" or equivalent Self-supporting, insulated wall cladding; Type QuadCore KS100RW LEC Roof Panel or equivalent insulated roof panel, Self-supporting double skin metal faced insulating panels; Colour to RAL 7016 TBC; 60mm and 100mm overall thickness to BS & IS EN 14509 with insulated core of rigid polyisocyanurate foam (PIR) to BS EN 13165 & IS EN 13162 (with 1 hour (60min) FireSafe IPN core as CROOF(t4) or better, Fire Resistance according to DIN EN 13501-1) as required to comply with Building Regulations for heat loss (minimum U-Value to be achieved 0.18 W/m2K) to BS EN ISO 6946 and IS EN ISO 6946, fixed to elsewhere measured steelwork; composite wall panel comprising of external facings / outer skin & internal facing materials to be organically coated steel to BS EN 10169 & IS EN 10088-4 outer skin face finished in Asymmetrical Trapezoidal profile steel to BS EN 508-1, Grade S280GD, Finish to PUR 70 micrometres, Colour to RAL 7016 TBC; internal facings of panel finished in ribbed steel to BS EN 508-1, Grade S220GD, Finish to SP 15 micrometres, Colour Bright White / RAL 9010; Firesafe FM approved 60 minute fire rating cladding; FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials; including all associated fixings etc.; include for 150mm end laps, include for factory applied weather seal FAWS; include for profile fillers, include for all necessary self-drilling , self-tapping stainless steel primary fasteners high threaded anti corrosion screws with non-ferrous EPDM backed bonded washers with plastic coloured heads, as outlined in Architects Specification H43/110 (roof panel) and all in strict accordance with manufacturers instructions/recommendations . Refer to Architects Elevation Drawings 25002-AFEC-01-ZZ-DR-A-4001 & 4002, 5001 and Section Drawings Series 6000				
A	^^^^^^extra over for 40mm galvanised				

(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)

(Cont) ROOFING, CLADDING AND WATERPROOFING:

(Cont) Rigid Sheet Coverings and Decking

(Cont) Supply and Install "Kingspan" or equivalent Self-supporting, insulated wall cladding; Type QuadCore KS100RW LEC Roof Panel or equivalent insulated roof panel, Self-supporting double skin metal faced insulating panels; Colour to RAL 7016 TBC; 60mm and 100mm overall thickness to BS & IS EN 14509 with insulated core of rigid polyisocyanurate foam (PIR) to BS EN 13165 & IS EN 13162 (with 1 hour (60min) FireSafe IPN core as CROOF(t4) or better, Fire Resistance according to DIN EN 13501-1) as required to comply with Building Regulations for heat loss (minimum U-Value to be achieved 0.18 W/m2K) to BS EN ISO 6946 and IS EN ISO 6946, fixed to elsewhere measured steelwork; composite wall panel comprising of external facings / outer skin & internal facing materials to be organically coated steel to BS EN 10169 & IS EN 10088-4 outer skin face finished in Asymmetrical Trapezoidal profile steel to BS EN 508-1, Grade S280GD, Finish to PUR 70 micrometres, Colour to RAL 7016 TBC; internal facings of panel finished in ribbed steel to BS EN 508-1, Grade S220GD, Finish to SP 15 micrometres, Colour Bright White / RAL 9010; Firesafe FM approved 60 minute fire rating cladding; FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials; including all associated fixings etc.; include for 150mm end laps, include for factory applied weather seal FAWS; include for profile fillers, include for all necessary self-drilling , self-tapping stainless steel primary fasteners high threaded anti corrosion screws with non-ferrous EPDM backed bonded washers with plastic coloured heads, as outlined in Architects Specification H43/110 (roof panel) and all in strict accordance with manufacturers instructions/recommendations . Refer to Architects Elevation Drawings 25002-AFEC-01-ZZ-DR-A-4001 & 4002, 5001 and Section Drawings Series 6000

Roof Coverings

(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)

(Cont) ROOFING, CLADDING AND WATERPROOFING:

(Cont) Rigid Sheet Coverings and Decking

(Cont) Supply and Install "Kingspan" or equivalent Self-supporting, insulated wall cladding; Type QuadCore KS100RW LEC Roof Panel or equivalent insulated roof panel, Self-supporting double skin metal faced insulating panels; Colour to RAL 7016 TBC; 60mm and 100mm overall thickness to BS & IS EN 14509 with insulated core of rigid polyisocyanurate foam (PIR) to BS EN 13165 & IS EN 13162 (with 1 hour (60min) FireSafe IPN core as CROOF(t4) or better, Fire Resistance according to DIN EN 13501-1) as required to comply with Building Regulations for heat loss (minimum U-Value to be achieved 0.18 W/m2K) to BS EN ISO 6946 and IS EN ISO 6946, fixed to elsewhere measured steelwork; composite wall panel comprising of external facings / outer skin & internal facing materials to be organically coated steel to BS EN 10169 & IS EN 10088-4 outer skin face finished in Asymmetrical Trapezoidal profile steel to BS EN 508-1, Grade S280GD, Finish to PUR 70 micrometres, Colour to RAL 7016 TBC; internal facings of panel finished in ribbed steel to BS EN 508-1, Grade S220GD, Finish to SP 15 micrometres, Colour Bright White / RAL 9010; Firesafe FM approved 60 minute fire rating cladding; FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials; including all associated fixings etc.; include for 150mm end laps, include for factory applied weather seal FAWS; include for profile fillers, include for all necessary self-drilling , self-tapping stainless steel primary fasteners high threaded anti corrosion screws with non-ferrous EPDM backed bonded washers with plastic coloured heads, as outlined in Architects Specification H43/110 (roof panel) and all in strict accordance with manufacturers instructions/recommendations . Refer to Architects Elevation Drawings 25002-AFEC-01-ZZ-DR-A-4001 & 4002, 5001 and Section Drawings Series 6000

A ^^^100mm thick (with 120mm thick core), m2 390

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont) **(Cont) ROOFING, CLADDING AND WATERPROOFING:** **(Cont) Rigid Sheet Coverings and Decking** (Cont) Supply and Install "Kingspan" or equivalent Self-supporting, insulated wall cladding; Type QuadCore KS100RW LEC Roof Panel or equivalent insulated roof panel, Self-supporting double skin metal faced insulating panels; Colour to RAL 7016 TBC; 60mm and 100mm overall thickness to BS & IS EN 14509 with insulated core of rigid polyisocyanurate foam (PIR) to BS EN 13165 & IS EN 13162 (with 1 hour (60min) FireSafe IPN core as CROOF(t4) or better, Fire Resistance according to DIN EN 13501-1) as required to comply with Building Regulations for heat loss (minimum U-Value to be achieved 0.18 W/m2K) to BS EN ISO 6946 and IS EN ISO 6946, fixed to elsewhere measured steelwork; composite wall panel comprising of external facings / outer skin & internal facing materials to be organically coated steel to BS EN 10169 & IS EN 10088-4 outer skin face finished in Asymmetrical Trapezoidal profile steel to BS EN 508-1, Grade S280GD, Finish to PUR 70 micrometres, Colour to RAL 7016 TBC; internal facings of panel finished in ribbed steel to BS EN 508-1, Grade S220GD, Finish to SP 15 micrometres, Colour Bright White / RAL 9010; Firesafe FM approved 60 minute fire rating cladding; FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials; including all associated fixings etc.; include for 150mm end laps, include for factory applied weather seal FAWS; include for profile fillers, include for all necessary self-drilling , self-tapping stainless steel primary fasteners high threaded anti corrosion screws with non-ferrous EPDM backed bonded washers with plastic coloured heads, as outlined in Architects Specification H43/110 (roof panel) and all in strict accordance with manufacturers instructions/recommendations . Refer to Architects Elevation Drawings 25002-AFEC-01-ZZ-DR-A-4001 & 4002, 5001 and Section Drawings Series 6000				
A	^^^^^^extra over last for forming				

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont) **(Cont) ROOFING, CLADDING AND WATERPROOFING:** **(Cont) Rigid Sheet Coverings and Decking** (Cont) Supply and Install "Kingspan" or equivalent Self-supporting, insulated wall cladding; Type QuadCore KS100RW LEC Roof Panel or equivalent insulated roof panel, Self-supporting double skin metal faced insulating panels; Colour to RAL 7016 TBC; 60mm and 100mm overall thickness to BS & IS EN 14509 with insulated core of rigid polyisocyanurate foam (PIR) to BS EN 13165 & IS EN 13162 (with 1 hour (60min) FireSafe IPN core as CROOF(t4) or better, Fire Resistance according to DIN EN 13501-1) as required to comply with Building Regulations for heat loss (minimum U-Value to be achieved 0.18 W/m2K) to BS EN ISO 6946 and IS EN ISO 6946, fixed to elsewhere measured steelwork; composite wall panel comprising of external facings / outer skin & internal facing materials to be organically coated steel to BS EN 10169 & IS EN 10088-4 outer skin face finished in Asymmetrical Trapezoidal profile steel to BS EN 508-1, Grade S280GD, Finish to PUR 70 micrometres, Colour to RAL 7016 TBC; internal facings of panel finished in ribbed steel to BS EN 508-1, Grade S220GD, Finish to SP 15 micrometres, Colour Bright White / RAL 9010; Firesafe FM approved 60 minute fire rating cladding; FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials; including all associated fixings etc.; include for 150mm end laps, include for factory applied weather seal FAWS; include for profile fillers, include for all necessary self-drilling , self-tapping stainless steel primary fasteners high threaded anti corrosion screws with non-ferrous EPDM backed bonded washers with plastic coloured heads, as outlined in Architects Specification H43/110 (roof panel) and all in strict accordance with manufacturers instructions/recommendations . Refer to Architects Elevation Drawings 25002-AFEC-01-ZZ-DR-A-4001 & 4002, 5001 and Section Drawings Series 6000				
A	^^^^^^extra over last for forming Roof				

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont) **(Cont) ROOFING, CLADDING AND WATERPROOFING:** **(Cont) Rigid Sheet Coverings and Decking** (Cont) Supply and Install "Kingspan" or equivalent Self-supporting, insulated wall cladding; Type QuadCore KS100RW LEC Roof Panel or equivalent insulated roof panel, Self-supporting double skin metal faced insulating panels; Colour to RAL 7016 TBC; 60mm and 100mm overall thickness to BS & IS EN 14509 with insulated core of rigid polyisocyanurate foam (PIR) to BS EN 13165 & IS EN 13162 (with 1 hour (60min) FireSafe IPN core as CROOF(t4) or better, Fire Resistance according to DIN EN 13501-1) as required to comply with Building Regulations for heat loss (minimum U-Value to be achieved 0.18 W/m2K) to BS EN ISO 6946 and IS EN ISO 6946, fixed to elsewhere measured steelwork; composite wall panel comprising of external facings / outer skin & internal facing materials to be organically coated steel to BS EN 10169 & IS EN 10088-4 outer skin face finished in Asymmetrical Trapezoidal profile steel to BS EN 508-1, Grade S280GD, Finish to PUR 70 micrometres, Colour to RAL 7016 TBC; internal facings of panel finished in ribbed steel to BS EN 508-1, Grade S220GD, Finish to SP 15 micrometres, Colour Bright White / RAL 9010; Firesafe FM approved 60 minute fire rating cladding; FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials; including all associated fixings etc.; include for 150mm end laps, include for factory applied weather seal FAWS; include for profile fillers, include for all necessary self-drilling , self-tapping stainless steel primary fasteners high threaded anti corrosion screws with non-ferrous EPDM backed bonded washers with plastic coloured heads, as outlined in Architects Specification H43/110 (roof panel) and all in strict accordance with manufacturers instructions/recommendations . Refer to Architects Elevation Drawings 25002-AFEC-01-ZZ-DR-A-4001 & 4002, 5001 and Section Drawings Series 6000				
A	^^^60mm thick (with 120mm thick core),				

(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)

(Cont) ROOFING, CLADDING AND WATERPROOFING:

(Cont) Rigid Sheet Coverings and Decking

(Cont) Supply and Install "Kingspan" or equivalent Self-supporting, insulated wall cladding; Type QuadCore KS100RW LEC Roof Panel or equivalent insulated roof panel, Self-supporting double skin metal faced insulating panels; Colour to RAL 7016 TBC; 60mm and 100mm overall thickness to BS & IS EN 14509 with insulated core of rigid polyisocyanurate foam (PIR) to BS EN 13165 & IS EN 13162 (with 1 hour (60min) FireSafe IPN core as CROOF(t4) or better, Fire Resistance according to DIN EN 13501-1) as required to comply with Building Regulations for heat loss (minimum U-Value to be achieved 0.18 W/m2K) to BS EN ISO 6946 and IS EN ISO 6946, fixed to elsewhere measured steelwork; composite wall panel comprising of external facings / outer skin & internal facing materials to be organically coated steel to BS EN 10169 & IS EN 10088-4 outer skin face finished in Asymmetrical Trapezoidal profile steel to BS EN 508-1, Grade S280GD, Finish to PUR 70 micrometres, Colour to RAL 7016 TBC; internal facings of panel finished in ribbed steel to BS EN 508-1, Grade S220GD, Finish to SP 15 micrometres, Colour Bright White / RAL 9010; Firesafe FM approved 60 minute fire rating cladding; FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials; including all associated fixings etc.; include for 150mm end laps, include for factory applied weather seal FAWS; include for profile fillers, include for all necessary self-drilling , self-tapping stainless steel primary fasteners high threaded anti corrosion screws with non-ferrous EPDM backed bonded washers with plastic coloured heads, as outlined in Architects Specification H43/110 (roof panel) and all in strict accordance with manufacturers instructions/recommendations . Refer to Architects Elevation Drawings 25002-AFEC-01-ZZ-DR-A-4001 & 4002, 5001 and Section Drawings Series 6000

A ^^^^^^extra over for 40mm galvanised

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	Flashings to Cladding				
	PPC Pressed aluminium metal flashings, 1.0mm thick aluminium coated externally in RAL Colour 7016 to match cladding or equivalent, 200 microns thick with a polyester coating internally; in selected colours; flashings lapped 100mm to 150mm at all joints allow for fixing with low profile stitching screws with min 14mm diameter non-ferrous EPDM backed washers fitted at max. 450mm centres with 4mm diameter butyl rubber sealant; include for all necessary butt straps and sealed with two unbroken runs of 9mm wide x 3mm thick butyl rubber sealant tape at all joints, site applied LPCB certified PIR insulation board with and including the installation of an Air tightness / VCL layer and vapour barrier tape to provide a continuous sealed area / junctions and mineral wool firestop batt (providing continuity of fire rating to external wall opes etc.) to any gaps filled with fire rated canister insulation; include for all necessary grounds mastic sealing, from sealing stitching and riveting to provide air and water tight weather seals as per manufacturers written instructions; as per Architects Specification H72/470 and Architects Drawing Details 25002-AFEC-01-ZZ-DR-A-4001 & 4002 and Series 6000				
	Drip flashings along with Internal & External Cover flashings at bottom of cladding, 4 times bent; including cover strip, ledger angle and internal closure flashing as outlined on Drawing ZZ-DR-A-4001 and 6111, 6204				
A	girth 150 - 300mm; laid horizontal to Bottom of Main Building External Walls (100mm wide Cladding)	m	54		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Flashings to Cladding				
	Drip flashing to Typical Parapet Upstand Detail at bottom of cladding, 3/4 times bent; including cover strip, ledger angle and internal closure flashing as outlined on Architects				
A	girth 150 - 300mm; laid horizontal to Bottom of Main Building External Walls and to Top of Abutting Parapet to Flat Roof Drawing ZZ-DR-A-4001 and 6204, 6211	m	30		
	Movement Joint / Drip Flashing to External Cladding 2 times bent; as outlined on Drawing ZZ-DR-A-4001 and Section Drawings 6203 & 6208				
B	girth 150 - 300mm; laid horizontal to Main Building External Walls (100mm wide Cladding)	m	30		
	Abutment Flashings to Cladding 2 times bent; corner flashing with expansion joint Drawing ZZ-DR-A-4001 and Section Drawings 6405 & 6501				
C	girth 150 - 300mm; laid vertically at abutment / interface between New External Cladding and New Brick Facing; as outlined on Drawing ZZ-DR-A-4001 and Section Drawings 6405 (Gridline 3.2)	m	4		
D	girth 150 - 300mm; laid vertically at abutment / interface between New External Cladding Internal Corner as outlined on Drawing ZZ-DR-A-4001 and Section Drawings 6405 (Gridline 3.2)	m	4		
E	girth 150 - 300mm; laid vertically at abutment / interface between New External Cladding and Existing MTU Building; as outlined on Drawing ZZ-DR-A-4001 and Section Drawing 6501	m	11		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Flashings to Cladding				
	Apron Flashings to Wall & Roof Cladding; 2/3 times bent; as outlined on Drawing ZZ-DR-A-2002, 4001, 5001 and Section Drawings 6301, 6302, 6304 & 6307				
A	girth 150 - 300mm; laid horizontal at Bottom of Main Building Roof Parapet Walls as outlined on Drawing ZZ-DR-A-2002 and Section Drawing 6303	m	31		
B	girth 300 - 450mm; laid horizontal at Bottom of Main Building Roof Parapet Walls at abutment with existing MTU Building (Refer to Parapet Level 27.850m) as outlined on Drawing ZZ-DR-A-2002 and Section Drawing 6301 & 6304	m	30		
C	girth 300 - 450mm; laid horizontal & sloped at Bottom of Lift Over-run Cladding as outlined on Drawing ZZ-DR-A-2002 and Section Drawing 6302	m	11		
D	girth 300 - 450mm; laid horizontal to AOV's as outlined on Drawing ZZ-DR-A-2002 and Section Drawings 5001 & 6307	m	16		
E	girth 300 - 450mm; laid horizontal to Roof Services Box as outlined on Drawing ZZ-DR-A-2002	m	8		
	Verge Flashings to Wall & Roof Cladding; 2 times bent; as outlined on Drawing ZZ-DR-A-2002, 4001 and Section Drawings 6306				
F	girth 300 - 450mm; laid sloped at Bottom of Main Building Roof Parapet Walls along verges as outlined on Drawing ZZ-DR-A-2002 and Section Drawing 6306	m	28		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Flashings to Cladding				
	Closer Flashings to Lift Over-run Wall & Roof Cladding 3 times bent; as outlined on Drawing ZZ-DR-A-2002, 4001 and Section Drawings 6302				
A	girth 150 - 300mm; laid horizontal at perimeter edges of Roof and Wall Cladding to Lift Over-run as outlined on Drawing ZZ-DR-A-2002, and Section Drawing 6303	m	11		
	External Corner Flashings to Lift Over-run Wall Cladding 1 times bent; as outlined on Drawing ZZ-DR-A-2002, 4001, 5001 and Section Drawings 6302				
B	girth 150 - 300mm; laid vertically at external edges of Wall Cladding Corners to Lift Over-run as outlined on Drawing ZZ-DR-A-2002, 5001 and Section Drawing 6303	m	4		
	Vertical Internal corner flashings, 3 times bent; including Z support lapped at 150mm - 300mm joints; internal cleader angle				
C	girth 150 - 300mm, at abutment with existing MTU building	m	6		
D	girth 150 - 300mm, at abutment with New External Concrete Wall with light tone pebble dash finish	m	6		
E	girth 150 - 300mm, at abutment with New External Brick Faced Wall / Facade	m	5		
F	girth 150 - 300mm, at abutment / Internal Corner of New External Wall Cladding Panel	m	4		
G	girth 150 - 300mm, to Internal Corners of Parapet Wall Cladding Panel	m	3		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Flashings to Cladding				
	Door Jamb / Reveal Flashings to ope				
A	external jamb flashing girth 150 - 300mm overall wrapped around steel channel, 2 times bent external jamb flashing fixed with rivets and sealed with 9mm x 3mm butyl mastic; EDPM membrane continuous and fully weather sealed at all junctions to jamb; girth 230mm; site applied PIR insulation board fixed to steelwork 50mm thick; site applied rockwool insulation loose laid fitted between steel channels 70mm thick; nd mineral wool firestop batt (providing continuity of fire rating to external wall opes etc., continuous 12mm x 6mm rear air seal installed; 50 x 50mm corner support angle; all stitching screws with minimum 14mm diameter non-ferrous EPDM backed washer fitted at maximum 450mm centres (to door opes) as outlined on Architects Drawing ZZ-DR-A-6212	m	3		
	Door Jamb / Reveal Flashings to ope (to Roller Door)				
B	internal jamb flashing girth 300 - 450mm overall wrapped around steel channel, 3 times bent flashing fixed with rivets and sealed with 9mm x 3mm butyl mastic; EDPM membrane continuous and fully weather sealed at all junctions to jamb; girth 230mm; site applied PIR insulation board fixed to steelwork 50mm thick; site applied rockwool insulation loose laid fitted between steel channels 70mm thick; and mineral wool firestop batt (providing continuity of fire rating to external wall opes etc.; continuous 12mm x 6mm rear air seal installed; 50 x 50mm corner support angle; all stitching screws with minimum 14mm diameter non-ferrous EPDM backed washer fitted at maximum 450mm centres (to roller door ope) as outlined on Architects Drawing ZZ-DR-A-6404	m	6		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Flashings to Cladding				
	Window Jamb / Reveal Flashings to ope (to Aluminium Strip Windows & Doors)				
A	external jamb flashing girth 300 - 450mm overall wrapped around steel channel, 6 times bent, flashing fixed with rivets and sealed with 9mm x 3mm butyl mastic; EDPM membrane continuous and fully weather sealed at all junctions to jamb; girth 230mm; site applied PIR insulation board fixed to steelwork 50mm thick; site applied rockwool insulation loose laid fitted between steel channels 70mm thick; and mineral wool firestop batt (providing continuity of fire rating to external wall opes etc., continuous 12mm x 6mm rear air seal installed; 50 x 50mm corner support angle; all stitching screws with minimum 14mm diameter non-ferrous EPDM backed washer fitted at maximum 450mm centres(to window opes) as outlined on Architects Drawing ZZ-DR-A-6504 & 6510	m	23		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Flashings to Cladding				
	Window Jamb / Reveal Flashings to ope (to Aluminium Curtain Wall System)				
A	external jamb flashing girth 300 - 450mm overall wrapped around steel channel, 4 & 6 times bent, flashing fixed with rivets and sealed with 9mm x 3mm butyl mastic; EDPM membrane continuous and fully weather sealed at all junctions to jamb; girth 230mm; site applied PIR insulation board fixed to steelwork 50mm thick; site applied rockwool insulation loose laid fitted between steel channels 70mm thick; and mineral wool firestop batt (providing continuity of fire rating to external wall opes etc., continuous 12mm x 6mm rear air seal installed; 50 x 50mm corner support angle; all stitching screws with minimum 14mm diameter non-ferrous EPDM backed washer fitted at maximum 450mm centres (to curtain wall opes) as outlined on Architects Drawing ZZ-DR-A-6502 & 6503	m	14		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Flashings to Cladding				
	Head / Soffit / Internal Flashings to ope (to Aluminium Strip Windows & Doors)				
A	soffit flashing 1.0mm thick (with 3 degree slope) 300mm - 450mm girth overall, four time bent flashing to wrap around steel channel; fixed with pop rivets (at 450mm c/c) and sealed with 9mm x 3mm butyl mastic, site applied PIR insulation board fitted between flashings 50mm thick, and mineral wool firestop batt (providing continuity of fire rating to external wall opes etc., EDPM membrane continuous and fully weather sealed at all junctions to head of windows and doors; girth 235mm, continuous 12mm x 6mm rear air seal, installed complete with drillings, fixings, attachments, seals and 50 x 50mm corner support angle etc.; all stitching screws with minimum 14mm diameter non-ferrous EPDM backed washer fitted at maximum 450mm centres (to window & door opes) as outlined on Architects Drawing ZZ-DR-A-6210	m	32		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Flashings to Cladding				
	Head / Soffit / Internal Flashings to ope (to Aluminium Curtain Wall System)				
A	soffit flashing 1.0mm thick (with 3 degree slope) 450mm - 600mm girth overall, three times bent flashing to wrap around steel channel; fixed with pop rivets (at 450mm c/c) and sealed with 9mm x 3mm butyl mastic, site applied PIR insulation board fitted between flashings 50mm thick, and mineral wool firestop batt (providing continuity of fire rating to external wall opes etc., EDPM membrane continuous and fully weather sealed at all junctions to head of windows and doors; girth 235mm, continuous 12mm x 6mm rear air seal, installed complete with drillings, fixings, attachments, seals and 50 x 50mm corner support angle etc.; all stitching screws with minimum 14mm diameter non-ferrous EPDM backed washer fitted at maximum 450mm centres (to window & door opes) as outlined on Architects Drawing ZZ-DR-A-4001 & 6306	m	6		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Flashings to Cladding				
	Head / Soffit / Internal Flashings to ope (to Roller Door)				
A	profiled soffit flashing 1.0mm thick 1350mm - 1500mm girth overall, nine time bent / drip flashing to head flashing to wrap around steel channel; fixed with pop rivets (at 450mm c/c); sealed with 2 runs of 'C' seal tape and 2 run of 9mm x 3mm butyl mastic, with approved mastic joint sealant; 2no. site applied PIR insulation boards fitted between flashings 50mm thick, site applied rockwool insulation loose laid fitted between steel channels average thickness 150mm thick, and mineral wool firestop batt (providing continuity of fire rating to external wall opes etc.; EDPM membrane continuous and fully weather sealed at all junctions to head of doors; girth 265mm, continuous 12mm x 6mm rear air seal, installed complete with drillings, fixings, attachments, seals and 50 x 50mm corner support angle etc.; all stitching screws with minimum 14mm diameter non-ferrous EPDM backed washer fitted at maximum 450mm centres (to roller door opes) as outlined on Architects Drawing ZZ-DR-A-4001 and 6208	m	4		

To Collection € **NIL**

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Flashings to Cladding				
	Cill flashing to ope including Z-shaped support bracket for window (to Aluminium Strip Windows)				
A	external cill flashing 1.0mm thick (with 3 degree slope) girth 150 - 300mm, 3/4 times bent / including internal and external flashing fixed with rivets, and sealed with 9mm x 3mm butyl mastic; EDPM membrane continuous and fully weather sealed at all junctions to jamb; girth 235mm; site applied PIR insulation board fixed to steelwork 50mm thick; site applied rockwool insulation loose laid fitted between steel channels 70mm thick; and mineral wool firestop batt (providing continuity of fire rating to external wall opes etc.; continuous 20mm x 9mm rear air seal installed; 50 x 50mm corner support angle; all stitching screws with minimum 14mm diameter non-ferrous EPDM backed washer fitted at maximum 450mm centres (to window opes) as outlined on Architects Drawing ZZ-DR-A-4001 and 6210	m	31		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Flashings to Cladding				
	Cill flashing to ope including Z-shaped support bracket for window (to Aluminium Curtain Wall System)				
A	external cill flashing 1.0mm thick (with 3 degree slope) girth 300 - 450mm, 3/4 times bent / including internal and external flashing fixed with rivets, and sealed with 9mm x 3mm butyl mastic; EDPM membrane continuous and fully weather sealed at all junctions to jamb; girth 280mm; site applied PIR insulation board fixed to steelwork 50mm thick; site applied rockwool insulation loose laid fitted between steel channels 70mm thick; and mineral wool firestop batt (providing continuity of fire rating to external wall opes etc.; continuous 20mm x 9mm rear air seal installed; 50 x 50mm corner support angle; all stitching screws with minimum 14mm diameter non-ferrous EPDM backed washer fitted at maximum 450mm centres (to window opes) as outlined on Architects Drawing ZZ-DR-A-4001 and 6206	m	7		
	Ridge flashing; 1 times bent; including internal flashing				
B	girth 600 - 750mm, to Main Roof as per Architects Drawing	m	29		

To Collection € **NIL**

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Flashings to Cladding				
	Valley Gutters (2no.) - Gutters to Roof measured with Roof Finishes System hereunder				
	Kingspan or equal approved membrane lined insulated gutter system; colour coated pre-formed gutter; 0.70 mm thick hot-dip zinc/aluminium Galfan coated metal or similar; external weather sheet 500 microns PVC in selected colour; internal liner sheet 200 microns Kingspan XL Forte; consists of closed cell with polyisocyanurate (PIR) 50mm thick insulation; sealed at all joints; include for all necessary flashings, drilling, trims, fixings, grounds, support timbers, sealing and sealing strips at all junctions; all in accordance with manufactures written instructions and Architects Specification H43/234 and Architects Drawing 25002-AFEC-01-RF-DR-A-2002 New Building - Roof Plan & 25002-AFEC-01-RF-DR-A-6305_EWS-05 - Parapet-RWO Detail				
A	size 450 x 200mm deep	m	29		
B	size 525 x 200mm deep	m	20		
C	size 800 x 200mm deep	m	9		
	Extra over gutters on which they occur for:				
D	stopped ends	nr	4		
E	outlets	nr	4		
	Recessed Gutter Detail				
F	1.20mm galvanised gutter support four times cranked 1050 - 1300mm girth overall installed complete with all necessary drillings, fixings, attachments, seals, etc.	m	58		
G	extra over last for 6mm stainless steel gutter straps to fully support gutter	nr	116		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Flashings to Cladding				
	(Cont) Kingspan or equal approved membrane lined insulated gutter system; colour coated pre-formed gutter; 0.70 mm thick hot-dip zinc/aluminium Galfan coated metal or similar; external weather sheet 500 microns PVC in selected colour; internal liner sheet 200 microns Kingspan XL Forte; consists of closed cell with polyisocyanurate (PIR) 50mm thick insulation; sealed at all joints; include for all necessary flashings, drilling, trims, fixings, grounds, support timbers, sealing and sealing strips at all junctions; all in accordance with manufactures written instructions and Architects Specification H43/234 and Architects Drawing 25002-AFEC-01-RF-DR-A-2002 New Building - Roof Plan & 25002-AFEC-01-RF-DR-A-6305 EWS-05 - Parapet-RWO Detail				
	Gutter Test				
A	Contractor to allow for Gutter Test by temporarily blocking all outlets and fill gutters to overflow level and after 5 minutes closely inspect for leakage; all in accordance with Architects Specification R10/910	Item	1		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	Parapet Flashing to Cladding				
	PPC Pressed aluminium metal flashings, 1.0mm thick aluminium coated externally in RAL Colour 7016 to match cladding or equivalent; with 4 times bent and cranked white enamel internal flashing and closer flashings with 150mm sealed overlap with film backed butyl tape fixed with rivets and sealed with 9mm x 3mm butyl mastic; including all necessary drilings, fixings, attachments, seals etc.; EDPM membrane wrapped around parapet support flashing installed in accordance with the manufacturers recommendations; Site applied LPCB certified PIR insulation board with and including 18mm thick marine grade plywood (to width of parapets) along with installing Air tightness / VCL layer and vapour barrier tape to provide a continuous sealed area / junctions and mineral wool firestop batt (providing continuity of fire rating) and all gaps filled with fire rated canister insulation in accordance with the manufacturers recommendations; installed complete with all necessary drillings, fixings, attachments, seals, etc; with continuous 12mm x 6mm rear air seal installed in accordance with the manufacturers recommendations and allow for Seal between cladding and structural steelwork with silicone sealant all as per detail outlined on Architects Drawing ZZ-DR-A-4001 & 2002 and Section Drawings Details 6204, 6209, 6301, 6303, 6304, 6305 & 6306				
A	Parapet Flashing, girth 600 - 650mm; 4 times bent; including ledger angle and internal closure flashing as outlined on Section Drawing 6204 and 6209	m	33		
B	Extra over last for closer flashing; girth 150 - 300mm; 2 times bent; fixed to underside of parapet capping and against PPC aluminium wall system and solid spandrels as outlined on Section Drawing 6209	m	4		

To Collection € NIL

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Parapet Flashing to Cladding (Cont) PPC Pressed aluminium metal flashings, 1.0mm thick aluminium coated externally in RAL Colour 7016 to match cladding or equivalent; with 4 times bent and cranked white enamel internal flashing and closer flashings with 150mm sealed overlap with film backed butyl tape fixed with rivets and sealed with 9mm x 3mm butyl mastic; including all necessary drilings, fixings, attachments, seals etc.; EDPM membrane wrapped around parapet support flashing installed in accordance with the manufacturers recommendations; Site applied LPCB certified PIR insulation board with and including 18mm thick marine grade plywood (to width of parapets) along with installing Air tightness / VCL layer and vapour barrier tape to provide a continuous sealed area / junctions and mineral wool firestop batt (providing continuity of fire rating) and all gaps filled with fire rated canister insulation in accordance with the manufacturers recommendations; installed complete with all necessary drillings, fixings, attachments, seals, etc; with continuous 12mm x 6mm rear air seal installed in accordance with the manufacturers recommendations and allow for Seal between cladding and structural steelwork with silicone sealant all as per detail outlined on Architects Drawing ZZ-DR-A-4001 & 2002 and Section Drawings Details 6204, 6209, 6301, 6303, 6304, 6305 & 6306				
A	Parapet Flashing between Interface of New & Existing MTU Building, girth 900 - 1050mm; 4 times bent; including ledger angle and internal closure flashing as outlined on Section Drawing 6301 and 6304	m	30		
B	Parapet Flashing, girth 750 - 900mm; 4 times bent; including ledger angle and internal closure flashing as outlined on Section Drawing 6303, 6305 & 6306	m	62		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Parapet Flashing to Cladding (Cont) PPC Pressed aluminium metal flashings, 1.0mm thick aluminium coated externally in RAL Colour 7016 to match cladding or equivalent; with 4 times bent and cranked white enamel internal flashing and closer flashings with 150mm sealed overlap with film backed butyl tape fixed with rivets and sealed with 9mm x 3mm butyl mastic; including all necessary drilings, fixings, attachments, seals etc.; EDPM membrane wrapped around parapet support flashing installed in accordance with the manufacturers recommendations; Site applied LPCB certified PIR insulation board with and including 18mm thick marine grade plywood (to width of parapets) along with installing Air tightness / VCL layer and vapour barrier tape to provide a continuous sealed area / junctions and mineral wool firestop batt (providing continuity of fire rating) and all gaps filled with fire rated canister insulation in accordance with the manufacturers recommendations; installed complete with all necessary drillings, fixings, attachments, seals, etc; with continuous 12mm x 6mm rear air seal installed in accordance with the manufacturers recommendations and allow for Seal between cladding and structural steelwork with silicone sealant all as per detail outlined on Architects Drawing ZZ-DR-A-4001 & 2002 and Section Drawings Details 6204, 6209, 6301, 6303, 6304, 6305 & 6306				
A	Extra over last for L-Shaped closer flashing; girth 150 - 300mm; 2 times bent; fixed to underside of parapet capping and behind cladding wall system as outlined on Section Drawing 6306	m	62		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	Mastic Asphalt, Waterproof and Gas Proof Non Metal Flexible Sheet Coverings				
	Prepare, clean down and apply - MOY Group reinforced bitumen membrane warm deck roof covering system; comprising of Top layer / Cap Sheet MOY Paralon ARD/S reinforced bitumen compound membrane, fully bonded with 100mm side and 150mm end laps all laid on first layer with and including; MOY Paralon TOP S reinforced bitumen base sheet membrane, with Termotene hot melt film finish to underside, fully bonded with 100mm side and 150mm end laps with following properties; 3mm thickness; Colour: Black installed on Moy Group Paratherm T tapered PIR insulation or similar FM prior approved foil faced factory 100mm thick with thermal conductivity of minimum 0.025W/(m.K); installed butt jointed & staggered, mechanically fixed to and including 2 layers of 18mm thick marine plywood deck (primed with MOY SA Primer L) with SDS screws and metal plates, all joints taped & jointed, on Air and Vapour Control Layer / Barrier - MOY Sticker Sanded 3mm thick; all elements of roof build up to be laid in strict accordance with the manufacturers recommendations & as per Architects Specification Item J41/110 to 940 inclusive and as per Details outlined on Architects Drawings ZZ-DR-A-2002 and Section Drawings Details ZZ-DR-A-6204				
	Roofing				
A	horizontal; to falls; girth > 300 mm (lower roof level)	m2	13		
B	extra over last for 2 layers of 18mm thick marine plywood deck to over-run cubicles below flat roof structure as outlined on Drawing 6204	m2	34		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Mastic Asphalt, Waterproof and Gas Proof Non Metal Flexible Sheet Coverings				
	(Cont) Prepare, clean down and apply - MOY Group reinforced bitumen membrane warm deck roof covering system; comprising of Top layer / Cap Sheet MOY Paralon ARD/S reinforced bitumen compound membrane, fully bonded with 100mm side and 150mm end laps all laid on first layer with and including; MOY Paralon TOP S reinforced bitumen base sheet membrane, with Termotene hot melt film finish to underside, fully bonded with 100mm side and 150mm end laps with following properties; 3mm thickness; Colour: Black installed on Moy Group Paratherm T tapered PIR insulation or similar FM prior approved foil faced factory 100mm thick with thermal conductivity of minimum 0.025W/(m.K); installed butt jointed & staggered, mechanically fixed to and including 2 layers of 18mm thick marine plywood deck (primed with MOY SA Primer L) with SDS screws and metal plates, all joints taped & jointed, on Air and Vapour Control Layer / Barrier - MOY Sticker Sanded 3mm thick; all elements of roof build up to be laid in strict accordance with the manufacturers recommendations & as per Architects Specification Item J41/110 to 940 inclusive and as per Details outlined on Architects Drawings ZZ-DR-A-2002 and Section Drawings Details ZZ-DR-A-6204				
A	extra over for cutting to and forming sump in Paralon roof build up for rainwater outlet locations; size 1000 x 500 x 100 mm deep	nr	6		
B	extra over for cutting to and forming rainwater outlet locations; 400 - 450mm diameter overall; including Alumasc or equivalent Harmer Aluminium Roof AV400 Outlets all as per Detail outlined on Drawing 6204 and Architects Specification R10/365	nr	6		
	Roofing (Parapet & Main Building Skirtings)				

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Mastic Asphalt, Waterproof and Gas Proof Non Metal Flexible Sheet Coverings (Cont) Prepare, clean down and apply - MOY Group reinforced bitumen membrane warm deck roof covering system; comprising of Top layer / Cap Sheet MOY Paralon ARD/S reinforced bitumen compound membrane, fully bonded with 100mm side and 150mm end laps all laid on first layer with and including; MOY Paralon TOP S reinforced bitumen base sheet membrane, with Termotene hot melt film finish to underside, fully bonded with 100mm side and 150mm end laps with following properties; 3mm thickness; Colour: Black installed on Moy Group Paratherm T tapered PIR insulation or similar FM prior approved foil faced factory 100mm thick with thermal conductivity of minimum 0.025W/(m.K); installed butt jointed & staggered, mechanically fixed to and including 2 layers of 18mm thick marine plywood deck (primed with MOY SA Primer L) with SDS screws and metal plates, all joints taped & jointed, on Air and Vapour Control Layer / Barrier - MOY Sticker Sanded 3mm thick; all elements of roof build up to be laid in strict accordance with the manufacturers recommendations & as per Architects Specification Item J41/110 to 940 inclusive and as per Details outlined on Architects Drawings ZZ-DR-A-2002 and Section Drawings Details ZZ-DR-A-6204				
A	parapet skirting; girth 450 - 600mm, with and including the installation of an Air tightness / VCL layer and vapour barrier tape to provide a continuous sealed area / junctions (underside of External Wall Cladding to Main Building Walls)	m2	14		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Mastic Asphalt, Waterproof and Gas Proof Non Metal Flexible Sheet Coverings				
	(Cont) Prepare, clean down and apply - MOY Group reinforced bitumen membrane warm deck roof covering system; comprising of Top layer / Cap Sheet MOY Paralon ARD/S reinforced bitumen compound membrane, fully bonded with 100mm side and 150mm end laps all laid on first layer with and including; MOY Paralon TOP S reinforced bitumen base sheet membrane, with Termotene hot melt film finish to underside, fully bonded with 100mm side and 150mm end laps with following properties; 3mm thickness; Colour: Black installed on Moy Group Paratherm T tapered PIR insulation or similar FM prior approved foil faced factory 100mm thick with thermal conductivity of minimum 0.025W/(m.K); installed butt jointed & staggered, mechanically fixed to and including 2 layers of 18mm thick marine plywood deck (primed with MOY SA Primer L) with SDS screws and metal plates, all joints taped & jointed, on Air and Vapour Control Layer / Barrier - MOY Sticker Sanded 3mm thick; all elements of roof build up to be laid in strict accordance with the manufacturers recommendations & as per Architects Specification Item J41/110 to 940 inclusive and as per Details outlined on Architects Drawings ZZ-DR-A-2002 and Section Drawings Details ZZ-DR-A-6204				
A	parapet skirting; laid to vertical upstands and horizontal wrapping up and over the full width of the parapet; girth 1050 - 1200mm, with and including the installation of an Air tightness / VCL layer and vapour barrier tape to provide a continuous sealed area / junctions to main parapets of Low Level Roof	m2	74		
B	extra over last for supply & install 18mm thick marine plywood deck fixed vertically to flat roof timber stud structure upstand as outlined on Drawing 6204	m2	74		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Mastic Asphalt, Waterproof and Gas Proof Non Metal Flexible Sheet Coverings				
	(Cont) Prepare, clean down and apply - MOY Group reinforced bitumen membrane warm deck roof covering system; comprising of Top layer / Cap Sheet MOY Paralon ARD/S reinforced bitumen compound membrane, fully bonded with 100mm side and 150mm end laps all laid on first layer with and including; MOY Paralon TOP S reinforced bitumen base sheet membrane, with Termotene hot melt film finish to underside, fully bonded with 100mm side and 150mm end laps with following properties; 3mm thickness; Colour: Black installed on Moy Group Paratherm T tapered PIR insulation or similar FM prior approved foil faced factory 100mm thick with thermal conductivity of minimum 0.025W/(m.K); installed butt jointed & staggered, mechanically fixed to and including 2 layers of 18mm thick marine plywood deck (primed with MOY SA Primer L) with SDS screws and metal plates, all joints taped & jointed, on Air and Vapour Control Layer / Barrier - MOY Sticker Sanded 3mm thick; all elements of roof build up to be laid in strict accordance with the manufacturers recommendations & as per Architects Specification Item J41/110 to 940 inclusive and as per Details outlined on Architects Drawings ZZ-DR-A-2002 and Section Drawings Details ZZ-DR-A-6204				
A	extra over for 50mm thick rigid insulation mechanically fixed to galvanised upstand (upstand measured elsewhere), all joints taped & sealed, installed in accordance with the manufacturers recommendations; Insulation in both skirtings to parapets and main building walls, laid vertical, 450 - 600mm girth overall	m2	30		
B	extra over last for supply and install 15mm thick fibre-reinforced cement board fixed vertically to flat roof timber stud structure upstand as outlined on Drawing 6204	m2	14		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	(Cont) Mastic Asphalt, Waterproof and Gas Proof Non Metal Flexible Sheet Coverings				
	Flexible Sheet Metal Coverings (Parapet Capping Low Level Roof)				
	Flashings / Parapet Up-Stand Detail (Drawing 25002-AFEC-01-01-DR-A-2002, 4001, 6204, 6209)				
A	PPC aluminium parapet capping; girth 600 - 650mm overall 1.0mm thick, 4 times bent including ledger angle and internal closure flashing and cranked white enamel internal flashing with 150mm sealed overlap with film backed butyl tape fixed with rivets and sealed with 9mm x 3mm butyl mastic; including all necessary drilings, fixings, attachments, seals etc.; EDPM membrane wrapped around parapet support flashing installed in accordance with the manufacturers recommendations; Site applied LPCB certified PIR insulation board with 18mm thick marine grade plywood (to width of parapets) with and including the installation of an Air tightness / VCL layer and vapour barrier tape to provide a continuous sealed area / junctions and mineral wool firestop batt (providing continuity of fire rating) and all gaps filled with fire rated canister insulation in accordance with the manufacturers recommendations; installed complete with all necessary drillings, fixings, attachments, seals, etc; with continuous 12mm x 6mm rear air seal installed in accordance with the manufacturers recommendations and allow for Sealing all gaps with silicone sealant all as per detail outlined on Architects Drawing -DR-A-6204 and 6209	m	33		
B	Allow for fixing / tie-in of Low Level Roof Parapet with New Cladded Walls to Main Building	nr	2		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	WOODWORK: (To Parapets)				
	Structural and First Fixings				
	White deal, structural grade Class SC1, vac -vac treated				
	First fixings				
A	100 x 50 mm grounds	m	33		
B	150 x 50 mm fillet piece	m	33		
	Boarding and Second Fixings				
	Marine plywood; 18 mm thick; fixed to timber grounds; include for all necessary fixings.				
	Boarding and sheetings; roofs				
C	> 300 mm wide high & low level parapets; laid horizontal	m2	87		
	100mm thick Rockwool Flexi Stone Wool slab infill (min. density 10kg/m3) to BS EN 13162:2012 + A1:2015 or equivalent (Thermal Conductivity 0.038 W/mK); Flexi is non-combustible, achieving a reaction-to-fire classification of A1, as defined in EN 13501-1; insulation is to be cut, placed and friction-fitted tightly between timber joists / frame system and supported with galvanised clips, include for acoustic sealant to perimeter as required and fixed as per manufacturers instructions; as per Architects Drawing 25002-AFEC-00-ZZ-DR-A-6204 & 6209				
D	150mm thick to upstands at flat roofs; > 300mm wide	m2	16		

	(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
	(Cont) ROOFING, CLADDING AND WATERPROOFING:				
	Holes				
	Weather to pipes or opening in roof build-up, include for all weathering, flashing and insulation etc; all in accordance with manufactures instructions - Ref: Drawing 25002-AFEC-01-01-DR-A-2002				
A	< 0.50 m girth	nr	5		
B	0.50 - 1.00 m girth	nr	3		
	Weather to cables or openings & the like; in roof build-up, include for 100mm dia stainless steel swan necks and all weathering, flashing and insulation etc; all in accordance with manufactures instructions				
C	< 0.50 m girth	nr	2		
	Weather to square / rectangular ductwork or opening in roof build-up, include for all weathering, flashing and insulation etc; all in accordance with manufactures instructions				
D	0.50 - 1.00m girth	nr	1		
E	2.00 - 3.00m girth	nr	2		

(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)

COLLECTION

Page No. BQ/283				NIL
Page No. BQ/284				NIL
Page No. BQ/285				NIL
Page No. BQ/286				NIL
Page No. BQ/287				NIL
Page No. BQ/288				NIL
Page No. BQ/289				NIL
Page No. BQ/290				NIL
Page No. BQ/291				NIL
Page No. BQ/292				NIL
Page No. BQ/293				NIL
Page No. BQ/294				NIL
Page No. BQ/295				NIL
Page No. BQ/296				NIL
Page No. BQ/297				NIL
Page No. BQ/298				NIL
Page No. BQ/299				NIL
Page No. BQ/300				NIL
Page No. BQ/301				NIL
Page No. BQ/302				NIL
Page No. BQ/303				NIL
Page No. BQ/304				NIL
Page No. BQ/305				NIL

(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)

COLLECTION

Page No. BQ/306	NIL
Page No. BQ/307	NIL
Page No. BQ/308	NIL
Page No. BQ/309	NIL
Page No. BQ/310	NIL
Page No. BQ/311	NIL
Page No. BQ/312	NIL
Page No. BQ/313	NIL
Page No. BQ/314	NIL
Page No. BQ/315	NIL
Page No. BQ/316	NIL
Page No. BQ/317	NIL
Page No. BQ/318	NIL
Page No. BQ/319	NIL
Page No. BQ/320	NIL
Page No. BQ/321	NIL
Page No. BQ/322	NIL
Page No. BQ/323	NIL
Page No. BQ/324	NIL
Page No. BQ/325	NIL
Page No. BQ/326	NIL

(47) ROOF FINISHES & CLADDING (PLASTERING) (Cont)				
COLLECTION				
Page No. BQ/327				NIL
(47) ROOF FINISHES & CLADDING (PLASTERING)				
Carried to Summary				**NIL**

	(52) DRAINAGE, RAINWATER AND REFUSE DISPOSAL				
	Disposal Above Ground				
	Siphonic Roof Rainwater Drainage System				
	The Contractor will be required to submit detailed proposals for the following systems for review :				
	Siphonic roof drainage to be designed, supplied and installed by the Contractor. Contractor Design of Primary Siphonix Roof Drainage System designed by specialist designer for compliance with BS EN1519-1; the Contractor to allow for all necessary Electro-Fusion welded HDPE pipework and fittings, bends, branches, reducers, supports and rails systems components to complete the works and testing; all in accordance with Architects Specification R10.				
A	generally	item	1		
	25mm thick foil pipe insulation wrap, preformed flexible closed cell split tube, thermal conductivity (max) : 0.045 W/mK, Class O spread of flame to BS476:Part 7 or Class C to BS EN 13501 (whichever is the more onerous), include for all necessary trimming and sealing around joints, fittings, supports and the like, as per the manufacturers recommendations and Specification				
B	generally	item	1		

To Collection € **NIL**

(52) DRAINAGE, RAINWATER AND REFUSE DISPOSAL (Cont)				
COLLECTION				
Page No. BQ/331				NIL
(52) DRAINAGE, RAINWATER AND REFUSE DISPOSAL Carried to Summary				**NIL**

	(59) MECHANICAL INSTALLATION (PLASTERING)				
	(59) MECHANICAL INSTALLATION				
	GENERAL				
A	The prices hereunder shall include for all work in the design, execution and testing of mechanical installation in accordance with the Specification.	note			
B	The prices hereunder shall include for the co-ordination of the design and installation of the mechanical installation. The Contractor shall ensure compatibility of design performance and consistency of any design assumptions for the mechanical installation.	note			
C	The work is to be undertaken as a Domestic Sub-Contract to the Main Contractor. The prices hereunder shall be deemed to include for profit, general attendance and special attendances as necessary by the Main Contractor.	note			
D	For preliminaries particulars, please refer to tender documentation.	note			
E	The Contractor shall allow for the provision, coordination and commissioning of energy metering and sub-metering systems appropriate to the building layout and Significant Energy Uses (SEUs), to support monitoring of Energy Performance Indicators (EnPIs). The Contractor shall provide all necessary data, technical information and settings to enable integration of metering systems into the Employer's energy management systems. Energy performance shall be considered as part of commissioning, with systems set up and demonstrated to operate in accordance with design intent and energy efficiency requirements.	Item	1		
F	Tenderers shall provide information on the energy performance of proposed systems, including efficiency ratings and operational energy consumption, where applicable.	note			

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	DESCRIPTION				
	Provide everything necessary for the proper installation of the Mechanical services system, all in accordance with the Service Engineer Information as issued by AFEC; refer to the following documents:				
	Drawings:				
A	MTUBA-AFEC-00-00-DR-M-2100	item	1		
B	MTUBA-AFEC-00-00-DR-M-2200	item	1		
C	MTUBA-AFEC-00-00-DR-M-2300	item	1		
D	MTUBA-AFEC-00-00-DR-M-2400	item	1		
E	MTUBA-AFEC-00-00-DR-M-2600	item	1		
F	MTUBA-AFEC-00-01-DR-M-2100	item	1		
G	MTUBA-AFEC-00-01-DR-M-2200	item	1		
H	MTUBA-AFEC-00-01-DR-M-2300	item	1		
J	MTUBA-AFEC-00-01-DR-M-2400	item	1		
K	MTUBA-AFEC-00-01-DR-M-2600	item	1		
L	MTUBA-AFEC-00-01-DR-M-2700	item	1		
M	MTUBA-AFEC-00-RL-DR-M-2100	item	1		
N	MTUBA-AFEC-00-RL-DR-M-2200	item	1		
P	MTUBA-AFEC-00-RL-DR-M-2600	item	1		
Q	MTUBA-AFEC-00-XX-DR-M-2000	item	1		
R	MTUBA-AFEC-00-XX-SC-M-2000	item	1		
S	MTUBA-AFEC-00-XX-SC-M-2001	item	1		
T	MTUBA-AFEC-00-XX-SC-M-2600	item	1		
U	23028-AFEC-00-XX-SP-M-0050 mechanical specification	item	1		

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	Tender Breakdown				
	Preliminary Items				
A	Amount for general preliminaries.	item	1		
B	Amount for marking on site builders work and attendances.	item	1		
C	Amount for record documentation	item	1		
D	Amount for as-installed drawings	item	1		
E	Amount for builders works and co-ordination drawings, construction drawings.	item	1		
F	Amount for set-up.	item	1		
G	Amount for site specific preliminaries.	item	1		
H	Works associated with As built drawings and O&M Manuals (three disks copy and three hard copies of all).	item	1		
J	Works associated with staff demonstrations and training.	item	1		
K	Works associated with recommissioning of all systems following a full year of operation.	item	1		
L	Works associated with decommissioning and removal of all redundant services	item	1		
M	Allow for any other work in this section (Tenderer to detail)	item	1		
	Insurances				
N	Amount for employers liability.	item	1		
P	Amount for third party workmans compensation.	item	1		
Q	Statutory requirements.	item	1		
R	All risks insurances.	item	1		
S	Public liability insurance.	item	1		
T	Amount for Collateral Agreement.	item	1		

To Collection € **NIL**

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Insurances				
A	Allow for any other work in this section (Tenderer to detail)	item	1		
	Co-ordination				
B	Amount for coordination with MTU facilities department	item	1		
	Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	Heating (Main Building)				
	LPHW Plant				
C	Supply and installation of LPHW buffer vessel	Item	1		
D	Supply and installation of LPHW circulation pumps P.01	Item	1		
E	Supply and installation of LPHW circulation pumps P.02	Item	1		
F	Supply and installation of LPHW circulation pumps P.03	Item	1		
G	Supply and installation of LPHW dosing pot	Item	1		
H	Supply and installation of LPHW energy meters	Item	1		
J	Supply and installation of LPHW low loss header	Item	1		
K	Supply and installation of packaged pressurisation unit	Item	1		
L	Supply and installation of LPHW expansion vessel	Item	1		
	LPHW Distribution & Heat Emitters				
M	LPHW Pipework (including supports) DN25	Item	1		
N	LPHW Pipework (including supports) DN32	Item	1		

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	(Cont) Heating (Main Building)				
	(Cont) LPHW Distribution & Heat Emitters				
A	LPHW Pipework (including supports) DN40	Item	1		
B	LPHW Pipework (including supports) DN50	Item	1		
C	LPHW Pipework (including supports) DN65	Item	1		
D	LPHW Isolation Valves DN25	Item	1		
E	LPHW Isolation Valves DN32	Item	1		
F	LPHW Isolation Valves DN40	Item	1		
G	LPHW Isolation Valves DN50	Item	1		
H	LPHW Isolation Valves DN65	Item	1		
J	LPHW Strainer Valves DN25	Item	1		
K	LPHW Strainer Valves DN32	Item	1		
L	LPHW Strainer Valves DN40	Item	1		
M	LPHW Strainer Valves DN50	Item	1		
N	LPHW Strainer Valves DN65	Item	1		
P	LPHW Non-Return Valves DN25	Item	1		
Q	LPHW Non-Return Valves DN32	Item	1		
R	LPHW Non-Return Valves DN40	Item	1		
S	LPHW Drain Valves	Item	1		
T	LPHW Temperature Gauges	Item	1		
U	LPHW Pressure Gauges	Item	1		
V	LPHW Regulating Valves	Item	1		
W	LPHW AAVs	Item	1		
X	Pipework & Valves associated with the Pressurisation Unit	Item	1		

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	(Cont) Heating (Main Building)				
	(Cont) LPHW Distribution & Heat Emitters				
A	LPHW Dirt / Air Separator	Item	1		
B	Supply & Installation of radiators to main building	Item	1		
C	Radiators TRVs (main building)	Item	1		
D	Insulation of LPHW Pipework	Item	1		
E	Labelling of LPHW Pipework	Item	1		
F	Any other works (provide details)	Item	1		
	Domestic Water (Main Building)				
	Domestic Water Plant				
G	Supply and installation of Under-sink Water Heaters including valving arrangement as per manufacturer guidelines to main building.	Item	1		
	Domestic Water Distribution				
H	DW Pipework (including supports) DN15	Item	1		
J	DW Pipework (including supports) DN22	Item	1		
K	DW Pipework (including supports) DN28	Item	1		
L	Tie into existing DW services	Item	1		
M	DW Isolation Valves	Item	1		
N	Insulation of DW Pipework	Item	1		
P	Labelling of DW Pipework	Item	1		
Q	DW Drain Valves	Item	1		
R	Any other works (provide details)	Item	1		

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	Ventilation & Air Conditioning (Main Building)				
	Ventilation & Air Conditioning Plant				
A	Supply and installation of comms room split air-conditioning internal and external unit, including refrigerant piping and supports.	Item	1		
	Ventilation & Air Conditioning Distribution				
B	Supply Air Ductwork installation (including supports)	Item	1		
C	Return Air Ductwork installation (including supports)	Item	1		
D	Volume Control Dampers	Item	1		
E	Fire Dampers, 2 No. 1000mm x 450mm complete with access panels	Item	1		
F	Supply Air Grilles	Item	1		
G	Return Air Grilles	Item	1		
H	Insulation of all ductwork	Item	1		
J	Any other works (provide details)	Item	1		
	Above Ground Drainage (Main Building)				
	Above Ground Drainage Works				
K	Drainage Pipework (including supports) DN100	Item	1		
L	Drainage Pipework (including supports) DN50	Item	1		
M	Drainage Pipework (including supports) DN40	Item	1		
N	Condensate pipework installation to Comms Room AC unit c/w pump	Item	1		
P	Rodding Eyes and Traps	Item	1		

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	(Cont) Above Ground Drainage (Main Building)				
	(Cont) Above Ground Drainage Works				
A	Floor Gullys DN100	Item	1		
B	Floor Gully 600x600mm with Grit Sump	Item	1		
C	Any other works (provide details)	Item	1		
	Gas Services (Main Building)				
	Gas Services				
D	Make connection to existing compressed air pipework and extend to workshop	Item	1		
E	Make connection to existing acetylene pipework and extend to external acetylene store	Item	1		
F	Any other works (provide details)	Item	1		
	BMS System (Main Building)				
	BMS Plant				
G	Supply and installation of new plantroom MCC panel	Item	1		
	BMS System				
H	Installation and commissioning of all LPHW stats and motorised valves as detailed in the MCC and LPHW schematics	Item	1		
J	Installation and commissioning of all Ventilation stats and motorised dampers	Item	1		
K	Integration of heat pump with BMS system	Item	1		
L	Integration of AHUs with BMS system	Item	1		
M	Integration of AC Unit & DX Coil with BMS system	Item	1		
N	Integration of fire alarm with BMS system	Item	1		

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	(Cont) BMS System (Main Building)				
	(Cont) BMS System				
A	Integration of heat meters with BMS system	Item	1		
B	Any other works (provide details)	Item	1		
	Other Services (Main Building)				
	Other Services Works				
C	Required strip-out and removal from site or modifications to existing mechanical services	Item	1		
D	Tie-ins	Item	1		
E	Testing (including pressure tests of all pipework and ducts) and commissioning - all systems listed herein	Item	1		
F	As-built drawings and data books (three disc copies and three hard copies of all, including builder's works and co-ordination drawings)	Item	1		
G	Staff demonstrations and training	Item	1		
H	Re-commissioning of all systems following a full year of operation	Item	1		
	Heating (Link Corridors)				
	LPHW Distribution				
J	LPHW Pipework (including supports) DN15	Item	1		
K	LPHW Isolation Valves DN15	Item	1		
L	Supply & Installation of Radiators	Item	1		
M	Radiators TRVs	Item	1		
N	Insulation of LPHW Pipework	Item	1		
P	Labelling of LPHW Pipework	Item	1		
Q	Any other works (provide details)	Item	1		

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	Other Services (Link Corridors)				
	Other Services Works				
A	Tie-ins	Item	1		
B	Testing and commissioning - all systems listed herein including pressure testing of all pipework and ducts	Item	1		
C	As-built drawings and data books (three disc copies and three hard copies of all, including builder's works and co-ordination drawings)	Item	1		
D	Staff demonstrations and training	Item	1		
E	Re-commissioning of all systems following a full year of operation	Item	1		
	Heating (Site)				
	LPHW Plant				
F	2 No. External Air Source Heat Pumps, Supply and Installation	Item	1		
	LPHW Distribution				
G	LPHW Pipework (including supports) DN65	Item	1		
H	Insulation of LPHW Pipework	Item	1		
J	Labelling of LPHW Pipework	Item	1		
K	Any other works (provide details)	Item	1		
	Ventilation & Air Conditioning (Site)				
	Ventilation Plant				
L	Supply & Installation of AHU & Supports	Item	1		
M	Supply & Installation of AHU DX Coil and piping	Item	1		
N	Supply & Installation of Roof Mounted Extract Fans	Item	1		

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	(Cont) Ventilation & Air Conditioning (Site)				
	Ventilation Distribution				
A	Supply & Installation of AHU Ductwork	Item	1		
B	Insulation & Cladding of AHU Ductwork	Item	1		
C	Extract Ductwork Termination c/w Goosenecks	Item	1		
D	Windcatcher Make-up Louvre Roof Works	Item	1		
E	Any other works (provide details)	Item	1		
	Gas Services (Site)				
	Gas Distribution				
F	Survey of works required to relocate affected external gas pipework storage & pipework	Item	1		
G	Relocation of affected gas storage & pipework	Item	1		
H	Technical Gas Services Pipework Connections to Existing Networks & new storage locations	Item	1		
J	External Technical Gas Services Pipework (including supports) DN40	Item	1		
K	External Technical Gas Services Pipework (including supports) DN35	Item	1		
L	Labelling of Pipework	Item	1		
M	External Pipework Valves, Gauges, Regulators & Fittings	Item	1		
N	Any other works (provide details)	Item	1		
	Other Services (Site)				
	Other Services Works				
P	Tie-ins	Item	1		
Q	Relocation / Stripout works	Item	1		

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	(Cont) Other Services (Site)				
	(Cont) Other Services Works				
A	Testing and commissioning - all systems listed herein including pressure testing of all pipework and ducts	Item	1		
B	As-built drawings and data books (three disc copies and three hard copies of all, including builder's works and co-ordination drawings)	Item	1		
C	Staff demonstrations and training	Item	1		
D	Re-commissioning of all systems following a full year of operation	Item	1		
	General				
E	Contractor design responsibilities	Item	1		
F	Testing and commissioning	item	1		
G	Operating and maintenance manuals	item	1		
H	Working drawings	item	1		
J	Co-ordination drawings	item	1		
K	As built drawings & data books	item	1		
L	Identification plates, labels and the like	item	1		
M	Mock-ups	item	1		
N	Staff demonstrations and training	item	1		
P	Recommissioning of all systems following one full year of operation	item	1		
Q	Co-ordination of Services	item	1		
R	Decommissioning and removal of all redundant services	item	1		
S	Builders work	item	1		
T	Fire stopping and other associated fire protection work	item	1		

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) General				
A	Allow for all other items necessary to complete the Works Requirements for this element of the Works	item	1		
	Sundries an Builders Work				
	Builders work, cutting, forming or leaving holes, mortices, chases or the like and subsequent making good to structure, including firestopping, fire barriers, smoke barriers, dust barriers and similar items				
B	generally	item	1		
	Forming and cutting holes.				
	Form or cut holes for ducts; through 200 mm thick concrete floor slab on metal decking; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification and Details and Drawings; make good on completion; girth:				
C	2.00 - 3.00 m; rectangular.	nr	2		

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Form or cut holes for duct; through insulated metal stud partitions; double slabbed and skim finished both sides; including grounds; include for necessary formwork; include for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification and Drawings; make good on completion; girth:				
A	< or = to 110 mm; circular	nr	2		
B	1.00 - 2.00 m; rectangular.	nr	1		
C	2.00 - 3.00 m; rectangular.	nr	1		

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Form or cut holes for ducts; through 215 mm thick solid concrete blockwork wall; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = to 110 mm; circular	nr	2		
B	2.00 - 3.00 m; rectangular.	nr	1		

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Form or cut holes for ducts ; through existing 120mm thick insulated cladding panel, clean, prime cladding externally and seal with layers of fibre reinforced cold applied liquid weather membrane; filled around service with site applied non-combustible insulation and include for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating and EPDM flexible pipe flashing; all sealed with 6mm bead of butyl rubber sealant; include for any necessary fixings, sealing and flashing and upstands as per Architects Specification Details and Drawings; girth;				
A	2.00 - 3.00 m; rectangular (roof).	nr	2		

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Form or cut holes for pipes; through 200 mm thick concrete floor slab on meta decking; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = 55 mm; circular	nr	15		
B	55 - 110 mm; circular	nr	5		
C	>110 mm; circular	nr	3		

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Form or cut holes for pipes; through insulated metal stud partitions; double slabbed and skim finished both sides; including grounds; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = 55 mm; circular	nr	15		
B	55 - 110 mm; circular	nr	5		
C	>110 mm; circular	nr	3		

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Form or cut holes for pipes; through 215 mm thick solid concrete blockwork wall; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = 55 mm	nr	15		
	Form or cut holes for pipes; through existing 215 mm thick solid concrete blockwork wall; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
B	< or = 55 mm	nr	10		

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Form or cut holes for pipes; through existing precast wall panel wall with 215mm solid concrete blockwork wall; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Sectioninstalled 500mm either side of the seal, allow for 2no ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, precoated on both sides with high preformace ablative coating; clean opening and remove any dust and debris, cut to shape aand tightly fit and sealing around edge of opening and service penitration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = 55 mm	nr	6		
	Form or cut holes for; pipes; through roof membrane roof; include for any necessary sealing, flashing and upstands; girth;				
B	>110 mm; circular	nr	5		

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Form or cut holes for pipes ; through 120mm thick insulated cladding panel, clean, prime cladding externally and seal with layers of fibre reinforced cold applied liquid weather membrane; filled around service with site applied non-combustible insulation and include for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating and EPDM flexible pipe flashing; all sealed with 6mm bead of butyl rubber sealant; include for any necessary fixings, sealing and flashing and upstands as per Architects Specification Details and Drawing 22115_521; girth;				
A	< or = 55 mm (roof)	nr	10		
B	55 - 110 mm; circular (roof)	nr	5		

	(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
	Pipe Boxing				
	Allow for the Supply and install bespoke / proprietary pipe boxing to conceal exposed heating pipe(s) dropping from soffit to radiator; powder coated steel trunking construction, colour RAL 9010; by Coverad (Standard Steel range) or other equal and approved; manufacturer to carry out a site survey to confirm final sizes prior to manufacture; including dor all necessary brackets, supports, corner pieces, joints, end caps and access provision for TRV/valve adjustment as required; fixed to wall/soffit as indicated on Architect Drawings 25002-AFEC-01-00-DR-A-2102, 2201, 2202 and all in accordance with Architects Specification P31/301				
A	girth 300 mm - 1000 mm	m	40		

(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)

COLLECTION

Page No. BQ/333	NIL
Page No. BQ/334	NIL
Page No. BQ/335	NIL
Page No. BQ/336	NIL
Page No. BQ/337	NIL
Page No. BQ/338	NIL
Page No. BQ/339	NIL
Page No. BQ/340	NIL
Page No. BQ/341	NIL
Page No. BQ/342	NIL
Page No. BQ/343	NIL
Page No. BQ/344	NIL
Page No. BQ/345	NIL
Page No. BQ/346	NIL
Page No. BQ/347	NIL
Page No. BQ/348	NIL
Page No. BQ/349	NIL
Page No. BQ/350	NIL
Page No. BQ/351	NIL
Page No. BQ/352	NIL
Page No. BQ/353	NIL

(59) MECHANICAL INSTALLATION (PLASTERING) (Cont)				
COLLECTION				
Page No. BQ/354				NIL
(59) MECHANICAL INSTALLATION (PLASTERING) **Carried to Summary**				**NIL**

	(66) LIFT AND LIFT SHAFT (PLASTERING)				
	ELEMENT NUMBER 66				
	TRANSPORT/LIFT INSTALLATIONS:				
	GENERAL				
A	The following section measured in accordance with ARM4 Supplement 2 - Agreed Alternative Rules for the Measurement of Services Installations.	note			
B	The prices hereunder shall include for all work in the design, execution and testing of electrical installation in accordance with the Specification.	note			
C	The prices hereunder shall include for the co-ordination of the design and installation of the electrical installation. The Contractor shall ensure compatibility of design performance and consistency of any design assumptions for the electrical installation.	note			
D	The work is to be undertaken as a Domestic Sub-Contract to the Main Contractor. The prices hereunder shall be deemed to include for profit, general attendance and special attendances as necessary by the Main Contractor.	note			
E	The Contractors shall read the other Elements of the Bill of Quantities when pricing this section of the project, in particular (but not limited to) Elements (61) Electrical Installations	note			
F	For preliminaries particulars, please refer to tender documentation.	note			
	LIFT/TRANSPORT INSTALLATION				
	Contractors Design Responsibilities				
	The following is a non-exhaustive list of the contractors design responsibilities. Reference should also be made to the design contract specifications.				
	The Contractor will be required to submit detailed proposals for the following systems for review :				

	(66) LIFT AND LIFT SHAFT (PLASTERING) (Cont)				
	(Cont) LIFT/TRANSPORT INSTALLATION				
	(Cont) Contractors Design Responsibilities				
A	Lift Installation	item	1		
	Description				
	Provide everything necessary for the proper installation of the Lift/Transport services system, all in accordance with Passenger Lift Specification 25002-AFEC-00-XX-SP-N-0066 as Issued by AFEC Consulting Engineers. Also refer to Architects Drawings, General Electrical Specification and Electrical Particular Specifications				
B	The contractor is to include for the following:	note			
C	Preliminaries	item	1		
	Transport Installation				
	Equipment				
D	generally all in accordance with Passenger Lift Specification 25002-AFEC-00-XX-SP-N-0066	nr	1		
	General				
E	Testing and commissioning	item	1		
F	Operating and maintenance manuals	item	1		
G	Working drawings	item	1		
H	Co-ordination drawings	item	1		
J	As built drawings & data books	item	1		
K	Identification plates, labels and the like	item	1		
L	Mock-ups	item	1		
M	Staff demonstrations and training	item	1		
N	Recommissioning of all systems following one full year of operation	item	1		

	(66) LIFT AND LIFT SHAFT (PLASTERING) (Cont)				
	(Cont) Transport Installation				
	(Cont) General				
A	Co-ordination of Services	item	1		
B	Builders work	item	1		
C	Fire stopping and other associated fire protection work	item	1		
D	Allow for all other items necessary to complete the Works Requirements for this element of the Works	item	1		

(66) LIFT AND LIFT SHAFT (PLASTERING) (Cont)				
COLLECTION				
Page No. BQ/357				NIL
Page No. BQ/358				NIL
Page No. BQ/359				NIL
(66) LIFT AND LIFT SHAFT (PLASTERING) Carried to Summary				**NIL**

	(69) ELECTRICAL INSTALLATION (PLASTERING)				
	(69) ELECTRICAL INSTALLATION (PLASTERING)				
	GENERAL				
A	The following section measured in accordance with ARM4 Supplement 2 - Agreed Alternative Rules for the Measurement of Services Installations.	note			
B	The prices hereunder shall include for all work in the design, execution and testing of electrical installation in accordance with the Specification.	note			
C	The prices hereunder shall include for the co-ordination of the design and installation of the electrical installation. The Contractor shall ensure compatibility of design performance and consistency of any design assumptions for the electrical installation.	note			
D	The work is to be undertaken as a domestic sub-contractor to the Main Contractor. The prices hereunder shall be deemed to include for profit, general attendance and special attendances as necessary by the Main Contractor.	note			
E	The Contractors shall read the other Elements of the Bill of Quantities when pricing this section of the project, in particular (but not limited to) Elements (50.1 to 50.3) Site Services Mainly Piped and Ducted, (60) Site Services Mainly Electrical,	note			
F	For preliminaries particulars, please refer to tender documentation.	note			

To Collection € **NIL**

	(69) ELECTRICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) GENERAL				
A	The Contractor shall allow for the provision, coordination and commissioning of energy metering and sub-metering systems appropriate to the building layout and Significant Energy Uses (SEUs), to support monitoring of Energy Performance Indicators (EnPIs). The Contractor shall provide all necessary data, technical information and settings to enable integration of metering systems into the Employer's energy management systems. Energy performance shall be considered as part of commissioning, with systems set up and demonstrated to operate in accordance with design intent and energy efficiency requirements.	Item	1		
B	Tenderers shall provide information on the energy performance of proposed systems, including efficiency ratings and operational energy consumption, where applicable.	note			
C	The Contractor shall allow for full coordination and integration of all door systems, including fire-rated doors, access-controlled doors, and doors connected to fire alarm and security systems, including all associated wiring, interfaces, controls, ironmongery and commissioning.	Item	1		
D	The Contractor shall include for full provision, coordination and commissioning of ICT, data, CCTV, and security systems, including integration with access control and building management systems where applicable.	Item	1		
	DESCRIPTION				
	Provide everything necessary for the proper installation of the Electrical services system, all in accordance with the Service Engineer Information as issued by AFEC; refer to the following documents:				
	Drawings:				
E	MTUBA-AFEC-00-XX-RG-E-0001	item	1		

	(69) ELECTRICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) DESCRIPTION **(Cont) Provide everything necessary for the proper installation of the Electrical services system, all in accordance with the Service Engineer Information as issued by AFEC; refer to the following documents:**				
A	MTUBA-AFEC-00-XX-SP-E-0050	item	1		
B	MTUBA-AFEC-00-ZZ-DR-E-1000	item	1		
C	MTUBA-AFEC-00-ZZ-DR-E-2000	item	1		
D	MTUBA-AFEC-00-00-DR-E-2050	item	1		
E	MTUBA-AFEC-00-01-DR-E-2050	item	1		
F	MTUBA-AFEC-00-RL-DR-E-2050	item	1		
G	MTUBA-AFEC-00-00-DR-E-2100	item	1		
H	MTUBA-AFEC-00-01-DR-E-2100	item	1		
J	MTUBA-AFEC-00-00-DR-E-2150	item	1		
K	MTUBA-AFEC-00-01-DR-E-2150	item	1		
L	MTUBA-AFEC-00-00-DR-E-2250	item	1		
M	MTUBA-AFEC-00-01-DR-E-2250	item	1		
N	MTUBA-AFEC-00-00-DR-E-2300	item	1		
P	MTUBA-AFEC-00-01-DR-E-2300	item	1		
Q	MTUBA-AFEC-00-RF-DR-E-2550	item	1		
	Tender Breakdown				
	Preliminary Items				
R	Amount for general preliminaries.	item	1		
S	Amount for marking on site builders work and attendances.	item	1		
T	Amount for record documentation	item	1		
U	Amount for as-installed drawings	item	1		

To Collection € **NIL**

	(69) ELECTRICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Preliminary Items				
A	Amount for builders works and co-ordination drawings, construction drawings.	item	1		
B	Amount for set-up.	item	1		
C	Amount for site specific preliminaries.	item	1		
D	Works associated with As built drawings and O&M Manuals (three disks copy and three hard copies of all).	item	1		
E	Works associated with staff demonstrations and training.	item	1		
F	Works associated with recommissioning of all systems following a full year of operation.	item	1		
G	Works associated with decommissioning and removal of all redundant services	item	1		
H	Allow for any other work in this section (Tenderer to detail)	item	1		
	Insurances				
J	Amount for employers liability.	item	1		
K	Amount for third party workmans compensation.	item	1		
L	Statutory requirements.	item	1		
M	All risks insurances.	item	1		
N	Public liability insurance.	item	1		
P	Amount for Collateral Agreement.	item	1		
Q	Allow for any other work in this section (Tenderer to detail)	item	1		
	Co-ordination				
R	Amount for coordination with MTU facilities department	item	1		

	(69) ELECTRICAL INSTALLATION (PLASTERING) (Cont)				
	Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	(61) Electrical Supply and Distribution				
	Containment				
A	Cable Ladder 75mm	item	1		
B	Cable Ladder 300mm	item	1		
C	Cable Tray 400mm	item	1		
D	Cable Tray 300mm	item	1		
E	Trunking 100 x 100	item	1		
F	Trunking 200 x 100	item	1		
G	Conduit	item	1		
	Distribution Boards				
H	MDB/SDB-01	item	1		
J	SDB-02	item	1		
K	SDB-03	item	1		
L	Modifications to main board & fitting of 250A MCCB	item	1		
	Sub-mains Cabling				
M	16mm2 x 4c + 16mm2 CPC	item	1		
N	Terminations	item	1		
P	25mm2 x 4c + 16mm2 CPC	item	1		
Q	Terminations	item	1		
R	70mm2 x 4c + 35mm2 CPC	item	1		
S	Terminations	item	1		
T	150mm2 x 4C + 70mm2 CPC	item	1		
U	Terminations	item	1		

	(69) ELECTRICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	(62) Power				
	Power Outlets				
A	Industrial socket 32A	item	1		
B	Industrial socket interlocking switch	item	1		
C	230 V Sockets	item	1		
D	Fused spur	item	1		
E	Isolators	item	1		
F	Wiring	item	1		
	(63) Lighting				
	Internal Lighting – Type:				
G	A	item	1		
H	B	item	1		
J	CE	item	1		
K	D	item	1		
L	G	item	1		
M	F	item	1		
N	Fe	item	1		
P	M – (Existing Highbay)	item	1		
	Lighting Controls				
Q	DALI Daylight / Presence sensor	item	1		
R	On/Off sensor	item	1		
S	Switch 1	item	1		
	Emergency Lighting – Type:				
T	E1 – Emergency spot recessed	item	1		
U	E2 – Emergency spot surface	item	1		

	(69) ELECTRICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	(Cont) (63) Lighting				
	(Cont) Emergency Lighting – Type:				
A	E3 – Twinspot	item	1		
B	E4 – Emergency bulkhead	item	1		
C	Exit sign	item	1		
D	Wiring	item	1		
	(64) Communications				
	Cat6 / ELV cabling including terminations to outlets:				
E	Data outlets – double	item	1		
F	Communications cabinet including all necessary patch panels and accessories	item	1		
G	Cat 6A structured cabling	item	1		
H	Conduit	item	1		
J	Fibre-optic cabling	item	1		
	(65) Security and Protection				
	Fire Alarm System:				
K	Smoke detector	item	1		
L	Heat detector	item	1		
M	Sounder	item	1		
N	Breakglass	item	1		
P	I/O	item	1		
Q	ASP	item	1		
R	24V DC Sounder Supply Box	item	1		
S	Cable	item	1		
	Access Control:				
T	Maglock	item	1		

	(69) ELECTRICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	(Cont) (65) Security and Protection				
	(Cont) Access Control:				
A	Green breakglass	item	1		
B	Reader / keypad	item	1		
C	Egress button	item	1		
	Earthing and Bonding				
D	Earthing and bonding – all systems	item	1		
	(6_) Other Services				
E	Relocation / Stripout works				
F	Tie-ins	item	1		
G	Contractor design responsibilities	item	1		
	General				
H	Testing and commissioning – all systems listed herein	item	1		
J	Operating and maintenance manuals	item	1		
K	Working drawings	item	1		
L	Co-ordination drawings	item	1		
M	As-built drawings and data books (three disc copies and three hard copies of all, including builder's works and co-ordination drawings)	item	1		
N	Identification plates, labels and the like	item	1		
P	Mock-ups	item	1		
Q	Staff demonstrations and training	item	1		
R	Recommissioning of all systems following one full year of operation	item	1		
S	Co-ordination of Services	item	1		
T	Decommissioning and removal of all redundant services	item	1		

	(69) ELECTRICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	(Cont) General				
A	Builders work	item	1		
B	Fire stopping and other associated fire protection work	item	1		
C	Allow for all other items necessary to complete the Works Requirements for this element of the Works	item	1		
	Sundries an Builders Work				
	Builders work, cutting, forming or leaving holes, mortices, chases or the like and subsequent making good to structure, including firestopping, fire barriers, smoke barriers, dust barriers and similar items				
D	generally	item	1		
	Recesses;				
E	In 100 mm thick blockwork chase size 100 mm wide x 60 mm deep.	m	300		
	Hole, mortices, chases and the like.				
	Holes; mortices; chases and the like for concealed metal conduit and fittings in slabbed and plastered finishes.				
F	Lighting points.	nr	50		
G	Socket points.	nr	50		
H	Fittings, equipment and control gear points.	nr	50		
	Holes; mortices; chases and the like for concealed metal conduit and fittings in 215mm collar blockwork wall				
J	Lighting points.	nr	50		
K	Socket points.	nr	50		
L	Fittings, equipment and control gear points.	nr	50		

	(69) ELECTRICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	(Cont) Sundries an Builders Work				
	Forming and cutting holes.				
	Form or cut holes for containment cable trays; through 200 mm thick concrete floor slab on metal decking; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification and Details and Drawings; make good on completion; girth:				
A	2.00 - 3.00 m; rectangular.	nr	2		

	(69) ELECTRICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	(Cont) Sundries an Builders Work				
	Form or cut holes for containment cable trays; through insulated metal stud partitions; double slabbed and skim finished both sides; including grounds; include for necessary formwork; include for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification and Drawings; make good on completion; girth:				
A	< or = to 110 mm; circular	nr	2		
B	1.00 - 2.00 m; rectangular.	nr	1		
C	2.00 - 3.00 m; rectangular.	nr	1		

To Collection € **NIL**

	(69) ELECTRICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	(Cont) Sundries an Builders Work				
	Form or cut holes for containment cable trays; through 215 mm thick solid concrete blockwork wall; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = to 110 mm; circular	nr	2		
B	2.00 - 3.00 m; rectangular.	nr	1		

	(69) ELECTRICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE) **(Cont) Sundries an Builders Work**				
	Form or cut holes for containment cable trays ; through existing 120mm thick insulated cladding panel, clean, prime cladding externally and seal with layers of fibre reinforced cold applied liquid weather membrane; filled around service with site applied non-combustible insulation and include for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating and EPDM flexible pipe flashing; all sealed with 6mm bead of butyl rubber sealant; include for any necessary fixings, sealing and flashing and upstands as per Architects Specification Details and Drawings; girth;				
A	2.00 - 3.00 m; rectangular (roof).	nr	2		

	(69) ELECTRICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	(Cont) Sundries an Builders Work				
	Form or cut holes for conduits; through 200 mm thick concrete floor slab on meta decking; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = 55 mm; circular	nr	15		
B	55 - 110 mm; circular	nr	5		
C	>110 mm; circular	nr	3		

	(69) ELECTRICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	(Cont) Sundries an Builders Work				
	Form or cut holes for conduits; through insulated metal stud partitions; double slabbed and skim finished both sides; including grounds; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = 55 mm; circular	nr	15		
B	55 - 110 mm; circular	nr	5		
C	>110 mm; circular	nr	3		

To Collection € **NIL**

	(69) ELECTRICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	(Cont) Sundries an Builders Work				
	Form or cut holes for conduits; through 215 mm thick solid concrete blockwork wall; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = 55 mm	nr	15		

	(69) ELECTRICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	(Cont) Sundries an Builders Work				
	Form or cut holes for conduits; through existing 215 mm thick solid concrete blockwork wall; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = 55 mm	nr	5		

	(69) ELECTRICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	(Cont) Sundries an Builders Work				
	Form or cut holes for conduits; through existing precast wall panel wall with 215mm solid concrete blockwork wall; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Sectioninstalled 500mm either side of the seal, allow for 2no ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, precoated on both sides with high preformace ablative coating; clean opening and remove any dust and debris, cut to shape aand tightly fit and sealing around edge of opening and service penitration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = 55 mm	nr	5		
	Form or cut holes for; conduits; through roof membrane roof; include for any necessary sealing, flashing and upstands; girth;				
B	>110 mm; circular	nr	5		

	(69) ELECTRICAL INSTALLATION (PLASTERING) (Cont)				
	(Cont) Elemental Summary (MAIN BUILDING, LINK CORRIDOR & SITE)				
	(Cont) Sundries an Builders Work				
	Form or cut holes for conduits ; through 120mm thick insulated cladding panel, clean, prime cladding externally and seal with layers of fibre reinforced cold applied liquid weather membrane; filled around service with site applied non-combustible insulation and include for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating and EPDM flexible pipe flashing; all sealed with 6mm bead of butyl rubber sealant; include for any necessary fixings, sealing and flashing and upstands as per Architects Specification Details and Drawing 22115 521; girth;				
A	< or = 55 mm (roof)	nr	5		
B	55 - 110 mm; circular (roof)	nr	2		

(69) ELECTRICAL INSTALLATION (PLASTERING) (Cont)				
COLLECTION				
Page No. BQ/361				NIL
Page No. BQ/362				NIL
Page No. BQ/363				NIL
Page No. BQ/364				NIL
Page No. BQ/365				NIL
Page No. BQ/366				NIL
Page No. BQ/367				NIL
Page No. BQ/368				NIL
Page No. BQ/369				NIL
Page No. BQ/370				NIL
Page No. BQ/371				NIL
Page No. BQ/372				NIL
Page No. BQ/373				NIL
Page No. BQ/374				NIL
Page No. BQ/375				NIL
Page No. BQ/376				NIL
Page No. BQ/377				NIL
Page No. BQ/378				NIL
Page No. BQ/379				NIL
(69) ELECTRICAL INSTALLATION (PLASTERING) Carried to Summary				**NIL**

	(00) DEMOLITIONS & ALTERATIONS (PLASTERING)				
	(00) DEMOLITIONS AND ALTERATIONS:				
	Information				
A	The Contractor is strongly advised to visit the site to determine the exact extent of the works, as no claim shall be entertained at a later date for his/her failure to comply with same.	item	1		
B	The Contractor shall note the position of all existing underground and overground services within the site.	Note			
C	All surplus material resulting from taking down must be segregated, removed and disposed off site in a proper safe manner to a Licensed facility. The Contractor shall include for all costs associated with same within his/her rates.	Note			
D	All new and existing timbers being refixed must be treated with preservative	Note			
E	Contractors must include for any temporary propping to existing services, plant and equipment to facilitate the works. Refer to Services Engineer for scope to be included.	Note			
F	The Contractor shall liaise with the Mechanical and Electrical Contractors regarding the programming/scheduling of their works associated with the decommissioning and removal for Mechanical and Electrical services, plant and equipment.	item	1		
G	Where on site fabrication or alteration is required to galvanized steelwork members, such as the addition of new weathering hats for weathering and the like, Where it is not feasible to remove such members for hot dipped galvanising an approciate paintwork specification to meet with the performance of a galvanised member will be required to meet Engineer Specification "Painting By Performance to IS EN ISO 12944: (C5 Environment)" for "touching up".	item	1		

	(00) DEMOLITIONS & ALTERATIONS (PLASTERING) (Cont)				
	(Cont) (00) DEMOLITIONS AND ALTERATIONS:				
	(Cont) Information				
A	The Contractor shall include for all demolition works, temporary support, protection of retained structures and services, and making good to existing elements affected by the Works.	item	1		
	Demolitions and Alterations				
	Removing; blockwork walls				
	Carefully take down and remove from site existing internal blockwork wall; include for saw cutting; all necessary shoring and propping of the existing as required to facilitate the works; removal of the existing wall and disposal off site; allow for protecting and making good any existing services and finishes disturbed during the course of the works and allow for repair or replacing as necessary to match the existing; as per Engineers Drawing Nr. 0500				
B	215mm thick wall; height 7300mm (GL 13-14 - ground floor to roof) as per Engineer Drawing Nr. 0500	m	8		
C	215mm thick wall; height 3650mm (GL 12-13 - above of structural blockwork to roof) as per Engineer Drawing Nr. 0500	m	8		
D	350mm thick wall; height 3650mm (GL 12-13 - structural blockwork ground floor to first floor) as per Engineer Drawing Nr. 0500	m	8		
E	existing first floor slab to be propped from ground floor level temporarily to facilitate the works until the blockwork walls are rebuilt; ref Engineers Drawing Nr. 0500	item	1		

	(00) DEMOLITIONS & ALTERATIONS (PLASTERING) (Cont)				
	(Cont) (00) DEMOLITIONS AND ALTERATIONS:				
	Cutting				
	Form new ope in existing aprox 100mm thick precast concrete wall panel (note thickness varies at cobels), carefully cut back existing structure to suit size of opening and remove from site; provide new 120 x 120 x 10mm x 33.7 kg/m SHS (7300mm long) steel support vertical to one side of opening and fixed to existing foundation with 250 x 250 x 12mm (1nr) thick fully welded basepate bolted to slab with 4nr M16 Grade 8.8 Hilti anchor bolts; 9nr 80 x 80 x 8mm steel plates welded to SHS and 2nr M12 75mm long concrete into existing retained precast; 250 x 250 x 12mm (1nr) thick fully welded head pate bolted to existing reinforced precast concrete beam with 4nr M16 Grade 8.8 Hilti anchor bolts; 203 x 102 x 23 kg/m UB and 300 x 15mm plate welded to to beam (2250mm long) with 205 x 150 x 12mm (1nr) thick fully welded pate bolted to existing reinforced precast concrete column with 4nr M16 Grade 8.8 Hilti anchor bolts; all steel to be galvanised; include for all necessary welding, grouting and drilling for anchors; including all making good existing finishes to match existing; all as per sequence and Detail on Engineers Drawing Nr. 0202				
A	for new door opening size 2400 x 3650mm high (First floor break through)	nr	1		
B	for new door opening size 1800 x 3150mm high (First floor break through)	nr	1		

	(00) DEMOLITIONS & ALTERATIONS (PLASTERING) (Cont)				
	(Cont) (00) DEMOLITIONS AND ALTERATIONS:				
	Treatment / Repairs				
	Retro Fit Supports to Existing Precast Concrete Panels and Blockwork				
	The following shall be fabricated steel Grade S355 JR to BS EN 10025-2 hot rolled sections and plates; all joints v-butt welded, prepared and ground flush; include for all site welding and adjustments; include for all site fixing, forming mortice and all necessary bolts, all as per Engineers Specification for Structural Steelwork.				
	Fabricated members; plates; < or = to 25 kg/m member profile.				
A	400 x 200 x 12 x 7.54 kg/m steel plate, galvanised in accordance with BS EN ISO 1461 with a minimum coating of 610 g/m2, with 1 nr. 18mm diameter hole and 1 nr. 18 x 50mm slotted holes, 2 nr anchor rod HAS-U 8.8 HDG M16 x 350mm with HIT-HY 200-A adhesive mortar, anchors to have double nut and double washered, including for drilling existing 80mm thick precast panel and precast concrete column for bolts with 100mm embedment; as per Engineers Drawing Nr. 500	nr	26		
B	400 x 400 x 12 x 7.54 kg/m steel plate, galvanised in accordance with BS EN ISO 1461 with a minimum coating of 610 g/m2, with 2 nr. 18mm diameter hole and 2 nr. 18 x 50mm slotted holes, 4 nr anchor rod HAS-U 8.8 HDG M16 x 350mm with HIT-HY 200-A adhesive mortar, anchors to have double nut and double washered, including for drilling existing 80mm thick precast panel and precast concrete column for bolts with 100mm embedment; as per Engineers Drawing Nr. 500	nr	14		

	(00) DEMOLITIONS & ALTERATIONS (PLASTERING) (Cont)				
	(Cont) (00) DEMOLITIONS AND ALTERATIONS:				
	(Cont) Treatment / Repairs				
	(Cont) The following shall be fabricated steel Grade S355 JR to BS EN 10025-2 hot rolled sections and plates; all joints v-butt welded, prepared and ground flush; include for all site welding and adjustments; include for all site fixing, forming mortice and all necessary bolts, all as per Engineers Specification for Structural Steelwork.				
	Fabricated members; angles; < or = to 25 kg/m member profile.				
A	1000 x 200 x 200 x 16 x 48.5 kg/m steel angle, galvanised in accordance with BS EN ISO 1461 with a minimum coating of 610 g/m2, with 1 nr. 18mm diameter hole and 2 nr. 18 x 50mm slotted holes, 3 nr anchor rod HAS-U 8.8 HDG M16 x 350mm with HIT-HY 200-A adhesive mortar, anchors to have double nut and double washered, including for drilling existing precast concrete column for bolts with 100mm embedment; as per Engineers Drawing Nr. 500	nr	15		
	Sealing Joints to Existing Precast Panels				
	Thoroughly clean, dry and remove all laitances, traces of dirt, grease and contaminants etc in preparation; apply Sikaflex or equivalent one part flexible air tightness seal to existing precast panel joints; as per Manufacturer written instructions and Architects Specification				
B	joint size 50mm x 40/20mm, horizontally / vertically	m	158		

	(00) DEMOLITIONS & ALTERATIONS (PLASTERING) (Cont)				
	(Cont) (00) DEMOLITIONS AND ALTERATIONS: **(Cont) Treatment / Repairs**				
	Concrete Repairs				
	Thoroughly clean, dry and remove all laitances, traces of dirt, grease and contaminants etc in preparation; any loose or defective concrete to be removed with electric scabbing tools; perimeter of the treatable area to be cut back to minimise feathered edges; rebar to be cleaned back to a shining finish; steel is to be treated with a corrosion inhibiting Zinc rich FOSROC Renderoc or equivalent primer; apply FOSROC Renderoc HB45 Repair mortar to the depth of the repair; apply FOSROC Dekguard A Plus or equivalent to the surface of the concrete; include for all necessary formwork; all as per Engineers Specification				
A	aprox size 450 x 350mm	nr	5		

(00) DEMOLITIONS & ALTERATIONS (PLASTERING) (Cont)

COLLECTION

Page No. BQ/381	NIL
Page No. BQ/382	NIL
Page No. BQ/383	NIL
Page No. BQ/384	NIL
Page No. BQ/385	NIL
Page No. BQ/386	NIL
(00) DEMOLITIONS & ALTERATIONS (PLASTERING) Carried to Summary	**NIL**

	(10) PREPARED SITE				
	(10) PREPARED SITE				
A	The Contractor shall include for all demolition works, temporary support, protection of retained structures and services, and making good to existing elements affected by the Works.	item	1		
	DEMOLITIONS AND ALTERATIONS:				
	Demolitions				
	Remove, existing bollards				
B	Carefully take down and store on site for re-use existing bollards, including for grubbing up foundations, take down below ground level and backfill if necessary with clause 804 hardcore to formation level of new works; dispose all surplus materials off site to a licensed dump, making good to disturbed areas	nr	10		
	Remove; Existing kerbing				
C	Break out and remove from site existing precast concrete kerbing 340 mm x 150 mm with concrete haunch and make good all work disturbed to match existing.	m	45		
	Remove; fencing				
D	Carefully take down and remove from site existing 2400mm high palisade fences, gates and the like with including all metal inserts, grubbing up foundations, take down below ground level and backfill if necessary with clause 804 Hardcore to formation level of new works; dispose all materials off site to a licensed dump, making good to disturbed areas (existing astro pitch)	m	53		
E	extra over for removing double gates aprox size 6000 x 2400mm high	nr	2		
F	extra over for removing sigle gates aprox size 1200 x 2400mm high	nr	1		

	(10) PREPARED SITE (Cont)				
	(Cont) DEMOLITIONS AND ALTERATIONS:				
	(Cont) Demolitions				
	Remove; existing plastering storage shed				
A	Carefully demolish, remove and dispose off site existing blockwork single storey plastering storage shed, including grubbing up and removing concrete base and foundations; aprox 10250 x 2700 x 3000mm high, take down below ground level and backfill if necessary with clause 804 Hardcore to formation level of new works; dispose all materials off site to a licensed dump, making good to disturbed areas; as per Architects Drawing Nr. 1002	nr	1		
	Existing drainage				
B	Excavate, trace existing uPVC storm water drain; size 150mm diameter; average 1000 - 1500 mm deep; disconnect, seal off end, expose, grub up and dispose existing pipe; de-orderize ground and backfill with hardcore on completion; make good all work disturbed	m	103		
	Existing manholes				
C	Break-out and remove existing storm manholes and cover size 900 x 900 x 1500 mm deep aprox, including associated pipework, making redundant section of existing pipework, backfilling upon completion and make good all work disturbed to match existing.	nr	2		
	Existing watermain				
D	Excavate, trace existing uPVC watermain; size 150mm diameter; average 1000 - 1500 mm deep; disconnect, seal off end, expose, grub up and dispose existing pipe; de-orderize ground and backfill with hardcore on completion; make good all work disturbed	m	18		

	(10) PREPARED SITE (Cont)				
	(Cont) DEMOLITIONS AND ALTERATIONS:				
	(Cont) Demolitions				
	Existing gullies				
A	Break-out and remove existing road gullies, including associated pipework, making redundant section of existing pipework, backfilling upon completion and make good all work disturbed to match existing.	nr	4		
	EXCAVATION AND EARTHWORK:				
	Excavation				
	Excavation				
	Reduced levels				
B	depth < or = 2.00 m	m3	495		
	Extra on excavation items for				
C	breakup existing hard surfaces, 100mm thick concrete paths and 200mm hardcore; including additional extra over cost for handling and disposal off site (isolated locations)	m2	68		
D	saw cut to last	m	4		
E	breakup existing hard surfaces, 100mm thick tarmac and 200mm hardcore; including additional extra over cost for handling and disposal off site (isolated locations outside the boundary of the site)	m2	19		
F	saw cut to last	m	14		
G	breakup existing hard surfaces, 200mm thick concrete yard and 200mm hardcore; including additional extra over cost for handling and disposal off site (isolated location as per Engineers Drawing Nr. 0100, 0101)	m2	683		
H	saw cut to last	m	17		
J	being next to existing buildings	m2	44		

	(10) PREPARED SITE (Cont)				
	(Cont) EXCAVATION AND EARTHWORK:				
	(Cont) Excavation				
	(Cont) Extra on excavation items for				
A	being next to existing roadway / footbaths / yards	m2	39		
	Disposal				
	Water				
B	surface	item	1		
C	ground	item	1		
	Excavated material				
D	off site	m3	495		
	Protection				
E	Protect all existing services	item	1		
F	Protect all adjoining buildings and structures	item	1		
G	Protect all existing finishes being maintained outside area of site as detailed on Architects Drawing	item	1		

(10) PREPARED SITE (Cont)				
COLLECTION				
Page No. BQ/388				NIL
Page No. BQ/389				NIL
Page No. BQ/390				NIL
Page No. BQ/391				NIL
(10) PREPARED SITE Carried to Summary				**NIL**

	(20) ANCILLARY SITE STRUCTURES				
	(20) ANCILLARY SITE STRUCTURES				
A	It will be deemed that the Contractor has inspected the drawings and site and has consulted available information concerning sub-soil conditions before submitting his tender.	item	1		
B	The contractor's attention is drawn to the fact that earthwork support is deemed to be included in Excavation and Earthworks under the Agreed Rules of Measurement.	item	1		
C	Where concrete in foundations, beds etc. is measured as cast against the faces of the excavations; and should the Contractor opt to use shuttering the following rates for concrete shall be deemed to include for all such shuttering.	item	1		
D	By pricing these works the Contractor will be held to have visited the site and formed his own opinion as to the extent of the actual work involved, including for all temporary works over and above those measured below, and for monitoring the adjacent buildings for both movement and vibration, as necessary to properly carry out the works.	item	1		
E	The quantities for excavation items are based on the volume as per the substructure design and no allowance is made for overdig, the contractor's operational requirements or temporary works when excavating other than as required in the Agreed Rules of Measurement e.g. working space and formwork to bulk concrete blinding.	item	1		
F	The Contractor shall ensure that he has allowed either in the preliminaries section or in the various rates in his pricing document for all costs associated with achieving the airtightness requirements. It should be noted that taping, sealants and seals are generally not specifically itemised in the pricing document but should be included for in the rates for the various elements or in the preliminaries section.	item	1		

	(20) ANCILLARY SITE STRUCTURES (Cont)				
	(Cont) (20) ANCILLARY SITE STRUCTURES				
A	Starting level for measurement purposes is taken from formation level. All works in association with works to formation are taken within the Prepared Site Element of the Bill of Quantities.	item	1		
B	For details of ground conditions see the Site Investigation Report	item	1		
C	The Contractor shall have overall responsibility for all necessary tempory works required for the excavation / protection / maintenance of adjacent embankments	item	1		
D	The Contractor shall note the position of all existing underground and overground services within and adjacent to the site.	item	1		
	EXCAVATION AND EARTHWORKS				
	Excavation				
	Excavation; at formation level; depth				
E	< or = 2.00m in isolated pits	m3	13		
F	< or = 2.00m in soft spots	m3	1		
	Extra over excavating items irrespective of depth for:				
G	around existing services; parallel to excavations	m	5		
H	around existing services crossing excavations	nr	1		
J	being next to existing buildings	m2	4		
	Disposal of water				
K	surface	item	1		
L	ground	item	1		
	Disposal of excavated material				
M	off site	m3	13		

	(20) ANCILLARY SITE STRUCTURES (Cont)				
	(Cont) EXCAVATION AND EARTHWORKS				
	(Cont) Excavation				
	Filling				
	Hardcore filling to be SR21-Annex 1 hardcore material; T.2 Permeable:4/40mm Gas Permeable layer (Radon) Min depth 200mm.; Radon sump to be positioned in this layer; laid and compacted in 225mm layers to Engineers Specification				
	To excavations				
A	> 250mm	m3	1		
	To make up levels under slab				
B	< 250mm	m3	5		
	CONCRETE WORK				
	Insitu Concrete				
	Plain, in-situ concrete, grade C16/20 (IS EN 206), poured on or against earth or unblinded hardcore to Engineers Specification				
C	Blinding below isolated pads	m3	1		
D	Soft Spots	m3	1		
	Reinforced, In-situ concrete, grade C30/37 (to ISEN 206), exposure class XC2 / XC4; minimum cement content of 320 kg/m3; poured on or against earth or unblinded hardcore and well vibrated around reinforcement in:				
E	Isolated foundations	m3	6		
F	Walls, > 150mm	m3	11		

	(20) ANCILLARY SITE STRUCTURES (Cont)				
	(Cont) CONCRETE WORK				
	Sundries				
	Joints				
	Internally cast waterstop, type HD240, having heat welded butt joints in the running length, include for formwork and supporting in position sealing joint with two part expoxy sulphide sealant all in accordance with manufacturers instructions.				
A	at junction of foundation and concrete walls, 250mm thick	m	14		
B	extra over for bends	nr	2		
	Surface finishes				
C	power floating beds	m2	18		
	Reinforcement				
	Reinforcement mesh fabric; BS 4483;				
	Reference A393 (6.16kg/m2); 300mm minimum side and end laps				
D	horizontal to slab	m2	35		
E	vertically to walls	m2	85		
	Formwork				
	Formwork surface finish to concrete; Type "Ordinary" finish as defined in Section 1.9 of the National Structural Concrete Specification (NSCS) 4th edition				
	Sides of foundations				
F	height, > 250 < or = to 500mm, to pad foundations	m	20		
	Formwork surface finish to concrete; Type "Plain" finish as defined in Section 1.9 of the National Structural Concrete Specification (NSCS) 4th edition				
	Kickers				

	(20) ANCILLARY SITE STRUCTURES (Cont)				
	(Cont) CONCRETE WORK				
	(Cont) Formwork				
	(Cont) Formwork surface finish to concrete; Type "Plain" finish as defined in Section 1.9 of the National Structural Concrete Specification (NSCS) 4th edition				
A	walls	m	14		
	Walls				
B	vertical	m2	85		
C	Extra on any of the foregoing formwork categories for:				
D	20 x 20mm chamfer to exposed beam corners	m	18		
	ROOFING CLADDING AND WATERPROOFING				
	Mastic Asphalt,Waterproof and Gasproof Non Metal Flexible Sheet Coverings				
	Tanking				
	Delta Duel Proof or equivalent water proofing membrane fixed with tape in one layer with 75mm fully bonded laps between adjacent sheets; all in accordance with Manufacturer Instructions and the Architects specification				
E	horizontal, girth > 300 mm to underside of foundation; as per Engineers Detail on Drawing Nr. 0121	m2	18		
F	vertical, girth < or = to 300 mm, dressed up foundation; as per Engineers Detail on Drawing Nr. 0121	m2	20		

(20) ANCILLARY SITE STRUCTURES (Cont)				
COLLECTION				
Page No. BQ/393				NIL
Page No. BQ/394				NIL
Page No. BQ/395				NIL
Page No. BQ/396				NIL
Page No. BQ/397				NIL
(20) ANCILLARY SITE STRUCTURES Carried to Summary				**NIL**

	(30) SITE ENCLOSURES, RETAINING WALLS				
	METALWORK				
	Non-structural				
	Euroguard Regular V Mesh Panel Fence System or equivalent to BS 1722-14 Category 1 complete; in selected polyester powder coating in selected colour, to BS 6497; mesh 200 x 50mm centres with 45mm gap, 5mm wires generally and reducing to 50mm centres on the v crimp, (v crimp has 5mm wires structured with 2 wires at 40mm centres and 4 wires at 24mm centres to give the striped effect) with & including 80mm x 60mm galvanised and subsequently electrostatically powder coated posts complying to EN 1722 Part 16 with plastic cap spaced at maximum 3030mm centres including steel clip fixings with 8mm Anti Vandal Bolts, erect posts in 400 x 400 x 600mm deep pits for bases, holding posts in position, and backfilling with 25N concrete, disposal of excavated material off site, include for all holes, bolts, bolting, welding, fixings and labours as required; including all necessary fittings and fixings complete; assembled and erected all in accordance with manufacturers written instructions and as per Architects Specification Q40				
A	2400mm overall height (to site boundary)	m	12		
B	2400mm overall height (to gas storage)	m	5		
	Extra over for				
C	bends / corner posts	nr	1		
D	end post	nr	4		
E	Extra over last for; fixing fence / post to existing palasade fence	nr	1		
F	Extra over last for; fixing fence / post to RC wall	nr	2		
G	EuroGuard Flatform heavy gate - single gate aprox size 1200 x 2400mm high	nr	1		

	(30) SITE ENCLOSURES, RETAINING WALLS (Cont)				
	(Cont) METALWORK				
	(Cont) Non-structural				
	(Cont) Euroguard Regular V Mesh Panel Fence System or equivalent to BS 1722-14 Category 1 complete; in selected polyester powder coating in selected colour, to BS 6497; mesh 200 x 50mm centres with 45mm gap, 5mm wires generally and reducing to 50mm centres on the v crimp, (v crimp has 5mm wires structured with 2 wires at 40mm centres and 4 wires at 24mm centres to give the striped effect) with & including 80mm x 60mm galvanised and subsequently electrostatically powder coated posts complying to EN 1722 Part 16 with plastic cap spaced at maximum 3030mm centres including steel clip fixings with 8mm Anti Vandal Bolts, erect posts in 400 x 400 x 600mm deep pits for bases, holding posts in position, and backfilling with 25N concrete, disposal of excavated material off site, include for all holes, bolts, bolting, welding, fixings and labours as required; including all necessary fittings and fixings complete; assembled and erected all in accordance with manufacturers written instructions and as per Architects Specification Q40				
A	EuroGuard Flatform heavy gate - double gate aprox size 3000 x 2400mm high	nr	1		
B	EuroGuard Flatform heavy gate - double gate aprox size 4000 x 2400mm high	nr	1		

(30) SITE ENCLOSURES, RETAINING WALLS (Cont)				
COLLECTION				
Page No. BQ/399				NIL
Page No. BQ/400				NIL
(30) SITE ENCLOSURES, RETAINING WALLS Carried to Summary				**NIL**

	(40) ROADS PATHS PAVINGS				
	ROADS, PATHS, PAVINGS				
	INFORMATION				
A	The Contractor shall allow for scanning all areas prior to commencement, including for marking all existing services located using spray paint and marker stakes. Allow for all necessary liaison with the project Engineers and utility companies as required	Item	1		
B	The Contractor shall note the position of all existing underground and overground services within and adjacent to the site.	Item	1		
C	The Contractor is strongly advised to visit the site to determine the exact extent of the works, as no claim shall be entertained at a later date for his/her failure to comply with same.	Item	1		
D	The Contractor shall note that all works outside the hoarding line will be under Permit. The Contractor is deemed to have taken cognisance of same in pricing in his tender, and is deemed to have included for all necessary costs associated with same against this item, or generally within his rates.	Item	1		
	TARMACADAM - DELIVERIES YARD				
	EXCAVATION AND EARTHWORKS:				
	Testing				
E	Testing the bearing capacity of formation levels/excavated surfaces as per the Engineers Specification; allow for continuous and ongoing plate bearing tests to establish suitable bearing capacity of formation levels as required by the Engineer; provide for carrying out plate bearing tests as per Works Requirements to establish suitable load bearing capacity of near surface materials as specified; allow for all disruption of the excavation and earthwork process as a result of the testing requirements as specified	Item	1		

	(40) ROADS PATHS PAVINGS (Cont)				
	(Cont) EXCAVATION AND EARTHWORKS:				
	Excavation				
	Filling;				
	Filling; 300mm thick 6F1/6F2 capping layer material as required spread and compacted in layers to falls and cross falls under paving as outlined on Engineers Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002, average thickness;				
A	> 250 mm (300mm thick) to New tarmacadam deliveries yard adjacent to new extension building as per Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002	m3	38		
	Filling; 150mm hardcore sub base of type 3 granular material to series 800 (Clause 804) spread and compacted in layers to falls and cross falls under paving as outlined on Engineers Drawing as outlined on Engineers Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002, average thickness;				
B	< or = to 250 mm (150mm thick) to New tarmacadam deliveries yard adjacent to new extension building as per Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002	m3	19		
C	< or = to 250 mm (150mm thick) to New compact gravel area adjacent to new extension building as per Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002	m3	3		
D	< or = to 250 mm (150mm thick) to New stone paving area adjacent to new extension building as per Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002	m3	6		
	Surface Treatment.				
	Limestone fines blinding; laid on hardcore base				
E	50 mm thick to New tarmacadam deliveries yard adjacent to new extension building as per Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002	m2	125		

	(40) ROADS PATHS PAVINGS (Cont)				
	(Cont) EXCAVATION AND EARTHWORKS:				
	(Cont) Excavation				
	(Cont) Surface Treatment.				
A	50 mm thick to New compact gravel area adjacent to new extension building as per Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002	m2	19		
B	50 mm thick to New stone paving area adjacent to new extension building as per Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002	m2	37		
	Geotextiles				
	Geomembrane, Terram 1000 or equivalent to be laid under capping layer as seperation barrier to clause 609; 150 mm laps; no allowance in measurement for laps				
C	Horizontal, under New tarmacadam deliveries yard, New compact gravel area and New stone paving area adjacent to new extension building as per Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002	m2	181		
	SURFACE PAVINGS, FENCING AND LANDSCAPING:				
	In - Situ Surface Paving				
	Tarmacadam comprising; machine laid; 60mm thick AC20 dense bin 70/100 rec binder course laid on well compacted hardcore (Clause 804), (elsewhere taken) all as outlined on Engineers Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002				
	Binder Course				
D	to falls and cross-falls of New tarmacadam deliveries yard	m2	125		
E	Extra over last for all necessary tac-coats	m2	125		
F	Extra over last for regulating course of asphalt to deliveries yard entrance (Set Down Area)	m3	3		

	(40) ROADS PATHS PAVINGS (Cont)				
	(Cont) SURFACE PAVINGS, FENCING AND LANDSCAPING:				
	(Cont) In - Situ Surface Paving				
	(Cont) Tarmacadam comprising; machine laid; 60mm thick AC20 dense bin 70/100 rec binder course laid on well compacted hardcore (Clause 804), (elsewhere taken) all as outlined on Engineers Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002				
A	Extra over of the above for dishing / forming ramp to bitumen macadam to deliveries yard entrance (Set Down Area)	m2	31		
	Tarmacadam comprising; machine laid; 40mm thick PSMA surface course in accordance with CL. 942of TII SRW laid on 60mm thick AC20 dense bin 70/100 rec binder course (elsewhere taken) laid on well compacted hardcore (Clause 804), (elsewhere taken) all as outlined on Engineers Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002				
	Surface Course				
B	to falls and cross-falls of New tarmacadam deliveries yard	m2	125		
C	Extra over of the above for dishing / forming ramp to bitumen macadam deliveries yard entrance (Set Down Area)	m2	31		
	Labour Item on Above				
D	Contractor to allow for forming/providing 250mm x 250mm x 300mm deep holes in new tarmacadam binder course and surface finish to allow for Collapsible Bollards to be set within tarmac delivery entrance surface as outlined in Architects Specification Q50/85 and as shown on Drawing ZZ-DR-A-1002	nr	6		
	Junction				
	Joints between new and existing road surfaces				

	(40) ROADS PATHS PAVINGS (Cont)				
	(Cont) SURFACE PAVINGS, FENCING AND LANDSCAPING:				
	(Cont) In - Situ Surface Paving				
	(Cont) Junction				
A	Transverse Joint with existing surfacing, including overlaying in two sections:- (1) 1000mm min. wide section of 40mm thick surface course; and (2), 1000mm min. wide section of 40mm thick asphalt surface course and 60mm thick of 20mm aggregate size dense asphalt binder course, and (3) 500mm min wide section of 40mm thick surface course and 60mm thick of 20mm aggregate size dense asphalt binder course; all as per Engineers Drawing M237-KCSE-XX-XX-DR-C-0002, including for all necessary preparing existing surfaces, tac-coats, and sealing junctions.	m	13		
B	Extra over for saw cutting existing pavement (40mm thick asphalt surface course) to form a clean vertical surface, prepare and prime, as per Drawing M237-KCSE-XX-XX-DR-C-0002	m	13		
C	Extra over for saw cutting existing pavement (60mm thick dense asphalt binder course) to form a clean vertical surface, prepare and prime, as per Drawing M237-KCSE-XX-XX-DR-C-0002	m	13		
D	Extra over for breaking out, removing and disposing off site, 500mm (min) wide x 550mm (min) deep section of existing road build-up, including for replacement of same with 40mm thick asphalt surface course, on and including 60mm thick of 20mm aggregate size dense binder course asphalt, on and including 150mm thick sub-base of clause 804 hardcore material, on 300mm 6F1 / 6F2 capping layer, all as per Engineer Specification on Drawing M237-KCSE-XX-XX-DR-C-0002	m	13		

	(40) ROADS PATHS PAVINGS (Cont)				
	(Cont) SURFACE PAVINGS, FENCING AND LANDSCAPING:				
	(Cont) In - Situ Surface Paving				
	(Cont) Junction				
A	Extra over for regulating course of asphalt, as per Engineers Specification on Drawing M237-KCSE-XX-XX-DR-C-0002	m3	1		
B	Extra over for contractor to allow for the removal of weak spots within the existing binder course and allow for the reinstatement of same as per Engineers Specification on Drawing M237-KCSE-XX-XX-DR-C-0002	m2	13		
	Tactile Buff Blister Paving (Yellow)				
	Allow for 3 rows of "Buff" Blister Tactile paving 400 x 400 x 50mm thick, Colour: Yellow, to set-down area and non controlled pedestrian crossing, laid to falls on minimum 50mm thick sand cement bed, with and include for twice vibrating paving and filling 2mm joints with approved mortar and brushing clean and sprinkling with water all in accordance with manufacturer's instructions and as per Engineers Drawings M237-KCSE-XX-XX-DR-C-0001 & 0002				
C	Tactile blister paving in at road crossings in 1nr. isolated location (at set down area)	m2	3		
	Allow for 150mm Type 1 concrete dish laid to falls in accordance with series 1100 of TII SRW with concrete, IX X30/35-D20-XF4-S2 on min 150mm well compacted Cl. 804 material all in accordance with Engineers Drawings M237-KCSE-XX-XX-DR-C-0001 & 0002				
D	Dished concrete to each side of tactile blister paving in at road crossings in 1nr. isolated location (at set down area)	m2	2		
E	Sundries				
F	Fair joint with new tarmac finish	m	10		

	(40) ROADS PATHS PAVINGS (Cont)				
	(Cont) SURFACE PAVINGS, FENCING AND LANDSCAPING:				
	(Cont) In - Situ Surface Paving				
	Sundries				
A	Allow for working around and providing neat tarmac surface finish around Collapsible Bollards to be set within tarmac delivery entrance surface as shown on Architects Drawing ZZ-DR-A-1002	nr	6		
B	Fair joint with existing tarmac finish	m	13		
C	Fair joint with new compact gravel area	m	11		
	Linemarking				
	Prepare and apply by hot pressure spray method thermoplastic material in 2 mm thick lines to B.S. 3262 Part 1 1960, on macadam surface; note line marking in accordance with m112 of traffic signs manual chapter 7 to be provided at raised table				
D	Lettering "SET DOWN" wording;	Item	1		
	Pre Formed Pavings and Edging Units				
	'Tobermore' or equivalent approved stone paving; laid and jointed to outlined pattern using selected mixed paviors; size 600 x 300 x 80 mm in selected colours (Mid Grey), include for compacting paviours with a suitable plate vibrator, include for filling joints with kiln dried jointing sand, sweeping away excess sand etc., all laid and including on sand cement blinding, in accordance with the manufacturers written instructions as per Details outlined on Architects Drawing DR-A-1002 and Engineers Drawing M237-KCSE-XX-XX-DR-C-0001				
	Pavings				
E	80 mm thickness; falls	m2	37		
	Labours				

	(40) ROADS PATHS PAVINGS (Cont)				
	(Cont) SURFACE PAVINGS, FENCING AND LANDSCAPING:				
	(Cont) Pre Formed Pavings and Edging Units				
A	cutting to 80mm thick concrete paviours to provide slant (on plan) / fair and neat joint with New compact gravel area and adjoining wall abutments, as indicated on drawings DR-A-1002 & KCSE Drawing M237-KCSE-XX-XX-DR-C-0001	m	28		
	Bonded / Compacted Gravel				
B	5 to 20mm natural stone quartz "washed"; minimum 80mm thick layer of UV stable with anti slip additive; in selected colour; spread, level, laid on top of and including 100mm AC20 open graded asphalt concrete mix 100/150 pen binder to BS-EN13108-1:2006, laid on with and including hardcore fill sub base of type 3 granular material to series 800 (Clause 804); as per DR-A-1002 & KCSE Drawing M237-KCSE-XX-XX-DR-C-0001, girth > 300mm	m2	19		
	Labours / Sundries				
C	Form fair joint tie-in to various surface finishes (paving & tarmacadam), depth < or = 150 mm	m	21		
	Speed Ramps				
D	75mm high Heavy Duty Proprietary Speed ramps (painted in yellow and black); overall plan size 6150mm long x 400mm wide x 75mm high, bolt on speed ramp mechanically fixed to existing road surfacing including for all necessary fixings / bolts, preparing existing surfaces and sealing junctions and making good existing surface areas where disturbed etc. ramps to be installed as per manufactures instructions and to Engineers Satisfaction as per details outlined on Engineers Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002	nr	2		

	(40) ROADS PATHS PAVINGS (Cont)				
	Precast Concrete Kerbs				
	Flush Kerbs				
	Proprietary 6mm high Precast Concrete Flush Kerb Type D in accordance with TII standard detail CC-SCD-01101; half battered kerb finished smooth, colour natural, standard: to IS 146, Size 250 x 125 x 900mm to be laid and levelled in accordance with BS 7363 part 4 with dry joints, 2-3 mm gap including 300mm wide x 225 mm high Grade C35N20 concrete bed and haunch; excavation; disposal; backfilling; formwork; including all ends and angles all to Engineers Specification as per Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002				
A	250 x 125 mm; flush kerb laid straight	m	14		
B	250 x 125 mm; flush kerb laid curved	m	3		
	CONCRETE FOOTPATHS				
	EXCAVATION AND EARTHWORKS:				
	Excavation				
	Filling;				
	Filling; 150mm hardcore sub base of type 3 granular material to series 800 (Clause 804) spread and compacted in layers to falls and cross falls under paving as outlined on Engineers Drawing as outlined on Engineers Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002, average thickness;				
C	< or = to 250 mm (150mm thick) to New concrete footpath around extension building as per Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002	m3	20		
	Surface Treatment.				
	Limestone fines blinding; laid on hardcore base				
D	25 mm thick to New concrete footpath around extension building as per Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002	m2	133		

	(40) ROADS PATHS PAVINGS (Cont)				
	(Cont) EXCAVATION AND EARTHWORKS:				
	(Cont) Excavation				
	Geotextiles				
	Geomembrane, Terram 1000 or equivalent to be laid under capping layer as seperation barrier to clause 609; 150 mm laps; no allowance in measurement for laps				
A	Horizontal, under New concrete footpath around extension building as per Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002	m2	133		
	CONCRETE WORK:				
	In-situ Concrete				
	Reinforced in-situ concrete; 150mm thick brushed concrete to Series 1100 of TII SRW; Grade X30/35 - D20-XF4-S2; 5% air entrained as per Engineers Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002				
	Footpaths; (New Concrete footpaths around new extension building) as per Drawing M237-KCSE-XX-XX-DR-C-0002				
B	falls and cross falls; depth < or = to 150mm (150mm thick)	m3	20		
C	Extra over last for contractor to allow for forming/providing 250mm x 250mm x 300mm deep holes in concrete foothpath to allow for S/S Bollards to be set within concrete footpath as outlined in Architects Specification Q50/85 and as shown on Drawing ZZ-DR-A-1002	nr	17		

	(40) ROADS PATHS PAVINGS (Cont)				
	(Cont) CONCRETE WORK:				
	Sundries				
	Designed joints				
	Form isolation joint in 150 mm concrete by inserting 20 mm thick approved jointing material at position of isolation joint, sealing off top 20mm with Fosroc Colpor 200PF sealant or equivalent approved joint filler sealant and including necessary formwork				
A	depth < or = 150 mm	m	66		
	Form expansion joint in 150 mm concrete by saw cutting 5mm thick clean cut joint 20mm deep (max) at 3m c/c for full depth of the joint, sealing off top 20mm with Fosroc Colpor 200PF sealant or equivalent approved joint filler sealant and including necessary formwork				
B	depth < or = 150mm	m	44		
	Surface finishes				
	Steel trowel bullnose finish at edges 100mm wide				
C	Footpaths edges	m	128		
D	Both sides of expansion joints	m	88		
	Brushed surface finish to unset concrete				
E	to footpaths; falls and cross falls	m2	133		
F	Extra over last for dishing footpath at crossing areas (2nr)	m2	6		
G	Extra over for working around and providing neat finish around S/S Bollards set into concrete footpath as shown on Architects Drawing ZZ-DR-A-1002	nr	17		
H	Fair joint with other finishes	m	21		

To Collection € **NIL**

	(40) ROADS PATHS PAVINGS (Cont)				
	(Cont) CONCRETE WORK:				
	Reinforcement				
	Steel fabric reinforcement to BS 4483; fixing with tying wire and supporting on metal chairs in strict accordance with the manufacturers instructions but at the contractors discretion				
	Fabric				
	Reference A393 mesh (6.16kg/m2); 300mm minimum side and end laps				
A	horizontal; in footpaths (x 1 layer)	m2	133		
	Formwork				
	Formwork surface finish to concrete; Type "Ordinary Finish" as per P.1.9 of NSCS 4th Edition				
	Edge of foothpaths				
B	< or = 250 mm	m	21		
	Sundries				
C	Dished / dropped kerb (Tactile Paving)	m	10		
	Precast Concrete Kerbs				
	Raised Kerbs				
	Proprietary 125mm high Precast Concrete Kerb Type C in accordance with TII standard detail CC-SCD-01101; half battered kerb finished smooth, colour natural, standard: to IS 146, Size 250 x 125 x 900mm to be laid and levelled in accordance with BS 7363 part 4 with dry joints, 2-3 mm gap including 300mm wide x 225 mm high Grade C16/20 concrete bed and haunch; excavation; disposal; backfilling; formwork; including all ends and angles all to Engineers Specification as per Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002				
D	250 x 125 mm; laid straight	m	40		

	(40) ROADS PATHS PAVINGS (Cont)				
	(Cont) Precast Concrete Kerbs				
	(Cont) Raised Kerbs				
	(Cont) Proprietary 125mm high Precast Concrete Kerb Type C in accordance with TII standard detail CC-SCD-01101; half battered kerb finished smooth, colour natural, standard: to IS 146, Size 250 x 125 x 900mm to be laid and levelled in accordance with BS 7363 part 4 with dry joints, 2-3 mm gap including 300mm wide x 225 mm high Grade C16/20 concrete bed and haunch; excavation; disposal; backfilling; formwork; including all ends and angles all to Engineers Specification as per Drawing M237-KCSE-XX-XX-DR-C-0001 & 0002				
A	Extra over last for dished precast concrete kerb at pedestrian crossing areas	m	4		
B	250 x 125 mm; laid curved	m	2		
	Gravel Strip (to Perimeter of Building)				
	Excavation				
	Filling;				
	T1 Structural Hardcore filling to be Annex E SR 21 material; laid and compacted in accordance 100mm with the "Specification for Road Works" produced by the Department of the Environment to Engineers Specification and as per Details outlined on Architects Drawing DR-A-6102				
	Filling; hardcore base spread and compacted in 225mm layers to falls and crossfalls under paving, average thickness:-				
C	< or = 250mm (150mm thick)	m3	71		
	Gravel Filling / Finish				
D	200mm wide x 250mm deep strip of 20/40mm Valentia or equivalent washed pea gravel; in selected colour; spread, level and lay on top of terram, as per Engineers & Architects Specification, girth > 300mm	m	98		

(40) ROADS PATHS PAVINGS (Cont)

COLLECTION

Page No. BQ/402				NIL
Page No. BQ/403				NIL
Page No. BQ/404				NIL
Page No. BQ/405				NIL
Page No. BQ/406				NIL
Page No. BQ/407				NIL
Page No. BQ/408				NIL
Page No. BQ/409				NIL
Page No. BQ/410				NIL
Page No. BQ/411				NIL
Page No. BQ/412				NIL
Page No. BQ/413				NIL
Page No. BQ/414				NIL
(40) ROADS PATHS PAVINGS Carried to Summary				**NIL**

	(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (Plastering)				
	(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer)				
A	The drainage shall be carried out generally in accordance with Irish Water Standards and Documents Irish Water/Uisce Eireann Wastewater Infrastructure Standard Details and Irish Water/Uisce Eireann Water Infrastructure Standard Details and TII Specification for Road Works, all where necessary and applicable	Note			
	DRAINAGE:				
	Below Ground				
	The Following Work is Inside the Boundary of the Building from New AJ's / Floor Gullies & Main Foul Pipeline				
	Excavate trenches; backfilling with hardcore filling to be SR21-Annex E hardcore material; T.2 Permeable:4/40mm Gas Permeable layer (Radon) Min depth 200mm.; carting surplus excavated material off site to a tip provided by the contractor; compacting in 150 mm layers all as per Engineers Specification Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011, 0012 & 0013				
	Pipes; < or = 250 mm nominal diameter				
B	average depth 500 to 1000 mm (within new MTU extension building)	m	44		
C	average depth 1000 to 1500 mm (within existing MTU building)	m	35		
D	average depth 1000 to 1500 mm (outside existing MTU building in courtyard area)	m	28		

To Collection € **NIL**

	(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (Plastering) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Inside the Boundary of the Building from New AJ's / Floor Gullies & Main Foul Pipeline				
	Extra over excavating trenches irrespective of depth				
A	breaking up existing hard surfaces; 250 mm thick concrete floor slab, radon, insulation and hardcore; include for saw cutting both sides and reinstate and seal radon to match existing and provide painted finish to match existing colour	m	21		
B	breaking up existing hard surfaces; 250 mm thick powerfloated concrete floor slab, radon, insulation and hardcore; include for saw cutting both sides and reinstate and seal radon to match existing.	m	9		
C	breaking up existing hard surfaces; asphalt courtyard surface and hardcore average 250 mm thick; including saw cutting both sides; temporary and full reinstatement to match existing, all to the full satisfaction of the Engineer.	m	28		
D	breaking through existing 300 mm think block wall in foundation (externally) for new 150 mm uPVC pipe penetration including for new stainlees steel puddle flange and grouting in.	nr	2		
E	breaking through existing 215 mm think block wall in foundation (internally) for new 100 mm uPVC pipe penetration including for new stainless steel puddle flange and grouting in.	nr	3		
F	around existing services crossing excavations; 1 number 150 mm diameter uPVC electrical ducts.	nr	1		
G	around existing services crossing excavations; 225mm diameter uPVC surface water drain.	nr	1		

To Collection € **NIL**

	(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (Plastering) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Inside the Boundary of the Building from New AJ's / Floor Gullies & Main Foul Pipeline				
	Disposal				
A	ground water	item	1		
B	surface water	item	1		
	In-situ concrete to IS EN206; Grade C30/37; 20 mm maximum size limestone aggregate; piped wrapped in 1 layer of plastic; as per Engineers Specification shown on Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011, 0012 & 0013 to the following pipes:				
	Beds and surrounds				
C	550 x 450 mm; pipe 100 mm nominal diameter	m	107		
	Vertical casing				
D	550 mm x 450 mm; pipe 100 mm nominal diameter	m	3		
	"Wavin" or equivalent approved SN8 uPVC pipes to IS 424, BS 5481, BS 5556 and BS 4660, laid and jointed with integral mechanical joints with D or O rubber sealing rings with rubber seals in running lengths, in accordance with the manufacturers instructions as per Engineers Specification shown on Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011, 0012 & 0013				
	Pipes				
E	nominal pipe diameter 100 mm	m	107		
	Extra over pipes for which they occur				
F	fittings; bends 100 mm diameter	nr	24		
G	Riser pieces to uPVC gully trap 100 mm diameter.	m	3		
H	1500 mm long rocker pipes 100 mm diameter at junctions with manholes.	nr	9		

	(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (Plastering) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Inside the Boundary of the Building from New AJ's / Floor Gullies & Main Foul Pipeline				
	Pipe accessories				
	Floor Gullies to Specification, include for excavation, disposal, concrete grade C20/25 in bed and surround 100mm deep, on 100mm deep clause 804 fill, include for all necessary formwork as per Engineers Specification shown on Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011, 0012 & 0013				
A	100 x 100mm, 100mm outlet, with gully grating and frames to be heavy duty grade D400A to EN 124:1994	nr	3		

	(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (Plastering) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Inside the Boundary of the Building from New AJ's / Floor Gullies & Main Foul Pipeline				
	Inspection Chambers - Ref: FWIC-01, FWIC-02, FWIC-03				
	Manholes - Ref: FMH-01, FMH-02, FMH-03				
	Precast manholes; excavate manhole pit and cart excavated material off site; backfilling in hardcore granular filling to SR21:2014 Annex E; grade bottom of pit; including any necessary earthwork supports; 75 mm thick concrete grade 16/25 in blinding under base; 225 mm thick reinforced in-situ concrete grade C30/37 base unit complete with channels; reinforced with mesh reinforcement ref A142 lapped at all joints; granolithic concrete grade C30/37 in benching to base section and channels finished with 3:1 sand-cement mortar with a smooth trowel finish; precast concrete manhole riser rings hoisted and set in position on base to meet the required depths; rubber ring gaskets at all intersections of chamber units; reinforced in-situ manhole cover to suit diameter of chambers, complete with 600mm ope hoisted and set in position; make up levels in engineer bricks for cover (cover measured elsewhere); include for all opes in chamber walls; surround chamber with minimum of 150 mm thick concrete grade C16/20; including for all necessary formwork, working space and making good to all work and finishes disturbed all as per Engineers Drawings M237-KCSE-XX-XX-DR-C-0011, 0012, 0013				
	Internal dimensions 1200 mm diameter				
A	depth 500 to 1000 mm (FMH-01)	nr	1		
B	depth 1000 to 1500 mm (FMH 02 & FMH 03)	nr	2		
C	Sundries on manholes				

To Collection € **NIL**

	(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (Plastering) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Inside the Boundary of the Building from New AJ's / Floor Gullies & Main Foul Pipeline				
	(Cont) Precast manholes; excavate manhole pit and cart excavated material off site; backfilling in hardcore granular filling to SR21:2014 Annex E; grade bottom of pit; including any necessary earthwork supports; 75 mm thick concrete grade 16/25 in blinding under base; 225 mm thick reinforced in-situ concrete grade C30/37 base unit complete with channels; reinforced with mesh reinforcement ref A142 lapped at all joints; granolithic concrete grade C30/37 in benching to base section and channels finished with 3:1 sand-cement mortar with a smooth trowel finish; precast concrete manhole riser rings hoisted and set in position on base to meet the required depths; rubber ring gaskets at all intersections of chamber units; reinforced in-situ manhole cover to suit diameter of chambers, complete with 600mm ope hoisted and set in position; make up levels in engineer bricks for cover (cover measured elsewhere); include for all opes in chamber walls; surround chamber with minimum of 150 mm thick concrete grade C16/20; including for all necessary formwork, working space and making good to all work and finishes disturbed all as per Engineers Drawings M237-KCSE-XX-XX-DR-C-0011, 0012, 0013				
A	channels; 100 mm diameter; straight channel, bedded and jointed in cement mortar (1:1), 1200mm long	nr	3		
B	channels; 100 mm diameter; curved channel, bedded and jointed in cement mortar (1:1), 600 mm long	nr	2		
C	benching; plain in-situ concrete grade C30/37 in benching to bottom of manhole, screeded with 25 mm 2:1 sand-cement mortar with a smooth trowel finish floated smooth to falls; size 1200 mm diameter	nr	3		

To Collection € **NIL**

(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (Plastering) (Cont)

(Cont) DRAINAGE:

(Cont) The Following Work is Inside the Boundary of the Building from New AJ's / Floor Gullies & Main Foul Pipeline

(Cont) Precast manholes; excavate manhole pit and cart excavated material off site; backfilling in hardcore granular filling to SR21:2014 Annex E; grade bottom of pit; including any necessary earthwork supports; 75 mm thick concrete grade 16/25 in blinding under base; 225 mm thick reinforced in-situ concrete grade C30/37 base unit complete with channels; reinforced with mesh reinforcement ref A142 lapped at all joints; granolithic concrete grade C30/37 in benching to base section and channels finished with 3:1 sand-cement mortar with a smooth trowel finish; precast concrete manhole riser rings hoisted and set in position on base to meet the required depths; rubber ring gaskets at all intersections of chamber units; reinforced in-situ manhole cover to suit diameter of chambers, complete with 600mm ope hoisted and set in position; make up levels in engineer bricks for cover (cover measured elsewhere); include for all opes in chamber walls; surround chamber with minimum of 150 mm thick concrete grade C16/20; including for all necessary formwork, working space and making good to all work and finishes disturbed all as per Engineers Drawings M237-KCSE-XX-XX-DR-C-0011, 0012, 0013

A	manhole steps, galvanised ,mild steel, plastic encapsulated; to IS EN 13101 built into precast concrete walls.	nr	16		
	Manhole covers and frames				
B	"Maestro" or equivalent manhole cast iron access covers and frame; to EN 124:1994; grade D400A; bedding frame in cement mortar (1:3) and bedding covers in grease and sand; on engineering brick to make up levels; size 600mm opening diameter as per Engineers Specification shown on Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011, 0012 & 0013	nr	3		

	(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (Plastering) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Inside the Boundary of the Building from New AJ's / Floor Gullies & Main Foul Pipeline				
	(Cont) Manhole covers and frames				
A	Extra over last for being recessed manhole cover	nr	3		
	Mains				
	Connection to existing manhole				
	Locate existing manhole; take off cast iron cover; connect end of new pipe to existing manhole; including all necessary excavation, disposal, backfilling and reinstatement; forming openings; adapting channels and benching as required; including necessary diversion during the progress of the work; making good all work disturbed.				
B	1 nr 100 mm diameter pipe; connection at average 1300mm below existing cover level to existing manhole in Court Yard (Ref: Drawing M237-KCSE-XX-XX-DR-C-0012	nr	1		

	(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (Plastering) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Inside the Boundary of the Building from New AJ's / Floor Gullies & Main Foul Pipeline				
	Existing Services				
A	Particulars of all known existing services will be indicated to the Contractor on site. However, Contractors shall be entirely responsible for location the positions of all services and will be required to carry out on-site surveys including all necessary investigation pits/hand digging to determine location/route of all underground services, in grass and tarmacadam areas, together with tracing routes of overhead services, using his best endeavors to determine the position of all existing services, with results of the survey to be handed over to the Engineer prior to starting works on-site. The Contractor shall make good at his own expense, any damage whatsoever to existing services to the complete satisfaction of and in accordance with the Employers Representitve and to the satisfaction of the Statutory Authority concerned and shall keep the Employer indemnified at all times from claims in connection with the damage. All services that are encountered during the excavation, shall be adequatley supported and protected. Existing sewers and drains shall not be used for discarging of ground water from excavations without writted concent. No drain or pipe of any description shall be disturbed until it has been inspected. The Contractor shall also to ensure that services of adjoining Buildings are to remain operational throughout the Contract.	item	1		

	(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (Plastering) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Inside the Boundary of the Building from New AJ's / Floor Gullies & Main Foul Pipeline				
	Survey of Existing Drainage System				
A	The Contractor shall undertake a CCTV survey of the existing drainage system serving prior to commencement of the works, and shall present same with an associated Report to the ER and Employers Consultant Engineer prior to commencement of the works. The Contractor shall allow for all associated costs for same against this item.	Item	1		
	Maintaining Existing Drains				
B	The Contractor shall allow for maintaining existing drainage during the course of the works.	item	1		
	TESTING & COMMISSIONING				
	Testing, sterilisation and commissioning (after completion of the works, and prior to Substantial Completion)				
	New Drainage System				
C	Allow for cleaning out all new drains, removal and disposal of all waste/rubble, and necessary making good upon completion.	item	1		
D	Allow for testing, sterilisation and commissioning drainage to the satisfaction of the Engineer and the Local Authority.	item	1		
E	Allow for CCTV surveys of all completed drains and submit same together with a Report to the Engineer for review prior to Substantial Completion	item	1		
F	Allow for all necessary retesting, and CCTV surveys and associated Reports, as required.	item	1		

	(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (Plastering) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Inside the Boundary of the Building from New AJ's / Floor Gullies & Main Foul Pipeline				
	(Cont) Testing, sterilisation and commissioning (after completion of the works, and prior to Substantial Completion)				
	Existing Drainage System				
A	Allow for cleaning out all existing drains, removal and disposal of all waste/rubble, and necessary making good upon completion.	item	1		
B	Allow for testing, sterilisation and commissioning drainage to the satisfaction of the Engineer and the Local Authority.	item	1		
C	Allow for CCTV surveys of all existing drains and submit same together with a Report to the Engineer for review prior to Substantial Completion	item	1		
D	Allow for all necessary retesting, and CCTV surveys and associated Reports, as required.	item	1		

(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (Plastering) (Cont)

COLLECTION

Page No. BQ/416	NIL
Page No. BQ/417	NIL
Page No. BQ/418	NIL
Page No. BQ/419	NIL
Page No. BQ/420	NIL
Page No. BQ/421	NIL
Page No. BQ/422	NIL
Page No. BQ/423	NIL
Page No. BQ/424	NIL
Page No. BQ/425	NIL
Page No. BQ/426	NIL
(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (Plastering) Carried to Summary	**NIL**

	(50.2) SITE SERVICES MAINLY PIPED AND DUCTED (Surface Water)				
	(50.2) SITE SERVICES MAINLY PIPED AND DUCTED (Surface Water)				
A	The drainage shall be carried out generally in accordance with Irish Water Standards and Documents Irish Water/Uisce Eireann Wastewater Infrastructure Standard Details and Irish Water/Uisce Eireann Water Infrastructure Standard Details and TII Specification for Road Works, all where necessary and applicable	Note			
	DRAINAGE:				
	Below Ground				
	The Following Work is Outside the Boundary of the Building and Within the Boundary of the Site				
	Excavate trenches; backfilling with hardcore Clause 808 granular fill material to TII SRW, all in accordance with , carting surplus excavated material off site to a tip provided by the contractor; compacting in 150 mm layers all as per Engineers Specification as outlined on Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011				
	Pipes; < or = 250 mm nominal diameter				
B	average depth < or = to 500 mm (branches to gully drains)	m	32		
C	average depth < or = to 500 mm (branches to drainage channels) (150mm pipe)	m	3		
D	average depth 1000 to 1500 mm (branches to drainage channels) (150mm pipe)	m	23		
E	average depth 1500 to 2000 mm (225mm pipe)	m	23		

	(50.2) SITE SERVICES MAINLY PIPED AND DUCTED (Surface Water) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Outside the Boundary of the Building and Within the Boundary of the Site				
	Extra over excavating trenches irrespective of depth				
A	breaking up existing hard surfaces; concrete yard surface and hardcore average 250 mm thick; including saw cutting both sides; temporary and full reinstatement to match existing, all to the full satisfaction of the Engineer.	m	6		
B	breaking up existing hard surfaces in existing road area for trench comprising 1nr. 225mm diameter pipe (measured elsewhere); 40mm thick dense surface wearing course, on 60mm thick dense binder course, all to Clause 909 of Civil & Structural Specification, on 250mm thick clause 804 hardcore; including saw cutting both sides; temporary and full reinstatement to match existing.	m	4		
C	around existing services crossing excavations; 1 number 150 mm diameter uPVC electrical ducts.	nr	1		
D	around existing services crossing excavations; 225mm diameter uPVC surface water drain.	nr	1		
	Disposal				
E	ground water	item	1		
F	surface water	item	1		

	(50.2) SITE SERVICES MAINLY PIPED AND DUCTED (Surface Water) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Outside the Boundary of the Building and Within the Boundary of the Site				
	Granular material; imported; complying with a minimum bedding of 150mm with granular material of 14mm to 5mm graded aggregate or 10mm single sized aggregate conforming to IS EN 13242 and having a compaction ratio of 0.2 or less. The pipes should be side-benched with the same material, 150mm of granular fill, free from stones larger than 40mm, should be placed directly over the pipe including marker tape as per Engineers Specification shown on Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011				
	Beds and surrounds				
A	750 x 650 mm; pipe 150 mm nominal diameter	m	58		
B	750 x 750 mm; pipe 225 mm nominal diameter	m	23		
	In-situ concrete to IS EN206; Grade C16/20; 20 mm maximum size limestone aggregate; piped wrapped in 1 layer of plastic; as per Engineers Specification shown on Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011 to the following pipes:				
	Beds and surrounds				
C	750 x 650 mm; pipe 150 mm nominal diameter	m	61		
D	750 x 750 mm; pipe 225 mm nominal diameter	m	22		
E	Encase existing 225mm diameter storm water sewer pipe in min 150mm concrete under the extent of proposed building as outlined on Drawing M237-KCSE-XX-XX-DR-C-0011	m	39		

	(50.2) SITE SERVICES MAINLY PIPED AND DUCTED (Surface Water) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Outside the Boundary of the Building and Within the Boundary of the Site				
	"Wavin" or equivalent approved SN6 uPVC pipes to IS 424, BS 5481, BS 5556 and BS 4660, laid and jointed with integral mechanical joints with D or O rubber sealing rings with rubber seals in running lengths, in accordance with the manufacturers instructions and Engineers Specification shown on Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011				
	Pipes				
A	nominal pipe diameter 150 mm	m	61		
B	nominal pipe diameter 225 mm	m	23		
	Extra over pipes for which they occur				
C	fittings; bends 150 mm diameter	nr	33		
D	fittings; bends 225 mm diameter	nr	2		
E	fittings; branches 150 to 225 mm diameter	nr	5		
F	1500 mm long rocker pipes 150 mm diameter at junctions with manholes.	nr	5		
G	1500 mm long rocker pipes 225 mm diameter at junctions with manholes.	nr	3		
H	for 225mm diameter saddle connection to existing 225mm diameter storm pipe line in existing roadway	nr	1		

	(50.2) SITE SERVICES MAINLY PIPED AND DUCTED (Surface Water) (Cont)				
	(Cont) DRAINAGE: **(Cont) The Following Work is Outside the Boundary of the Building and Within the Boundary of the Site**				
	Aco Channel Drains				
	B125 125mm wide Aco drainage channel; complete with class A stainless steel grating or equivalent; bedded and edged with 150 mm thick concrete Grade 25N bedding and edging, including mortar bedding at footpath / yard area, all necessary excavation, disposal and connecting to gulley traps at each end; as per Engineers Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011				
A	B125 Channel Drain	m	27		
B	extra over for ends	nr	12		
	Pipe accessories				
	Access junctions.				
	300mm x 300mm proprietary uPVC storm water armstrong junction; with 150mm diameter inlets and 150mm diameter outlets, galvanized iron cover and frame B125 rated, jointed to uPVC pipes with socket joints and rubber, bedding and surrounding in concrete Grade C16/20 and include for any additional excavation and disposal off site as per Engineers Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011				
C	300 x 300mm, 150mm inlets / outlets, with min. cover of 300mm	nr	5		
D	Extra over last for Riser pieces	m	5		
E	extra over for recessed galvanised cover and frame to take paving as specified	nr	5		

	(50.2) SITE SERVICES MAINLY PIPED AND DUCTED (Surface Water) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Outside the Boundary of the Building and Within the Boundary of the Site				
	Manholes				
	Precast manholes; to comply with irish water codes of practice and standard details; excavate manhole pit and cart excavated material off site; backfilling in hardcore granular filling to SR21:2014 Annex E; grade bottom of pit; including any necessary earthwork supports; 75 mm thick concrete grade 16/25 in blinding under base; 225 mm thick reinforced in-situ concrete grade C30/37 base unit complete with channels; reinforced with mesh reinforcement ref A142 lapped at all joints; granolithic concrete grade C30/37 in benching to base section and channels finished with 3:1 sand-cement mortar with a smooth trowel finish; precast concrete manhole riser rings hoisted and set in position on base to meet the required depths; rubber ring gaskets at all intersections of chamber units; reinforced in-situ manhole cover to suit diameter of chambers, complete with 600mm ope hoisted and set in position; make up levels in engineer bricks for cover (cover measured elsewhere); include for all opes in chamber walls; surround chamber with minimum of 150 mm thick concrete grade C16/20; including for all necessary formwork, working space and making good to all work and finishes disturbed all as per Engineers Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011				
	Internal dimensions 1200 mm diameter				
A	depth 1500 to 2000 mm (SWMH 01, 02 & 03)	each	3		
B	extra over for backdrop manhole including sump, backdrop assembly; including cleaning eye, junctions, bends, long radius bends and vertical pipes to suit length; including all necessary concrete surround (Ref: SWMH 01)	each	1		

	(50.2) SITE SERVICES MAINLY PIPED AND DUCTED (Surface Water) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Outside the Boundary of the Building and Within the Boundary of the Site				
	(Cont) Precast manholes; to comply with irish water codes of practice and standard details; excavate manhole pit and cart excavated material off site; backfilling in hardcore granular filling to SR21:2014 Annex E; grade bottom of pit; including any necessary earthwork supports; 75 mm thick concrete grade 16/25 in blinding under base; 225 mm thick reinforced in-situ concrete grade C30/37 base unit complete with channels; reinforced with mesh reinforcement ref A142 lapped at all joints; granolithic concrete grade C30/37 in benching to base section and channels finished with 3:1 sand-cement mortar with a smooth trowel finish; precast concrete manhole riser rings hoisted and set in position on base to meet the required depths; rubber ring gaskets at all intersections of chamber units; reinforced in-situ manhole cover to suit diameter of chambers, complete with 600mm ope hoisted and set in position; make up levels in engineer bricks for cover (cover measured elsewhere); include for all opes in chamber walls; surround chamber with minimum of 150 mm thick concrete grade C16/20; including for all necessary formwork, working space and making good to all work and finishes disturbed all as per Engineers Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011				
	Sundries on manholes				
A	channels; 225 mm diameter; straight channel, bedded and jointed in cement mortar (1:1), 600 mm long	nr	3		
B	channels; 225 mm diameter; curved branch channel, bedded and jointed in cement mortar (1:1), 600 mm long	nr	2		

	(50.2) SITE SERVICES MAINLY PIPED AND DUCTED (Surface Water) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Outside the Boundary of the Building and Within the Boundary of the Site				
	(Cont) Precast manholes; to comply with irish water codes of practice and standard details; excavate manhole pit and cart excavated material off site; backfilling in hardcore granular filling to SR21:2014 Annex E; grade bottom of pit; including any necessary earthwork supports; 75 mm thick concrete grade 16/25 in blinding under base; 225 mm thick reinforced in-situ concrete grade C30/37 base unit complete with channels; reinforced with mesh reinforcement ref A142 lapped at all joints; granolithic concrete grade C30/37 in benching to base section and channels finished with 3:1 sand-cement mortar with a smooth trowel finish; precast concrete manhole riser rings hoisted and set in position on base to meet the required depths; rubber ring gaskets at all intersections of chamber units; reinforced in-situ manhole cover to suit diameter of chambers, complete with 600mm ope hoisted and set in position; make up levels in engineer bricks for cover (cover measured elsewhere); include for all opes in chamber walls; surround chamber with minimum of 150 mm thick concrete grade C16/20; including for all necessary formwork, working space and making good to all work and finishes disturbed all as per Engineers Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011				
A	benching; plain in-situ concrete grade C30/37 in benching to bottom of manhole, screeded with 25 mm 2:1 sand-cement mortar with a smooth trowel finish floated smooth to falls; size 1200 mm diameter	nr	3		
B	manhole steps, galvanised ,mild steel, plastic encapsulated; to IS EN 13101 built into precast concrete walls.	nr	16		

To Collection € NIL

	(50.2) SITE SERVICES MAINLY PIPED AND DUCTED (Surface Water) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Outside the Boundary of the Building and Within the Boundary of the Site				
	(Cont) Precast manholes; to comply with irish water codes of practice and standard details; excavate manhole pit and cart excavated material off site; backfilling in hardcore granular filling to SR21:2014 Annex E; grade bottom of pit; including any necessary earthwork supports; 75 mm thick concrete grade 16/25 in blinding under base; 225 mm thick reinforced in-situ concrete grade C30/37 base unit complete with channels; reinforced with mesh reinforcement ref A142 lapped at all joints; granolithic concrete grade C30/37 in benching to base section and channels finished with 3:1 sand-cement mortar with a smooth trowel finish; precast concrete manhole riser rings hoisted and set in position on base to meet the required depths; rubber ring gaskets at all intersections of chamber units; reinforced in-situ manhole cover to suit diameter of chambers, complete with 600mm ope hoisted and set in position; make up levels in engineer bricks for cover (cover measured elsewhere); include for all opes in chamber walls; surround chamber with minimum of 150 mm thick concrete grade C16/20; including for all necessary formwork, working space and making good to all work and finishes disturbed all as per Engineers Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011				
A	("Maestro" or equivalent) manhole cast iron access covers and frame; to EN124; grade D400; bedding frame in cement mortar (1:3) and bedding covers in grease and sand; on engineering brick to make up levels; size 600mm opening diameter.	nr	3		
B	Extra over last for being recessed manhole cover in Paved areas	nr	3		

	(50.2) SITE SERVICES MAINLY PIPED AND DUCTED (Surface Water) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Outside the Boundary of the Building and Within the Boundary of the Site				
	Mains				
	Connection to existing manhole				
	Locate existing manhole; take off cast iron cover; connect end of new pipe to existing manhole; including all necessary excavation, disposal, backfilling and reinstatement; forming openings; adapting channels and benching as required; including necessary diversion during the progress of the work; making good all work disturbed.				
A	1 nr 225 mm diameter pipe; connection at average 1500m below existing cover level to existing manhole. (Ref Existing SWMH adjacent to SWMH 03)	nr	1		
B	Extra over last for surface water connection to existing manhole is in existing roadway	nr	1		
C	1 nr 225 mm diameter pipe; connection with saddle connection at average 2000m below existing cover level to existing manhole. (Ref SWMH 01)	nr	1		
D	Extra over last for saddle connection to existing surface water pipe is in existing roadway	nr	1		

	(50.2) SITE SERVICES MAINLY PIPED AND DUCTED (Surface Water) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Outside the Boundary of the Building and Within the Boundary of the Site				
	Existing Services				
A	Particulars of all known existing services will be indicated to the Contractor on site. However, Contractors shall be entirely responsible for location the positions of all services and will be required to carry out on-site surveys including all necessary investigation pits/hand digging to determine location/route of all underground services, in grass and tarmacadam areas, together with tracing routes of overhead services, using his best endeavors to determine the position of all existing services, with results of the survey to be handed over to the Engineer prior to starting works on-site. The Contractor shall make good at his own expense, any damage whatsoever to existing services to the complete satisfaction of and in accordance with the Employers Representitve and to the satisfaction of the Statutory Authority concerned and shall keep the Employer indemnified at all times from claims in connection with the damage. All services that are encountered during the excavation, shall be adequatley supported and protected. Existing sewers and drains shall not be used for discarging of ground water from excavations without writted concent. No drain or pipe of any description shall be disturbed until it has been inspected. The Contractor shall also to ensure that services of adjoining Buildings are to remain operational throughout the Contract.	item	1		

	(50.2) SITE SERVICES MAINLY PIPED AND DUCTED (Surface Water) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Outside the Boundary of the Building and Within the Boundary of the Site				
	Survey of Existing Drainage System				
A	The Contractor shall undertake a CCTV survey of the existing drainage system serving prior to commencement of the works, and shall present same with an associated Report to the ER and Employers Consultant Engineer prior to commencement of the works. The Contractor shall allow for all associated costs for same against this item.	Item	1		
	Maintaining Existing Drains				
B	The Contractor shall allow for maintaining existing drainage during the course of the works.	item	1		
	Road Opening Licence				
C	The Contractor is to allow for all costs associated with Road Opening Licence including Local Authority Fees	item	1		
	Work outside the Boundary of the Site				
D	The Contractor shall note that within the measured sections of the Bill of Quantities Works outside the boundary may not have been specifically stated or described or included for seperatley. In such instances, the contractor is deemed to have included here against this item or within his rates generally for all costs associated with such works.	item	1		
	Protection				
E	Protect all existing services	item	1		
F	Protect all adjoining buildings	item	1		
G	Maintain in operation all existing services	item	1		

	(50.2) SITE SERVICES MAINLY PIPED AND DUCTED (Surface Water) (Cont)				
	(Cont) DRAINAGE:				
	TESTING & COMMISSIONING				
	Testing, sterilisation and commissioning (after completion of the works, and prior to Substantial Completion)				
	New Drainage System				
A	Allow for cleaning out all new drains, removal and disposal of all waste/rubble, and necessary making good upon completion.	item	1		
B	Allow for testing, sterilisation and commissioning drainage to the satisfaction of the Engineer and the Local Authority.	item	1		
C	Allow for CCTV surveys of all completed drains and submit same together with a Report to the Engineer for review prior to Substantial Completion	item	1		
D	Allow for all necessary retesting, and CCTV surveys and associated Reports, as required.	item	1		
	Existing Drainage System				
E	Allow for cleaning out all existing drains, removal and disposal of all waste/rubble, and necessary making good upon completion.	item	1		
F	Allow for testing, sterilisation and commissioning drainage to the satisfaction of the Engineer and the Local Authority.	item	1		
G	Allow for CCTV surveys of all existing drains and submit same together with a Report to the Engineer for review prior to Substantial Completion	item	1		
H	Allow for all necessary retesting, and CCTV surveys and associated Reports, as required.	item	1		

(50.2) SITE SERVICES MAINLY PIPED AND DUCTED (Surface Water) (Cont)

COLLECTION

Page No. BQ/428	NIL
Page No. BQ/429	NIL
Page No. BQ/430	NIL
Page No. BQ/431	NIL
Page No. BQ/432	NIL
Page No. BQ/433	NIL
Page No. BQ/434	NIL
Page No. BQ/435	NIL
Page No. BQ/436	NIL
Page No. BQ/437	NIL
Page No. BQ/438	NIL
Page No. BQ/439	NIL
Page No. BQ/440	NIL
(50.2) SITE SERVICES MAINLY PIPED AND DUCTED (Surface Water) Carried to Summary	**NIL**

	(50.3) SITE SERVICES MAINLY PIPED AND DUCTED (Watermain)				
	(50.3) SITE SERVICES MAINLY PIPED AND DUCTED (Watermain)				
	DRAINAGE:				
A	For detailed description of materials and workmanship see drawings, sketches and specifications.	Note			
B	The Contractor is deemed to have visited the site, inspected both the site and all available information to carefully determine locations of all existing services, adjoining buildings and other constraints prior to commencing work.	Note			
	Below Ground				
	The Following Work is Outside the Boundary of the Building (but within the main site boundary)				
	Excavate trenches; backfilling with hardcore Clause 808 granular fill material to TII SRW, all in accordance with , carting surplus excavated material off site to a tip provided by the contractor; compacting in 150 mm layers all as per Engineers Specification as outlined on Drawing M237-KCSE-XX-XX-DR-C-0002 & 0021				
	Pipes; < or = 250 mm nominal diameter				
C	average depth 500 - 1000 mm - (Watermain 25mm dia. feed - outside building)	m	12		
D	average depth 500 - 1000 mm - (Watermain 25mm dia. feed - within building)	m	13		
E	average depth 1000 - 1500 mm - (Watermain 80mm dia. feed)	m	16		

	(50.3) SITE SERVICES MAINLY PIPED AND DUCTED (Watermain) (Cont)				
	(Cont) Below Ground				
	(Cont) The Following Work is Outside the Boundary of the Building (but within the main site boundary)				
	Extra over excavating trenches irrespective of depth				
A	breaking up existing hard surfaces in existing road area for trench comprising 1nr. 100mm diameter pipe (measured elsewhere); 40mm thick dense surface wearing course, on 60mm thick dense binder course, all to Clause 909 of Civil & Structural Specification, on 250mm thick clause 804 hardcore; including saw cutting both sides; temporary and full reinstatement to match existing.	m	8		
B	breaking up existing hard surfaces; existing concrete median surface and hardcore average 250 mm thick for installing new watermain hydrant; including saw cutting both sides; temporary and full reinstatement including kerbs to match existing, all to the full satisfaction of the Engineer.	Item	1		
C	around existing services crossing excavations; 225 mm diameter uPVC surface water drainage pipework.	nr	1		
D	around existing services crossing excavations; 4 x 100mm diameter uPVC electrical ducting	nr	1		
	Disposal				
E	ground water	item	1		
F	surface water	item	1		

	(50.3) SITE SERVICES MAINLY PIPED AND DUCTED (Watermain) (Cont)				
	(Cont) Below Ground				
	(Cont) The Following Work is Outside the Boundary of the Building (but within the main site boundary)				
	Granular material; imported; complying with WIS 4-08-02 and ign 4-08-01 granular material shall be 14mm to 5mm graded aggregate or 10mm single sized aggregate is EN 13242 including marker tape as per Engineers Specification as outlined on Drawing M237-KCSE-XX-XX-DR-C-0002 & 0021 and Irish Water- IW Standard Details				
	Beds and surrounds				
A	300 mm wide x 300 mm thick; pipe 25 mm nominal diameter - (Watermain outside building)	m	12		
B	300 mm wide x 300 mm thick; pipe 25 mm nominal diameter - (Watermain within building)	m	13		
C	600 mm wide x 400 mm thick; pipe 80 mm nominal diameter - (Watermain)	m	16		
	In-situ concrete to IS EN206; Grade C16/20; 20 mm maximum size limestone aggregate; piped wrapped in 1 layer of plastic; as per Engineers Specification shown on Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011 to the following pipes:				
	Beds and surrounds				
D	300 mm wide x 300 mm thick; pipe 25 mm nominal diameter - (Watermain outside building)	m	12		
E	300 mm wide x 300 mm thick; pipe 25 mm nominal diameter - (Watermain within building)	m	13		
F	600 mm wide x 400 mm thick; pipe 80 mm nominal diameter - (Watermain)	m	16		

	(50.3) SITE SERVICES MAINLY PIPED AND DUCTED (Watermain) (Cont)				
	(Cont) Below Ground				
	(Cont) The Following Work is Outside the Boundary of the Building (but within the main site boundary)				
	PE 80/100 SDR17 pipework and fittings, jointed in accordance with Irish Water and Engineers requirements; laid in trenches, all in accordance with manufactures instructions.				
	Pipes				
A	25 mm nominal diameter - (Watermain)	m	12		
B	25 mm nominal diameter - (Watermain)	m	13		
C	80 mm nominal diameter - (Watermain)	m	16		
	Extra over pipes on which they occur for				
D	fittings; 90 degree double flanged bends, 80 / 100 mm diameter - Watermain all as per IW Standard Details STD-W-19	nr	2		
E	fittings; DI double flanged raising piece, DN80 / 100 mm diameter riser pipe of suitable length to suit site conditions all as per IW Standard Details STD-W-19	nr	2		
F	fittings; stub flange with backing ring with fusion weld, 100 mm diameter - Fire Hydrant Watermain all as per IW Standard Details STD-W-19	nr	2		
G	fittings; P.E. Tee with flanged branch 100 mm diameter - P.E. Watermain Pipe branch connection all as per IW Standard Details STD-W-19	nr	2		
H	fittings; stub flange with backing ring with fusion weld, 100 mm diameter - P.E. Watermain Pipe branch connection all as per IW Standard Details STD-W-19	nr	2		
J	fittings; dismantling joint, 100 mm diameter - Fire Hydrant Watermain all as per IW Standard Details STD-W-19	nr	6		

	(50.3) SITE SERVICES MAINLY PIPED AND DUCTED (Watermain) (Cont)				
	(Cont) Below Ground				
	(Cont) The Following Work is Outside the Boundary of the Building (but within the main site boundary)				
	Fire Hydrants				
	Fire hydrants complete; include for all necessary gaskets, joint rings, nuts, bolts, flanged and socketed connectors and riser pieces and all necessary drilling etc. all as per IW Standard Details STD-W-19				
A	Standard Off Line Valve Hydrant for Polyethylene (P.E.) pipe including extension spindle as Engineers Drawing EW9016-08 and IW Standard Details STD-W-19	nr	1		
	Access Chambers as Engineers typical details				
	Access chambers; consisting of min 100mm grade C20 concrete in base slab and 150 mm thick cover slabs; 215 mm thick solid concrete blockwork; 215 x 75 mm precast lintols spaning over pipe opes; bed cover and frame in cement mortar; include for all necessary excavations and disposal surplus excavated material on site, backfilling, earthwork supports and formwork all as per IW Standard Details STD-W-19				
B	450 x 300 mm internal dimensions, minimum 900mm cover to top of pipe complete with surface box fire hydrant cover and frame to BS 750 bedded in sand cement mortar (Fire Hydrant)	nr	1		

	(50.3) SITE SERVICES MAINLY PIPED AND DUCTED (Watermain) (Cont)				
	(Cont) Below Ground				
	(Cont) The Following Work is Outside the Boundary of the Building (but within the main site boundary)				
	Extra over excavating irrespective of depth				
A	breaking up existing hard surfaces in tarmac carpark for chamber (measured elsewhere); 100mm thick tarmac surface carpark, on 300mm thick class 6f1 capping layer, on type 3 granular material clause 804 hardcore; including saw cutting all sides; temporary and full reinstatement to match existing. (Fire Hydrant Watermain to Existing Line)	nr	1		
	Grade 25N precast concrete marker posts, 300 mm wide x 100 mm thick x minimum 900 mm high above ground, reinforced with 3 No. 10 mild steel bars, including 300 mm x 300 mm Grade 20N concrete cube, necessary excavation and finishing exposed parts smooth				
B	for fire hydrant	nr	1		
	Sundries				
	Thrust blocks; triangular; concrete Grade C20; excavation, disposal of surplus spoil; levelling and compacting, formwork etc all as Engineers typical details				
C	750 x 750 x 750 mm deep (bends, tees etc.)	nr	5		
	Indicator posts and plates				
	Cast iron indicator plates, 200 x 200 mm, painted black with bitumastic paint, lettering in white				
D	for fire hydrant	nr	1		
	Marker tape and cable tile (metal detector tracing foil where PVC pipe used)				
	Warning marker tape				

	(50.3) SITE SERVICES MAINLY PIPED AND DUCTED (Watermain) (Cont)				
	(Cont) Below Ground				
	(Cont) The Following Work is Outside the Boundary of the Building (but within the main site boundary)				
	(Cont) Marker tape and cable tile (metal detector tracing foil where PVC pipe used)				
A	50 mm wide; laying in trenches	m	41		
	Work to existing main				
B	Carefully excavate by hand to locate existing watermain average depth approximately 1.50m deep; include for all necessary earthwork support, backfilling with hardcore upon completion; carting excavated material off site; new 80 mm diameter connection to existing 150mm daimeter watermain including all necessary fittings; include for all making good to finishes disturbed including reinstatement of tarmacadam roads and or footpaths as before described.	nr	2		

	(50.3) SITE SERVICES MAINLY PIPED AND DUCTED (Watermain) (Cont)				
	(Cont) Below Ground				
	(Cont) The Following Work is Outside the Boundary of the Building (but within the main site boundary)				
	Existing Services				
A	Particulars of all known existing services will be indicated to the Contractor on site. However, Contractors shall be entirely responsible for location the positions of all services and will be required to carry out on-site surveys including all necessary investigation pits/hand digging to determine location/route of all underground services, in grass and tarmacadam areas, together with tracing routes of overhead services, using his best endeavors to determine the position of all existing services, with results of the survey to be handed over to the Engineer prior to starting works on-site. The Contractor shall make good at his own expense, any damage whatsoever to existing services to the complete satisfaction of and in accordance with the Employers Representitve and to the satisfaction of the Statutory Authority concerned and shall keep the Employer indemnified at all times from claims in connection with the damage. All services that are encountered during the excavation, shall be adequatley supported and protected. Existing sewers and drains shall not be used for discarging of ground water from excavations without writted concent. No drain or pipe of any description shall be disturbed until it has been inspected. The Contractor shall also to ensure that services of adjoining Buildings are to remain operational throughout the Contract.	item	1		
	Testing and commissioning				
	Testing				
B	water testing and commissioning the watermain to the satisfaction of the Engineer.(1.5 times class pressure) - Watermain	item	1		

To Collection € **NIL**

	(50.3) SITE SERVICES MAINLY PIPED AND DUCTED (Watermain) (Cont)				
	(Cont) Below Ground				
	(Cont) The Following Work is Outside the Boundary of the Building (but within the main site boundary)				
	(Cont) Testing and commissioning				
A	air testing and commissioning the watermain to the satisfaction of the Engineer	item	1		
	Road Opening Licence				
B	The Contractor is to allow for all costs associated with Road Opening Licence including Local Authority Fees	item	1		
	Utility Company Attendances				
C	Allow for all necessary liaising with Irish Water, their subcontracts, and other utility companies, including all associated attendances, and co-ordination of same, making good to all structures and finishes disturbed.	item	1		
	Work outside the Boundary of the Site				
D	The Contractor shall note that within the measured sections of the Bill of Quantities Works outside the boundary may not have been specifically stated or described or included for seperatley. In such instances, the contractor is deemed to have included here against this item or within his rates generally for all costs associated with such works.	item	1		
	Protection				
E	Protect all existing services	item	1		
F	Protect all adjoining buildings	item	1		
G	Maintain in operation all existing services	item	1		

(50.3) SITE SERVICES MAINLY PIPED AND DUCTED (Watermain) (Cont)

COLLECTION

Page No. BQ/442	NIL
Page No. BQ/443	NIL
Page No. BQ/444	NIL
Page No. BQ/445	NIL
Page No. BQ/446	NIL
Page No. BQ/447	NIL
Page No. BQ/448	NIL
Page No. BQ/449	NIL
Page No. BQ/450	NIL

(50.3) SITE SERVICES MAINLY PIPED AND DUCTED (Watermain)
Carried to Summary **NIL**

	(70) SITE FITTINGS AND FURNITURE				
	SITE FITTINGS AND FURNITURE				
A	The Contractor shall note the position of all existing underground and overground services within and adjacent to the site.	Note			
B	The Contractor is strongly advised to visit the site to determine the exact extent of the works, as no claim shall be entertained at a later date for his/her failure to comply with same.	Item	1		
C	The Contractor shall note that all works outside the hoarding line will be under Permit. The Contractor is deemed to have taken cognisance of same in pricing in his tender, and is deemed to have included for all necessary costs associated with same against this item, or generally within his rates.	Item	1		
	FITTINGS:				
	Fittings: Fittings, Equipment and Furniture				
	Bollards - to Pavement for Protection of Pedestrians				
	Bollards Broxap or equivalent Mitred Top Sheffield Steel Bollard; 114mm diameter Grade 304 Stainless Steel with Brushed Finish, base plate anchor bolted to 400mm x 400mm x 400mm grade C40/32 concrete base (to BS 8500-2) with 1 layer of mesh 300mm below paving surface; including necessary excavation, disposal, formwork, assembled and erected; in accordance with manufacturers specifications all as per Architects Specification Q50/31, 80 & 85 and outlined on Architects Drawing ZZ-DR-A-1002				
D	1000mm high bollards laid along edge of concrete footpath	nr	17		

	(70) SITE FITTINGS AND FURNITURE (Cont)				
	(Cont) FITTINGS:				
	(Cont) Fittings: Fittings, Equipment and Furniture				
	Bollards - Collapsible to Delivery Yard				
	Bollards Broxap or equivalent Heavy Duty Removable Steel Bollard (Flat Top); 100mm x 100mm square with Polyester Powder-Coated Finish and Black & White Reflective Strips, base plate anchor bolted to 400mm x 400mm x 400mm grade C40/32 concrete base (to BS 8500-2) with 1 layer of mesh 300mm below paving surface; including necessary excavation, disposal, formwork, assembled and erected; in accordance with manufacturers specifications all as per Architects Specification Q50/31, 80 & 85 and outlined on Architects Drawing ZZ-DR-A-1002				
A	1100mm high bollards laid along entrance to the Delivery Yard	nr	6		

(70) SITE FITTINGS AND FURNITURE (Cont)				
COLLECTION				
Page No. BQ/452				NIL
Page No. BQ/453				NIL
(70) SITE FITTINGS AND FURNITURE Carried to Summary				**NIL**

	(00) DEMOLITIONS & ALTERATIONS (LINK CORRIDOR)				
	(00) DEMOLITIONS & ALTERATIONS (LINK CORRIDOR)				
	Information				
A	The Contractor is strongly advised to visit the site to determine the exact extent of the works, as no claim shall be entertained at a later date for his/her failure to comply with same.	item	1		
B	The Contractor shall note the position of all existing underground and overground services within the site.	Note			
C	All surplus material resulting from taking down must be segregated, removed and disposed off site in a proper safe manner to a Licensed facility. The Contractor shall include for all costs associated with same within his/her rates.	Note			
D	All new and existing timbers being refixed must be treated with preservative	Note			
E	Contractors must include for any temporary propping to existing services, plant and equipment to facilitate the works. Refer to Services Engineer for scope to be included.	Note			
F	The Contractor shall liaise with the Mechanical and Electrical Contractors regarding the programming/scheduling of their works associated with the decommissioning and removal for Mechanical and Electrical services, plant and equipment.	item	1		
G	Where on site fabrication or alteration is required to galvanized steelwork members, such as the addition of new weathering hats for weathering and the like, Where it is not feasible to remove such members for hot dipped galvanising an approciate paintwork specification to meet with the performance of a galvanised member will be required to meet Engineer Specification "Painting By Performance to IS EN ISO 12944: (C5 Environment)" for "touching up".	item	1		

	(00) DEMOLITIONS & ALTERATIONS (LINK CORRIDOR) (Cont)				
	(Cont) (00) DEMOLITIONS & ALTERATIONS (LINK CORRIDOR)				
	(Cont) Information				
A	The Contractor shall include for all demolition works, temporary support, protection of retained structures and services, and making good to existing elements affected by the Works.	item	1		
	Demolitions and Alterations				
	Cutting				
	Form new opening in existing internal blockwork wall; include for removal of existing wall and disposal off site, all necessary shoring, breaking through wall, forming jambs, inserting 2 nr. precast concrete lintels, adjustments and supports; making good all work disturbed to match existing.				
B	door ope size 1100 x 2100 mm in existing 215 mm thick blockwork wall	nr	1		
	Removing; doors				
	Carefully take down and remove from site existing internal doors complete with frames, architraves and liners etc and make good to finishes disturbed				
C	internal single door size aprox size 1000 x 2100 mm	nr	6		
	Removing; ceiling				
	Carefully take down and and remove from site existing ceilings and make good all work disturbed				
D	generally	m2	109		

	(00) DEMOLITIONS & ALTERATIONS (LINK CORRIDOR)	(Cont)			
	(Cont) (00) DEMOLITIONS & ALTERATIONS (LINK CORRIDOR)				
	(Cont) Demolitions and Alterations				
	Removing; floor finishes				
	Carefully take up, remove and dispose of the following existing floor finishes from the existing concrete floor; thoroughly clean, dry and remove all laitances, traces of dirt, grease and contaminants, including for the protection and all necessary making good to all structures and finishes disturbed.				
A	generally	m2	109		
	Removing; blockwork walls				
	Carefully take down and remove from site existing internal blockwork wall; include for saw cutting; all necessary shoring and propping of the existing as required to facilitate the works; removal of the existing wall and disposal off site; allow for protecting and making good any existing services and finishes disturbed during the course of the works and allow for repair or replacing as necessary to match the existing; as per Architects Drawing Nr. 1050				
B	215mm thick wall; height 3450mm	m	6		

(00) DEMOLITIONS & ALTERATIONS (LINK CORRIDOR) (Cont)				
COLLECTION				
Page No. BQ/455				NIL
Page No. BQ/456				NIL
Page No. BQ/457				NIL
(00) DEMOLITIONS & ALTERATIONS (LINK CORRIDOR) Carried to Summary				**NIL**

	(10) BUILDING SUBSTRUCTURE (LINK CORRIDOR)				
	(10) BUILDING SUBSTRUCTURE (LINK CORRIDOR)				
A	It will be deemed that the Contractor has inspected the drawings and site and has consulted available information concerning sub-soil conditions before submitting his tender.	item	1		
B	The contractor's attention is drawn to the fact that earthwork support is deemed to be included in Excavation and Earthworks under the Agreed Rules of Measurement.	item	1		
C	Where concrete in foundations, beds etc. is measured as cast against the faces of the excavations; and should the Contractor opt to use shuttering the following rates for concrete shall be deemed to include for all such shuttering.	item	1		
D	By pricing these works the Contractor will be held to have visited the site and formed his own opinion as to the extent of the actual work involved, including for all temporary works over and above those measured below, and for monitoring the adjacent buildings for both movement and vibration, as necessary to properly carry out the works.	item	1		
E	The quantities for excavation items are based on the volume as per the substructure design and no allowance is made for overdig, the contractor's operational requirements or temporary works when excavating other than as required in the Agreed Rules of Measurement e.g. working space and formwork to bulk concrete blinding.	item	1		

	(10) BUILDING SUBSTRUCTURE (LINK CORRIDOR) (Cont)				
	(Cont) (10) BUILDING SUBSTRUCTURE (LINK CORRIDOR)				
A	The Contractor shall ensure that he has allowed either in the preliminaries section or in the various rates in his pricing document for all costs associated with achieving the airtightness requirements. It should be noted that taping, sealants and seals are generally not specifically itemised in the pricing document but should be included for in the rates for the various elements or in the preliminaries section.	item	1		
B	Starting level for measurement purposes is taken from formation level. All works in association with works to formation are taken within the Prepared Site Element of the Bill of Quantities.	item	1		
C	For details of ground conditions see the Site Investigation Report	item	1		
D	The Contractor shall have overall responsibility for all necessary tempory works required for the excavation / protection / maintenance of adjacent embankments	item	1		
E	The Contractor shall note the position of all existing underground and overground services within and adjacent to the site.	item	1		
F	Contractor to undertake site investigation at formation level with 10nr. Dynamic cone penetration (DCP) test to verify ground bearing pressure of 150kN/m2; as per Engineers Drawings Nr. 0200	item	1		
G	The Contractor shall be deemed to have allowed for all excavation, filling, compaction and ground preparation works in accordance with the specification and site conditions, including any measures required to achieve formation levels and bearing capacity.	item	1		

To Collection € **NIL**

	(10) BUILDING SUBSTRUCTURE (LINK CORRIDOR) (Cont)				
	EXCAVATION AND EARTHWORKS				
	Excavation				
	Excavation; at formation level; depth				
A	< or = 2.00m in isolated pits - 4 nr. locations	m3	43		
B	< or = 2.00m in soft spots	m3	1		
	Extra over excavating items irrespective of depth for:				
C	breaking out existing 275mm thick reinforced concrete floor; for new isolated pads, making good areas disturbed (within the existing building) - 4 nr locations	m2	19		
D	saw cutting to last existing 275mm thick reinforced concrete floor, making good areas disturbed - 4 nr locations	m	36		
E	The Contractor shall include here against this item for any overdig and associated reinstatement (in excess of net foundation plan size) he deems necessary to complete the works	item	1		
F	around existing services; parallel to excavations	m	3		
G	around existing services crossing excavations	nr	2		
H	being next to existing buildings	m2	19		
J	extra breaking out reinforced concrete foundations	m3	2		
	Disposal of water				
K	surface	item	1		
L	ground	item	1		
	Disposal of excavated material				
M	off site	m3	43		

	(10) BUILDING SUBSTRUCTURE (LINK CORRIDOR) (Cont)				
	(Cont) EXCAVATION AND EARTHWORKS				
	(Cont) Excavation				
	Filling				
	Hardcore filling to be SR21-Annex 1 hardcore material; T.2 Permeable:4/40mm Gas Permeable layer (Radon) Min depth 200mm.; Radon sump to be positioned in this layer; laid and compacted in 225mm layers as per Engineers Specification and Drawings				
	To excavations				
A	> 250mm	m3	3		
	To make up levels under slab				
B	> 250mm (in isolated pits - 4 nr. locations)	m3	6		
	T.3 Blinding: 0/4mm blinding layer for T.2 max depth 50mm max. This layer is to protect radon membrane from damage; laid on hardcore base as per Engineers Specification and Drawings				
C	50 mm thick (in isolated pits - 4 nr. locations)	m2	19		
	CONCRETE WORK				
	Insitu Concrete				
	Plain, in-situ concrete, grade C16/20 (IS EN 206), poured on or against earth or unblinded hardcore as outlined in Engineers Specification				
D	Blinding below isolated pads - 4 nr.	m3	19		
E	Soft Spots	m3	1		
	Reinforced, In-situ concrete, grade C30/37 (to ISEN 206), exposure class XC2 / XC4; minimum cement content of 320 kg/m3; poured on or against earth or unblinded hardcore and well vibrated around reinforcement in:				
F	Isolated foundations - 4nr	m3	3		

	(10) BUILDING SUBSTRUCTURE (LINK CORRIDOR) (Cont)				
	(Cont) CONCRETE WORK				
	(Cont) Insitu Concrete				
	(Cont) Reinforced, In-situ concrete, grade C30/37 (to ISEN 206), exposure class XC2 / XC4; minimum cement content of 320 kg/m3; poured on or against earth or unblinded hardcore and well vibrated around reinforcement in:				
A	Beds, > 150mm (in isolated pits - 4 nr. locations)	m3	6		
B	Column casings, cross sectional area > 0.10m2	m3	2		
	Sundries				
	Designed joints				
	Form isolation joint to concrete slab and column encasement, 10mm Flexcell filled with two part polysulphate sealant as per Engineers Drawing DR-0111				
C	depth 150 - 300mm	m	15		
	Formed isolation dowelled joint in concrete slab with existing; with 600mm long stainless steel 12mm bars drilled in and chemically fixed into existing slab edge at 400mm centres with Hilti Hit HY150 chemical grout, debonding sleeve at one end; 10mm Flexcell filled with two part polysulphate sealant				
D	depth 150 - 300mm (in isolated pits - 4 nr. locations)	m	36		
	Formed isolation dowelled joint in concrete foundation with existing; with 600mm long stainless steel 12mm bars drilled in and chemically fixed into existing slab edge at 400mm centres with Hilti Hit HY150 chemical grout, debonding sleeve at one end; 10mm Flexcell filled with two part polysulphate sealant				
E	depth 150 - 300mm (in isolated pits - 4 nr. locations)	m	36		
F	depth 150 - 300mm (in isolated pits - 4 nr. locations)	m	6		

	(10) BUILDING SUBSTRUCTURE (LINK CORRIDOR) (Cont)				
	(Cont) CONCRETE WORK				
	(Cont) Sundries				
	Surface finishes				
A	power floating beds (in isolated pits - 4 nr. locations)	m2	19		
	Reinforcement				
	Reinforcement bars; high yield type 2 deformed steel bars to BS 4449 and BS 8666				
	Bar; straight or bent (Spacers and chairs at contractors discretion)				
B	nominal size > 12 < or = to 25 mm diameter (Pads as per Engineers rebar schedules)	t	0.25		
	Reinforcement mesh fabric; BS 4483;				
	Reference A393 (6.16kg/m2); 300mm minimum side and end laps				
C	horizontal to slab (in isolated pits - 4 nr. locations)	m2	38		
	Reference D49 (0.77kg/m2); 300mm minimum side and end laps				
D	vertical wrapping around structure members at column locations	m2	10		
	Formwork				
	Formwork surface finish to concrete; Type "Ordinary" finish as defined in Section 1.9 of the National Structural Concrete Specification (NSCS) 4th edition				
	Sides of foundations				
E	height, > 250 < or = to 500mm, to isolated pad foundations	m	71		

	(10) BUILDING SUBSTRUCTURE (LINK CORRIDOR) (Cont)				
	(Cont) CONCRETE WORK				
	(Cont) Formwork				
	Formwork surface finish to concrete; Type "Plain" finish as defined in Section 1.9 of the National Structural Concrete Specification (NSCS) 4th edition				
	Columns				
A	isolated, rectangular	m2	10		
	ROOFING CLADDING AND WATERPROOFING				
	Mastic Asphalt, Waterproof and Gas Proof Non Metal Flexible Sheet Coverings				
	Reinforced polyethylene gas retardant / damproof membrane with HPDE grid; 0.40mm thick, 407 g/m2 weight, reduce and maintain concentration levels below 200 Bq/m3; lapped 150mm at all joints on sand blinded base; sealed with two strips of 30mm radon resistant sealant tape and mastic sealer; all in accordance with Architects Specification (measured nett).				
	Gas Proofing				
B	horizontal, girth > 300mm, including for all lapping, taping and sealing (in isolated pits - 4 nr. locations)	m2	38		
C	extra over for taping and sealing to existing radon barrier	m	71		
	Sundries.				
	Seal around service pipe penetrations with universal approved top hat pipe seals; fixed with retension clips and 30mm radon resistant sealant tape; all in accordance manufactures written instructions.				
D	holes, < or = to 0.50m girth	nr	4		

	(10) BUILDING SUBSTRUCTURE (LINK CORRIDOR) (Cont)				
	WOODWORK:				
	Ironmongery, Accessories and Sundries				
	Insulation				
	150mm thick rigid PIR foil faced floor insulation with maximum thermal conductivity of 0.022 w/mK laid in 2 nr 100mm layers and butt jointed with taped joints as per manufactures instructions in preparation for the concrete slab, all as per Specification				
A	horizontal, girth >300mm (in isolated pits - 4 nr. locations)	m2	38		

To Collection € **NIL**

(10) BUILDING SUBSTRUCTURE (LINK CORRIDOR) (Cont)

COLLECTION

Page No. BQ/459				NIL
Page No. BQ/460				NIL
Page No. BQ/461				NIL
Page No. BQ/462				NIL
Page No. BQ/463				NIL
Page No. BQ/464				NIL
Page No. BQ/465				NIL
Page No. BQ/466				NIL
(10) BUILDING SUBSTRUCTURE (LINK CORRIDOR) Carried to Summary				**NIL**

	(22) INTERNAL WALLS PARTITIONS (LINK CORRIDOR)				
	(22) INTERNAL WALLS PARTITIONS				
A	The Contractor shall allow for full coordination and integration of all door systems, including fire-rated doors, access-controlled doors, and doors connected to fire alarm and security systems, including all associated wiring, interfaces, controls, ironmongery and commissioning.	Item	1		
	WOODWORK:				
	Structural and first fixings				
	The following shall be sawn white deal softwood unless otherwise stated; structural grade Class C; vac - vac treated; include for all necessary fixings.				
	First fixings; grounds				
B	70 x 50 mm around perimeter of door & screen	m	64		
C	70 x 50 mm fitted between vertical metal studs	m	49		
D	70 x 50 mm long shot fixed to concrete floor between vertical channel	m	36		
	Boarding and Second Fixings				
	WBP plywood; 18 mm thick; fixed to metal studs at 600 mm centres; include for all necessary fixings.				
	Boarding and sheeting; walls				
E	> 300 mm wide; vertically.	m2	59		

	(22) INTERNAL WALLS PARTITIONS (LINK CORRIDOR) (Cont)				
	FLOOR, WALL AND CEILING FINISHINGS:				
	Stud Partitions				
	Hot dipped galvanized mild steel stud partition system; consisting of stud partition system consisting of 72 S 50 mm vertical studs at 600 mm centres; fitted between and including 72 C 50 mm wide deep flange floor and ceiling channels, include for all necessary intermediate noggings, bearers, GSF1 fixing straps and 99FC50 channels; assemble, erect, plug and screw fix to concrete floor slab at base and underside of concrete floor slab at top; leave ready for plasterboard (plasterboard m/e); as per Architects Details on Drawings Nr. 6002 and Specification Section K10.				
	Partitions				
A	height 3450 mm (IWS-02 & 03 - ground floor)	m	22		
	Extra over for				
B	angles to partitions	nr	1		
C	three-way intersection	nr	3		
D	abutments with other finishes	nr	5		
E	forming opening; 1000 mm wide x 2100 mm high (door).	nr	2		
F	forming opening; 1450 mm wide x 2100 mm high (door).	nr	2		
	Partitions				
G	height average between 3350 mm (IWS-02 & 03 - first floor)	m	27		
	Extra over for				
H	three-way intersection	nr	4		
J	abutments with other finishes	nr	5		
K	forming opening; 1500 mm wide x 2100 mm high (door).	nr	2		

	(22) INTERNAL WALLS PARTITIONS (LINK CORRIDOR)	**(Cont)**			
	(Cont) FLOOR, WALL AND CEILING FINISHINGS:				
	(Cont) Stud Partitions				
	(Cont) Extra over for				
A	forming opening; 1125 mm wide x 2475 mm high (screen).	nr	5		
	Shaftwall CH stud system hot dipped galvanized mild steel; consisting of stud partition system consisting of CH90 / 0.7mm (B) studs at 600 mm centres; fitted between and including flange floor and ceiling channels, include for all necessary intermediate noggings; starter channels, fixing angle, 6mm bead of acoustic sealant, silicone, assemble, erect, plug and screw fix to top of concrete blocwork at base and underside of roof cladding at head; leave ready for plasterboard (plasterboard m/e); as outlined in Architects Specification K10				
	Partitions				
B	height average between 3450 / 3850 mm (IWS-05 - first floor)	m	6		
	Extra over for				
C	angles to partitions	nr	2		
D	abutments with other finishes	nr	2		
	Labours				
	Making good and / or cutting around obstructions				
E	girth < or = to 300 mm	nr	15		
F	girth 300 mm - 1.00m	nr	10		
	Sundries to partitions:-				
G	Seal faces around perimeter of metal stud partition system at junction with concrete / blockwork with one part water based acrylic acoustic intumescent sealant; as per Architects Specification K10	m	192		

	(22) INTERNAL WALLS PARTITIONS (LINK CORRIDOR)	**(Cont)**			
	(Cont) FLOOR, WALL AND CEILING FINISHINGS:				
	(Cont) Stud Partitions				
	Fire stopping				
A	70 mm wide x 19 mm thick coreboard firestop with firestrip forming deflection head between top of stud partition and underside of roof cladding / precast concrete floor; to achieve 30 / 30 rating; include for one part water based acrylic acoustic intumescent seal both sides; as per Architects Details on Drawing and Architects Specification	m	55		
	Insulation				
	Mineral wool acoustic insulation (16kg/m3); but jointed tightly packed into partition wall cavity between vertical studs and noggings etc, including taping / fastening to retain insulation and prevent slumping; as per Architects Details on Drawing Nr. A641 and Architects Specification				
B	50 mm thick	m2	141		
	Access panels				
C	Plaster finished access panel; 60 / 60 fire rated; size 300 x 300 mm; 1.2mm zintec electro galvanised mild steel frame and door with 50mm wide profile and perforated frame finished in polyester powder coat in selected RAL;door tray shall encapsulate 1 layer of 12.50mm plasterboard with a skim finish; door to include metal earthing tags; factory fitted piano hinge / removable plate with inserted steel pins; square drive operated lock with consealed keyhole; screw fixed frame to ceiling and apply 6mm continuous intumescent acoustic mastic sealant around perimeter of of frame; include for all necessary additional supports, fixings and hangers; in accordance with Manufacturers Instructions	nr	2		

(22) INTERNAL WALLS PARTITIONS (LINK CORRIDOR) (Cont)				
COLLECTION				
Page No. BQ/468				NIL
Page No. BQ/469				NIL
Page No. BQ/470				NIL
Page No. BQ/471				NIL
(22) INTERNAL WALLS PARTITIONS (LINK CORRIDOR) Carried to Summary				**NIL**

	(23) FLOORS AND GALLERIES (LINK CORRIDOR)				
	(23) FLOORS AND GALLERIES (LINK CORRIDOR)				
	CONCRETE WORK:				
	In-Situ Concrete				
	Reinforced, In-situ concrete, grade C30/37 (to ISEN 206), exposure class X0 & XC2 / XC4; minimum cement content 320 kg/m3; filled in between formwork and well vibrated around reinforcement in:				
	Slabs on decking				
A	> 150 mm	m3	7		
	Sundries				
	Designed joints				
	Formed isolation joint to concrete slab with approved joint filler to a depth of 250mm, mesh to have 50mm cover filled with 10mm proporietary joint filler sealed with a bitumen sealent.				
B	150- 300mm deep (200mm thick slab) at junction with walls	m	21		
	Surface Finish				
C	Powerfloat unset concrete floors to approval.	m2	38		
	Labours				
	Forming holes, recesses and the like; including all necessary formwork				
D	100 mm diameter opening	nr	1		
E	150 mm diameter opening	nr	1		

	(23) FLOORS AND GALLERIES (LINK CORRIDOR) (Cont)				
	(Cont) CONCRETE WORK:				
	(Cont) Sundries				
	Firestopping to holes				
	Ablative coated batt fire stop to openings; 50mm thick; consisting of high density 160 kg/m3 stone wool core, precoated on both sides with high preformace ablative coating; clean opening and remove any dust and debris, cut to shape aand tightly fit and sealing around edge of opening and service penitration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Specification				
A	100 mm diameter opening	nr	1		
B	150 mm diameter opening	nr	1		
	Reinforcement				
	Reinforcement mesh fabric; BS 4483;				
	Reference A393 (6.16kg/m2); 300mm minimum side and end laps				
C	horizontal to floor	m2	38		
	Formwork				
	Formwork surface finish to concrete; Type "Special" classification as defined in Section 8.6 of the National Structural Concrete Specification (NSCS) 4th edition				
	Edges of suspended slabs				
D	< or = to 250mm high	m	36		
	Backpropping of Upper Floor Slabs				
E	Allow for Backpropping of Slab to Engineers Requirements all as Detailed on Engineers drawings and specification	item	1		

	(23) FLOORS AND GALLERIES (LINK CORRIDOR) (Cont)				
	ROOFING, CLADDING AND WATERPROOFING:				
	Rigid Sheet Coverings and Decking				
	Decking				
	ComFlor 80+ x 1.2mm thick profiled steel floor decking; lapped, jointed and fixed in accordance with the manufacturers instructions; fixing to steel supports; drilling and tapping steelwork as necessary				
	Slabs on decking				
A	horizontal, > 300mm	m2	38		
B	Extra over last for taping and sealing all side and end laps of the decking	m2	38		
	Allow shear studs on steelwork for decking connection;				
C	19mm diameter x 100mm high Nelson type through deck shear studs to EN 1994-1-1, welded to beam flange at stated centres	nr	50		
	STRUCTURAL:				
	Steelwork				
	The following shall be fabricated steel grade S355 to BS EN 10025 hot rolled sections and plates; all joints V-butt welded joints prepared and ground flush; include for all site welding and adjustments; shot blast clean to remove all traces of loose rust, grit etc; apply blast primer at the workshop, site holding primer and spot prime after erection; include for all site fixing, forming mortice and all necessary bolts, all to the Engineers Drawings, Specification and approval				
	Fabricated members; beams; > 25 < or = to 50 kg/m member profile.				
D	305 x 165 x 46 kg/m UB (B02)	t	1.56		
	Fabricated members; beams; > 50 < or = to 100 kg/m member profile.				

	(23) FLOORS AND GALLERIES (LINK CORRIDOR) (Cont)				
	(Cont) STRUCTURAL:				
	(Cont) Steelwork				
	(Cont) The following shall be fabricated steel grade S355 to BS EN 10025 hot rolled sections and plates; all joints V-butt welded joints prepared and ground flush; include for all site welding and adjustments; shot blast clean to remove all traces of loose rust, grit etc; apply blast primer at the workshop, site holding primer and spot prime after erection; include for all site fixing, forming mortice and all necessary bolts, all to the Engineers Drawings, Specification and approval				
A	406 x 178 x 54 kg/m UB (B09)	t	0.38		
	Fabricated members; square hollow sections; < or = to 25kg/m member profile.				
B	100 x 100 x 8 x 22.6 kg/m SHS (C04)	t	0.47		
	Fabricated members; fittings				
C	allow for all necessary caps, bases, haunches, gussets, end plates, splice plates, cleats, brackets, stiffeners, distance pieces and the like as required.	t	0.36		
	Protective coatings				
D	Surface treatment off site; shot blast to BS7079 and cleaning to remove all traces of loose rust, grit etc to SA 2.5 of Sweedish Standard IS EN ISO 8501, 8502, 8504 and apply airless spray coat of two pack epoxy zinc rich primer to a dry film thickness of 25 microns, spot priming after fabrication, and apply one coat high build zinc Phosphate Epoxy primer to a dry film thickness of 75 microns (and apply a second cost of high build epoxy MIO to a dry film thickness of 100microns to fully/partially external steel), to Engineers Specification and approval	t	2.75		

	(23) FLOORS AND GALLERIES (LINK CORRIDOR) (Cont)				
	(Cont) STRUCTURAL:				
	(Cont) Steelwork				
	(Cont) Protective coatings				
A	extra over for surface treatment off site; shot blast and cleaning to remove all traces of loose rust, grit etc to Sa 2.5 standard of cleanness as specified in ISO 8501-1, and apply one full coat of two pack epoxy holding (pre-fabrication) primer to NDFT 25 microns, one full coat high build two pack epoxy zinc rich phosphate modified alkyd primer to NDFT 80 microns, apply one or more coats of intumescent painting to meet the required NDFT to achieve 60 minute fire protection in accordance with IS EN ISO 12944 and to Engineers Specification and approval (62m2)	t	2.75		
	Holding down bolt assemblies.				
B	Ref. C04 base plate bolted to reinforced concrete base with 4 no grade 8.8 M20 holding down bolts (60mm min treaded protection), minimum 320mm embedment into pads 500mm deep bedded on 20mm non shrink 5 star grout , 70 x 70 x 6mm RSA steel restraints to bolts set in 75mm diameter steel tubes grout all as detailed on Engineers Drawing Nr. 0110	nr	6		
	Shimming and grouting.				
C	Grout under 500 x 500mm 12mm thick base plates with 25 mm thick non shrink grout; include for all necessary formwork etc. (Column C4) as per Engineers Drawing Nr. 0110	nr	6		

	(23) FLOORS AND GALLERIES (LINK CORRIDOR) (Cont)				
	PAINTING AND DECORATING:				
	Painting				
	Surface treatment on site, after erection, touch up and patch prime apply Shot blast to Sa 2.5 (maximum surface profile 100 microns) and paint with Hempadur Primer 1557 (Hempels Industrial Coatings) to a minimum dry film thickness of 50 microns. (b) Apply one intermediate coat of Hampadur LTC 4514 to a minimum dry film thickness of 200 microns. (c) Apply one top coat of Hempathene Enamel 5510 to a minimum dry film thickness of 50 microns to Architects colour requirement.by airless spray to structural steelwork and to Engineers Specification and approval				
	Structural metalwork				
A	general surfaces; girth > 300 mm girth	item	1		
	Surface treatment on site, after erection, touch up and patch prime apply; shot blast and cleaning to remove all traces of loose rust, grit etc to Sa 2.5 standard of cleanness as specified in ISO 8501-1, and apply one full coat of two pack epoxy holding (pre-fabrication) primer to NDFT 25 microns, one full coat high build two pack epoxy zinc rich phosphate modified alkyd primer to NDFT 80 microns, apply one or more coats of intumescent painting to meet the required NDFT to achieve 60 minute fire protection in accordance with IS EN ISO 12944 and to Engineers Specification and approval				
	Structural metalwork				
B	general surfaces; girth > 300 mm girth	item	1		

(23) FLOORS AND GALLERIES (LINK CORRIDOR) (Cont)

COLLECTION

Page No. BQ/473	NIL
Page No. BQ/474	NIL
Page No. BQ/475	NIL
Page No. BQ/476	NIL
Page No. BQ/477	NIL
Page No. BQ/478	NIL

(23) FLOORS AND GALLERIES (LINK CORRIDOR)
Carried to Summary **NIL**

	(32) INTERNAL WALL COMPLETIONS (LINK CORRIDOR)				
	INTERNAL WALL COMPLETIONS				
A	The Contractor shall allow for full coordination and integration of all door systems, including fire-rated doors, access-controlled doors, and doors connected to fire alarm and security systems, including all associated wiring, interfaces, controls, ironmongery and commissioning.	Item	1		
B	The Contractor shall include for all specialist joinery and glazed screen systems, including fire-rated glazed screens, manifestation, interfaces with structure and services, and all associated supports, fixings and making good.	Item	1		
	WOODWORK:				
	Structural And First Fixings				
	The following shall be in wrot vac vac treated red deal unless otherwise stated;; plugged and screwed to composite metal deck/in situ concrete floor; include for all necessary fixings, counter sinking and making good with matching pellates; protected for finishes:				
	First fixings; fixing grounds				
C	32 x 50 mm	m	80		
	Boarding and second fixings				
	WBP plywood; 15 mm thick; fixed to blockwork wall; include for all necessary fixings.				
	Boarding and sheeting; walls				
D	< or = to 300 mm wide, around door openings & glazed screens	m	80		

	(32) INTERNAL WALL COMPLETIONS (LINK CORRIDOR)	**(Cont)**			
	(Cont) WOODWORK:				
	(Cont) Boarding and second fixings				
	The following shall be painted mdf (moisture resistant) in compliance with EN 622 parts 1 & 5 unless otherwise stated; plugged and screwed to blockwork / concrete and stud partitions; include for all necessary fixings and making good to punch holes; as per Architects Specification on Drawing 25002-AFEC-00-ZZ-SH-A-7001				
	Second fixings; architraves				
A	100 x 25 mm, rebated MDF	m	100		
	Second fixings; hardwood quadrants				
B	25 x 25 mm to vision panels & glazed Screens	m	119		
	Composite items; Doors				
	FD30S: 30 minutes integrity rating in accordance with BS 476 part 8, 20 and 22 and to have a leakage rate not exceeding 3m3 / hour when tested at 25 Pa under BS 476 Section 31.1. 30 minute fire door to have a min. density of 550 kg/cubic metre.	Note			
	All fire doors and screens shall be tested to B.S.476 p.8.1972, entire door sets to be installed in accordance with Test Certificate issued, a copy of which shall be supplied to the Architect, fire doors shall carry Trada fire door codes for various ratings	Note			
	The following door sets and screens are referenced by types to the Architects drawings mentioned above and schedules and should be read in conjunction with the Architects Specification	Note			

	(32) INTERNAL WALL COMPLETIONS (LINK CORRIDOR)	(Cont)			
	(Cont) WOODWORK:				
	(Cont) Composite items; Doors				
	Non-Fire Rated Doors				
	KCC Group / Carrolls Joinery 44mm thick Solid - core flush varnished paint grade door; internal single action; with hardwood European Oak veneer (or equivalent) with mechanical strength to 1To BS EN 1192 Class 2-3; Acoustic and Thermal Performances to manufacturers standards; with and including lipping to all edges 44 x 8 mm thick; faced both sides with 5mm hardwood veneered plywood finished as full stain system, as spec section M60; neatly cut and fitted to margins; all glued together and hydraulically pressed to approval nylon sweeps as required to door frame and leaves; (vp glazing and ironmongery measured separately); all in accordance with the Architects Specification as per Drawing 25002-AFEC-00-ZZ-SH-A-7001				
	Door Type 3 (INT-D03) - Door Nr 5				
	Composite items; single doors				
A	to suit overall structural opening size 1010 x 2110mm high; Solid Single Door size; 925 x 2070 mm high; 44 mm thick;	nr	1		
	Door Type 4 (INT-D04) - Door Nr 6 & 7				
	Composite items; single doors				
B	to suit overall structural opening size 1010 x 2110mm high; Solid Single Door size; 925 x 2070 mm high with vision panel; size 546mm x 1350mm high; 44 mm thick;	nr	2		

	(32) INTERNAL WALL COMPLETIONS (LINK CORRIDOR)	(Cont)			
	(Cont) WOODWORK: **(Cont) Composite items; Doors** 30 Minute Fire Rated Doors KCC Group / Carrolls Joinery 44mm thick Solid - core flush varnished paint grade door; internal single action; with hardwood European Oak veneer (or equivalent) with mechanical strength to 1To BS EN 1192 Class 2-3; Acoustic and Thermal Performances to manufacturers standards; with and including lipping to all edges 44 x 8 mm thick; faced both sides with 5mm hardwood veneered plywood finished as full stain system, as spec section M60; neatly cut and fitted to margins; all glued together and hydraulically pressed to approval intumescent strips, smoke seals and nylon sweeps as required to door frame and leaves; with and including 1 number glazed vision panels (various sizes); 20 x 15 mm splayed and rebated wrot hardwood glazing beads fixed, sunk, screwed and pelleted to both sided of door and bedded in intumescent paste; 20 x 4 mm 100 PSA fire seal strips to both sides of glazing to achieve 30 minute fire rating (vp glazing and ironmongery measured separately); all in accordance with the Architects Specification as per Drawing 25002-AFEC-00-ZZ-SH-A-7001 Door Type 2 (INT-D02) - Door Nr 3, 4 & 19 Composite items; single leaf & half doors - pivot hinge				
A	to suit overall structural opening size 1450 x 2110mm high; Single Door Leaf size; 915 x 2070 mm high with vision panel; size 200mm x 1350mm high and Solid Half Leaf Door size; 450mm x 2070mm high; 44 mm thick;	nr	3		
	Door Type 8 (INT-D0) - Door Nr 3 (FF) Composite items; single leaf & half doors - pivot hinge				

	(32) INTERNAL WALL COMPLETIONS (LINK CORRIDOR) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Composite items; Doors				
	(Cont) KCC Group / Carrolls Joinery 44mm thick Solid - core flush varnished paint grade door; internal single action; with hardwood European Oak veneer (or equivalent) with mechanical strength to lTo BS EN 1192 Class 2-3; Acoustic and Thermal Performances to manufacturers standards; with and including lipping to all edges 44 x 8 mm thick; faced both sides with 5mm hardwood veneered plywood finished as full stain system, as spec section M60; neatly cut and fitted to margins; all glued together and hydraulically pressed to approval intumescent strips, smoke seals and nylon sweeps as required to door frame and leaves; with and including 1 number glazed vision panels (various sizes); 20 x 15 mm splayed and rebated wrot hardwood glazing beads fixed, sunk, screwed and pelleted to both sided of door and bedded in intumescent paste; 20 x 4 mm 100 PSA fire seal strips to both sides of glazing to achieve 30 minute fire rating (vp glazing and ironmongery measured separately); all in accordance with the Architects Specification as per Drawing 25002-AFEC-00-ZZ-SH-A-7001				
	(Cont) Door Type 8 (INT-D0) - Door Nr 3 (FF)				
A	to suit overall structural opening size 1610 x 2110mm high; Single Door Leaf size; 1000 x 2070 mm high with vision panel; size 200mm x 1350mm high and Solid Half Leaf Door size; 525mm x 2070mm high; 44 mm thick;	nr	1		
	Door Type 13 (INT-D0) - Door Nr 16				
	Composite items; single doors				
B	to suit overall structural opening size 1010 x 2110mm high; Solid Single Door size; 925 x 2070 mm high; 44 mm thick;	nr	1		

	(32) INTERNAL WALL COMPLETIONS (LINK CORRIDOR)	**(Cont)**			
	(Cont) WOODWORK: **(Cont) Composite items; Doors** 60 Minute Fire Rated Doors KCC Group / Carrolls Joinery 56mm thick Solid - core flush varnished paint grade door; internal single action; with hardwood European Oak veneer (or equivalent) with mechanical strength to 1To BS EN 1192 Class 2-3; Acoustic and Thermal Performances to manufacturers standards; with and including lipping to all edges 56 x 8 mm thick; faced both sides with 5mm hardwood veneered plywood finished as full stain system, as spec section M60; neatly cut and fitted to margins; all glued together and hydraulically pressed to approval intumescent strips, smoke seals and nylon sweeps as required to door frame and leaves; with and including 1 number glazed vision panels (various sizes); 20 x 15 mm splayed and rebated wrot hardwood glazing beads fixed, sunk, screwed and pelleted to both sided of door and bedded in intumescent paste; 20 x 4 mm 100 PSA fire seal strips to both sides of glazing to achieve 60 minute fire rating (vp glazing and ironmongery measured separately); all in accordance with the Architects Specification as per Drawing 25002-AFEC-00-ZZ-SH-A-7001 Door Type 8 (INT-D0) - Door Nr 2 (FF) Composite items; single leaf & half doors - pivot hinge				
A	to suit overall structural opening size 1610 x 2110mm high; Single Door Leaf size; 1000 x 2070 mm high with vision panel; size 200mm x 1350mm high and Solid Half Leaf Door size; 525mm x 2070mm high; 44 mm thick;	nr	1		

	(32) INTERNAL WALL COMPLETIONS (LINK CORRIDOR) (Cont)				
	(Cont) WOODWORK:				
	Composite Items; Glazed Screens				
	Internal Glazed Screens; fire rated; made up of hardwood frames to match internal door frames (European Oak) 125 x 50mm with hardwood strips to head, jambs and sills; open for glass with (as per Architects Specification L40/505); 60 x 16mm slips and 60 x 16mm rebated glazing beads fixed, sunk and screwed and pelleted, all bedded in intusmescent paste to both sides of frame; include for all necessary frame fixings; steel angles, anchor bolts, intumescent mastic pointing and strips, smoke seals, fillers, mineral rockwool around frame; 25 x 4mm 500 PSA fire seal strips to both sides of glazing to achieve 30 & 60minute fire rating; all in accordance with the Architects Drawing 25002-AFEC-00-ZZ-SH-A-7003 Internal Glazed Screen Schedule and Specification L10/260				
	Composite items; Internal Windows / Screens				
A	Screen ID IGS.01.001 - Type IGS-02 - overall size 1125mm wide x 2475mm high; Fire Rating EI60	nr	1		
B	Screen ID IGS.01.002 - Type IGS-02 - overall size 1125mm wide x 2475mm high; Fire Rating EI60	nr	1		
C	Screen ID IGS.01.003 - Type IGS-02 - overall size 1125mm wide x 2475mm high; Fire Rating EI60	nr	1		
D	Screen ID IGS.01.004 - Type IGS-02 - overall size 1125mm wide x 2475mm high; Fire Rating EI60	nr	1		
E	Screen ID IGS.01.005 - Type IGS-02 - overall size 1125mm wide x 2475mm high; Fire Rating EI60	nr	1		

	(32) INTERNAL WALL COMPLETIONS (LINK CORRIDOR) (Cont)				
	(Cont) WOODWORK:				
	Framing				
	The following shall be in treated hardwood European Oak unless otherwise stated; plugged and screwed to blockwork/stud partitions; include for all necessary fixings, counter sinking and making good with matching pellates; protected for finishes; all in accordance with the Architects Drawings and Specification L20/410:				
	Framing; jambs and heads				
A	126 x 44 mm; 2 times rebated.	m	44		
B	138 x 56 mm; 2 times rebated.	m	6		
	Ironmongery, Accessories and Sundries				
	Provide and fit the following ironmongery to solid doors and frames as per Architects Specification on Drawing 25002-AFEC-00-ZZ-SH-A-7001				
	Hardware Set 3 (Leaf & Half Circulation Door with Double Action Pivot Hinge (Fire Rated))				
C	SS Double Action Pivot Hinge sets.	nr	10		
D	Cam-Motion Door Closers.	nr	10		
E	Hold Open Devices to be integrated into Fire Alarm System.	nr	10		
F	SS 19mm diameter x 600mm Pull Handle.	nr	10		
G	SS Roller Bolt lock.	nr	5		
H	Flush Bolt with Dust Socket for Inactive Leaf.	nr	5		
J	Automatic Drop Seal - Concealed.	nr	10		
K	Kickplate - Grade 304 -200mm High - Width to suit door width.	nr	20		
L	75mm Diameter "FIRE DOOR KEEP CLEAR" Sign -Stainless Steel / Blue Disc.	nr	20		

	(32) INTERNAL WALL COMPLETIONS (LINK CORRIDOR) (Cont)				
	(Cont) Ironmongery, Accessories and Sundries				
	(Cont) Provide and fit the following ironmongery to solid doors and frames as per Architects Specification on Drawing 25002-AFEC-00-ZZ-SH-A-7001				
	Hardware Set 5 (Single Secure Door - Access Controlled (NFR))				
A	SS Concealed Bearing Hinge with Integral Security Dog Bolt.	nr	12		
B	Heavy Duty Electrical Escape Lock.	nr	4		
C	SS Euro Single Cylinder & 2 Keys.	nr	4		
D	SS Lever Handle Set on Rose.	Sets	4		
E	Kickplate - Grade 304 -200mm High - Width to suit door width.	nr	8		
F	75mm Diameter Cleaner's Sign - Stainless Steel. (Cleaner's Store Only)	nr	4		
	Manifestations				
G	Manifestation In compliance with TGD Part M and DAC. Refer 25002-AFEC-00-ZZ-SH-A-7002_External Door Schedule; Coatex or equivalent approved; Product Metamark Frost Etch Glass Effect Film with individual square or circle decals to clause 436- 3 layer based - Layer 1: High optical quality polyester with printed design. Layer 2: PS adhesive, glass polymerization within 15 days. Layer 3: Protection release liner disposable after installation; heights set at 850mm approx. & 1475mm above FFL all as per Architects Specification and Drawing 25002-AFEC-00-ZZ-SH-A-7002	nr	50		

	(32) INTERNAL WALL COMPLETIONS (LINK CORRIDOR) (Cont)				
	(Cont) Ironmongery, Accessories and Sundries				
	Sundries; bedding and pointing				
	Bed door frame in 10 mm thick fire rated intumescent bedding compound to achieve 30 & 60 minute fire rating; include for Tightly Packed Mineral Fibre Capped on Both Sides with a 10mm Depth of Acrylic Intumescent Mastic, Fire Rated for this Application to BS 476: Part 22: 1987 or BS EN 163 -1 or full depth Expanding PU foam, Fire Tested for this Application; to 30 & 60 minutes fire rating to both sides of frame.				
A	door frame 126 mm wide (30min)	m	44		
B	door frame 138 mm wide (60min)	m	6		
C	internal glazed screen frames (60min)	m	36		
	Sundries; seals				
	Mineral "Rockwool" packing to fire rated doors as per manufacturers instructions.				
D	30 minute fire rated door frame 126 mm wide.	m	44		
E	60 minute fire rated door frame 138 mm wide.	m	6		
F	60 minute fire rated glazed screens	m	36		
	Sundries; intumescent seals				
	"Dufaylite" or equal approved intumescent fire seal strip with combined smoke seal; fixed into and including form any necessary groove within the door and door frames for the following:				
G	10 x 5 mm approved smoke seal to achieve 30 & 60 minute fire rating.	m	86		

	(32) INTERNAL WALL COMPLETIONS (LINK CORRIDOR)	**(Cont)**			
	(Cont) Ironmongery, Accessories and Sundries				
	(Cont) Sundries; bedding and pointing				
	Fixings; drilled				
A	"Hilti" or equally approved expanding anchor bolt set type HT 10 / 92; including for forming mortice in hardwood timber frames and solid concrete blockwork walls; including all necessary drilling and fixing; counter sink and making good and pelleted, maximum 150mm from ends of each jamb and at 600mm maximum centres.	nr	144		
	GLAZING:				
	General glazing (Vision Panels to Doors & Glass to Screens)				
B	Fire Rated (30 minutes)				
	Fire Rated EI30 (30/30) 17.3mm thick Pyrobel 16 with 2 ply annealed laminated or toughened glass, All glazing = 250mm wide to achieve a 1B1 classification in accordance with IS EN 12600; Manufacturer & Product: Pyrobel by AGC Glass UK Limited or equivalent in accordance with BS 6262-4, clear fire resisting safety glazing; Colour: Clear Sealant or equivalent; secured with 25 x 25mm hardwood glazing beads to timber doors / vision panels; all to achieve 30 minute fire rating; all in accordance with Architects Specification L40/505				
C	glazing; area 0.15 - 5.00m2; multiple glazed panes (viewing panels to doors).	m2	3		
D	glazing; area 0.15 - 5.00m2; multiple glazed panes (glazed screens).	m2	14		

	(32) INTERNAL WALL COMPLETIONS (LINK CORRIDOR) (Cont)				
	PAINTING AND DECORATING:				
	Painting				
	Prepare, knot, prime, stop and apply one coat of primer, one coat of undercoat/ base coat, two finishing coats of Dulux waterborne paint -Dulux diamond satinwood / eggshell to selected RAL colour range; as per Architects Specification M60/150				
	General surfaces; frames to doors				
A	< or = 300 mm	m	50		
	General surfaces; architraves, quadrants / beading				
B	< or = 300 mm	m	147		
	General surfaces; all doors (including vision panels)				
C	> 300 mm	m2	26		
	General surfaces; all Internal Glazed Screens				
D	< or = 300 mm	m2	28		

(32) INTERNAL WALL COMPLETIONS (LINK CORRIDOR) (Cont)				
COLLECTION				
Page No. BQ/480				NIL
Page No. BQ/481				NIL
Page No. BQ/482				NIL
Page No. BQ/483				NIL
Page No. BQ/484				NIL
Page No. BQ/485				NIL
Page No. BQ/486				NIL
Page No. BQ/487				NIL
Page No. BQ/488				NIL
Page No. BQ/489				NIL
Page No. BQ/490				NIL
Page No. BQ/491				NIL
(32) INTERNAL WALL COMPLETIONS (LINK CORRIDOR) Carried to Summary				**NIL**

	(42) WALL FINISHES INTERNALLY (LINK CORRIDOR)				
	WALL FINISHES INTERNALLY				
	FLOOR WALL AND CEILING FINISHES:				
	Board Finishes:				
	2 layers of Gyproc or equivalent plasterboard; consisting of 2 layer of 12.5m thick Soundbloc; including for staggered joints; fixing with gyproc drywall screws to metal framework at 600 mm centres (framework measured elsewhere); include all blocking and bracing as necessary; taped and filled joints and spotting nail holes in preparation for skim finish; "Gypsum" or equivalent plaster skim, 3 mm thick applied to plasterboard base; all as per Architects Specification K10				
	Walls				
A	< or = 300 mm wide (Reveals & Heads)	m2	5		
B	> 300 mm wide (IWS-02, 03 & 04)	m2	241		
	Shaftwall Gyproc or equivalent plasterboard; consisting of 2 layer of 12.5m thick Soundbloc and 1 layer of 19mm Gyproc core board; including for staggered joints; fixing with gyproc drywall screws to metal framework at 600 mm centres (framework measured elsewhere); include all blocking and bracing as necessary; taped and filled joints and spotting nail holes in preparation for skim finish; "Gypsum" or equivalent plaster skim, 3 mm thick applied to plasterboard base; all as per Architects Specification K10				
	Walls				
C	> 300mm wide (IWS-05 - first floor)	m2	21		
	Labours				
	Labours; making good and / or cutting around obstructions				
D	girth; < or = 300 mm	nr	10		
E	girth 300 mm - 1000 mm	nr	5		

	(42) WALL FINISHES INTERNALLY (LINK CORRIDOR) (Cont)				
	(Cont) FLOOR WALL AND CEILING FINISHES:				
	(Cont) Board Finishes:				
	Sundries				
	"Expamet" or equal approved galvanized mild steel; expanded metal lathing and beading fixed in accordance with manufacturers instructions				
	Beads				
A	angle bead; uPVC or proptietary stainless steel beads to grade 304 of BS 1449 Part 2;	m	25		
B	plaster stop bead; uPVC or proptietary stainless steel beads to grade 304 of BS 1449 Part 2;	m	25		
	PAINTING AND DECORATING:				
	Painting				
	Thoroughly clean down; remove any grease or dirt; prepare and apply prior to application of skim finishes to plasterboard 1 coat primer of drywall PVA sealer dilution 5:1 and 1 coat reprime dilution 3:1				
	Walls; plastered base				
C	girth < or = 300 mm	m	10		
D	girth > 300 mm	m2	241		
	Thoroughly clean down; remove any grease or dirt; prepare, apply one preparatory primer undercoat / base coat and two finishing coats of Dulux Diamond Matt or equivalent; emulsion paint finish in selected RAL colour range; all in accordance with the manufacturers written instructions and Architects Specification M60				
	Walls; plastered base				
E	girth < or = 300 mm	m	10		
F	girth > 300 mm	m2	241		

	(42) WALL FINISHES INTERNALLY (LINK CORRIDOR) (Cont)				
	(Cont) PAINTING AND DECORATING:				
	(Cont) Painting				
	(Cont) Thoroughly clean down; remove any grease or dirt; prepare, apply one preparatory primer undercoat / base coat and two finishing coats of Dulux Diamond Matt or equivalent; emulsion paint finish in selected RAL colour range; all in accordance with the manufacturers written instructions and Architects Specification M60				
	Walls; blockwork base				
A	girth < or = 300 mm	m			
B	girth > 300 mm (new blockwork)	m2	24		
C	girth > 300 mm (existing blockwork)	m2	114		
	Pipe Boxing				
	Allow for the Supply and install bespoke / proprietary pipe boxing to conceal exposed heating pipe(s) dropping from soffit to radiator; powder coated steel trunking construction, colour RAL 9010; by Coverad (Standard Steel range) or other equal and approved; manufacturer to carry out a site survey to confirm final sizes prior to manufacture; including dor all necessary brackets, supports, corner pieces, joints, end caps and access provision for TRV/valve adjustment as required; fixed to wall/soffit as indicated on Architect Drawing 25002-AFEC-01-00-DR-A-2103 and all in accordance with Architects Specification P31/301				
D	girth 300 mm - 1000 mm	m	10		

(42) WALL FINISHES INTERNALLY (LINK CORRIDOR) (Cont)				
COLLECTION				
Page No. BQ/493				NIL
Page No. BQ/494				NIL
Page No. BQ/495				NIL
(42) WALL FINISHES INTERNALLY (LINK CORRIDOR) Carried to Summary				**NIL**

	(43) FLOOR FINISHES (LINK CORRIDOR)				
	FLOOR FINISHES				
	INFORMATION				
	Conditions for laying floor coverings				
A	Before laying the floor coverings, their bases shall be swept and porous bases shall be primed as recommended by the Adhesive manufacturer	item	1		
B	In no circumstances should floor hardening solutions be used. Any priming coat should be allowed to dry before the adhesive is used	item	1		
C	When laying flexible P.V.C. coverings, the flooring should be kept at a room temperature of not less than 18 degrees centigrade for at least 24 hours before laying. When laying the material shall be well rolled with a floor roller, weighing approximately 65kg	item	1		
D	All other trades are to be finished	item	1		
E	All lighting and heating to be on	item	1		
F	Humidifiers to be provided	item	1		
G	Allow for protecting all floors with polythene (1000 gauge) covered with hardboard sheet taped and jointed, maintaining, removal and disposal upon completion and making good areas	item	1		
H	Areas to be completely free and protected from dust	item	1		
	New powerfloated and screeded concrete floor slabs are to be finished to an acceptable standard for floor coverings as recommended by the manufactures written instructions of the relevant sheet, tile and brush applied floor coverings and any uneven areas or blemishes are to be made good with a patent levelling screed or ground smooth where necessary at the Contractor own expense.	Note			

	(43) FLOOR FINISHES (LINK CORRIDOR) (Cont)				
	DEMOLITION AND ALTERATIONS:				
	Treatment / Repairs				
	Cleaning surfaces				
	Blastrac concrete floor slab to thoroughly clean, dry and remove all laitances, traces of dirt, grease and contaminants etc in preparation for the approved floor sealer in accordance with BS 8203 or DIN 18 365.				
A	concrete floor	m2	86		
	WOODWORK:				
	Boarding and Second Fixings				
	The following shall be painted mdf (type H1) in compliance with EN 622 parts 1 & 5 unless otherwise stated; plugged and screwed to blockwork / concrete and stud partitions; include for all necessary fixings and making good to punch holes; as per Architects Specification and Drawings 25002-AFEC-00-ZZ-DR-A-1004, 2103, 2201, 2202 & 6002				
	Second fixings; skirting				
B	125 x 18 mm, rebated MDF (1 x rebate 5mm x 5mm deep)	m	84		

	(43) FLOOR FINISHES (LINK CORRIDOR) (Cont)				
	FLOOR, WALL AND CEILING FINISHES:				
	Flexible sheet finishes:				
	Floor Finish Type 1 - Circulation Areas & Lobbies				
	Homogeneous Rubber Compound vinyl flooring to ASTM F1344 Standards - Norament 926 Grano 5307 or equivalent proprietary vinyl sheet floor covering by Interface Nora or equivalent approved; 3.5 mm thick hammered surface in selected colours; Sound rating 11dB yo ISO 10140-3, Slip Resistance (ASTM D2047) >0.5 dry/wet required, ADA Compliant; with surface roughness (Rz) minimum =20, with acoustic performance to manufacturers standards and fire classification To BS EN 13501-1, Class Bfls1 or better. In Ireland, refer to IS EN 13501-1 for the fire classification of construction products and building elements, with vinyl flooring fixed with approved adhesive Nora PU 102 & AC100 and apply Nora nTx 020 1C primer prior to laying vinyl floor finish; hot seam weld all joints as per clause 680 with welding bead to ensure watertight seams, groove cut with approved groove cutting machine with and including all trims and edgings; cemfloor liquid screeds cement base Cemfloor CT C20F4 self levelling compound; on concrete floor with and including for preparing floor level to SR1 finish and dry; and apply two coats water based UV cured sealer and dry buff with nylon pad to a matt finish; clean finished floor on completion; all in accordance with the manufacturers instructions and Architects Specification M50/150 to 895 inclusive and as per Architects Drawings 25002-AFEC-00-ZZ-DR-A-1004, 2103, 2201, 2202 & 6002				
	Floors; concrete base				
A	> 300mm wide	m2	86		

	(43) FLOOR FINISHES (LINK CORRIDOR) (Cont)				
	(Cont) FLOOR, WALL AND CEILING FINISHES:				
	(Cont) Floor Finish Type 1 - Circulation Areas & Lobbies				
	(Cont) Homogeneous Rubber Compound vinyl flooring to ASTM F1344 Standards - Norament 926 Grano 5307 or equivalent proprietary vinyl sheet floor covering by Interface Nora or equivalent approved; 3.5 mm thick hammered surface in selected colours; Sound rating 11dB yo ISO 10140-3, Slip Resistance (ASTM D2047) >0.5 dry/wet required, ADA Compliant; with surface roughness (Rz) minimum =20, with acoustic performance to manufacturers standards and fire classification To BS EN 13501-1, Class Bfls1 or better. In Ireland, refer to IS EN 13501-1 for the fire classification of construction products and building elements, with vinyl flooring fixed with approved adhesive Nora PU 102 & AC100 and apply Nora nTx 020 1C primer prior to laying vinyl floor finish; hot seam weld all joints as per clause 680 with welding bead to ensure watertight seams, groove cut with approved groove cutting machine with and including all trims and edgings; cemfloor liquid screeds cement base Cemfloor CT C20F4 self levelling compound; on concrete floor with and including for preparing floor level to SR1 finish and dry; and apply two coats water based UV cured sealer and dry buff with nylon pad to a matt finish; clean finished floor on completion; all in accordance with the manufacturers instructions and Architects Specification M50/150 to 895 inclusive and as per Architects Drawings 25002-AFEC-00-ZZ-DR-A-1004, 2103, 2201, 2202 & 6002				
	Labours; making good and / or cutting around obstructions				
A	girth < or = to 300mm	nr	5		
B	girth 300 to 1000 mm	nr	3		

	(43) FLOOR FINISHES (LINK CORRIDOR) (Cont)				
	(Cont) FLOOR, WALL AND CEILING FINISHES:				
	Ironmongery, Accessories and Sundries				
	Sundries				
	Airtightness membrane & tape sealing, mastic sealing and expanding foam, to Architects Specification and as detailed on Drawing Series 6000				
A	Horizontal Airtightness tape to create continuous seal between plaster and concrete screed at junction between skirting and floor, girth < or = 300mm,	m	84		
B	Extra over last for mastic bead at junction between skirting and floor	m	84		
	Accessories				
	Gradus or equivalent Proprietary stainless steel with brushed finish; expansion joint cover plate / dividing strips between different floor types; fixed at junction of different floor finishes and plugged and screwed to concrete floors at 600 mm c/c with and including for sealing with a silicone sealant; as per Architects Drawings 6106 & 6202 and Specification M50/740				
C	generally	m	11		
	Testing				
	Slip Resistance Testing				
D	Contractor to allow and provide slip resistance test (Pendulum Test) to all M50/150 Vinyl Sheeting to BS EN 16165 all as outlined in Architects Specification M50/861	Item	1		

	(43) FLOOR FINISHES (LINK CORRIDOR) (Cont)				
	PAINTING				
	Painting				
	Prepare, knot, prime, stop and apply one coat of primer, one coat of undercoat/ base coat, two finishing coats of Dulux waterborne paint -Dulux diamond satinwood / eggshell to selected RAL colour range; as per Architects Specification M60/150				
	Second fixing, to timber base				
A	girth < or = to 300 mm, skirtings	m	84		
B	girth < or = to 300 mm, skirtings, primer only to backs of skirtings	m	84		
	Apply two coats dampproof membrane; applied in strict accordance with the manufacturer's instructions in preparation for vinyl floor coverings				
	Floors				
C	> 300mm wide	m2	86		

(43) FLOOR FINISHES (LINK CORRIDOR) (Cont)				
COLLECTION				
Page No. BQ/497				NIL
Page No. BQ/498				NIL
Page No. BQ/499				NIL
Page No. BQ/500				NIL
Page No. BQ/501				NIL
Page No. BQ/502				NIL
(43) FLOOR FINISHES (LINK CORRIDOR) Carried to Summary				**NIL**

	(45) CEILING FINISHES (LINK CORRIDOR)				
	CEILING FINISHES				
	PAINTING				
	Painting				
	Thoroughly clean down; remove any grease or dirt; prepare, apply one preparatory undercoat / base coat and two finishing coats of "Dulux" or equivalent approved Waterborne (Water-based washable matt vinyl) paint - Dulux Diamond Matt; in selected RAL colour range; preparation as per Architects Specification M60/110 all in accordance with the manufacturers written instructions and Architects Specification M60/110				
	Ceilings to Exposed Concrete Soffit				
A	> 300mm wide	m2	86		

To Collection € **NIL**

(45) CEILING FINISHES (LINK CORRIDOR) (Cont)				
COLLECTION				
Page No. BQ/504				NIL
(45) CEILING FINISHES (LINK CORRIDOR) Carried to Summary				**NIL**

	(00) DEMOLITIONS & ALTERATIONS (PIPE FITTING)				
	(00) DEMOLITIONS AND ALTERATIONS:				
	Information				
A	The Contractor is strongly advised to visit the site to determine the exact extent of the works, as no claim shall be entertained at a later date for his/her failure to comply with same.	item	1		
B	The Contractor shall note the position of all existing underground and overground services within the site.	Note			
C	All surplus material resulting from taking down must be segregated, removed and disposed off site in a proper safe manner to a Licensed facility. The Contractor shall include for all costs associated with same within his/her rates.	Note			
D	All new and existing timbers being refixed must be treated with preservative	Note			
E	Contractors must include for any temporary propping to existing services, plant and equipment to facilitate the works. Refer to Services Engineer for scope to be included.	Note			
F	The Contractor shall liaise with the Mechanical and Electrical Contractors regarding the programming/scheduling of their works associated with the decommissioning and removal for Mechanical and Electrical services, plant and equipment.	item	1		
G	Where on site fabrication or alteration is required to galvanized steelwork members, such as the addition of new weathering hats for weathering and the like, Where it is not feasible to remove such members for hot dipped galvanising an approciate paintwork specification to meet with the performance of a galvanised member will be required to meet Engineer Specification "Painting By Performance to IS EN ISO 12944: (C5 Environment)" for "touching up".	item	1		

	(00) DEMOLITIONS & ALTERATIONS (PIPE FITTING) (Cont)				
	(Cont) (00) DEMOLITIONS AND ALTERATIONS:				
	(Cont) Information				
A	The Contractor shall include for all demolition works, temporary support, protection of retained structures and services, and making good to existing elements affected by the Works.	item	1		
	Demolitions and Alterations				
	Cutting				
	Form new opening in existing external blockwork insulated cavity wall (215/110/100mm); include for removal of existing wall and disposal off site, all necessary shoring, breaking through wall, forming jambs, inserting 2 nr. precast concrete lintels, adjustments and supports; making good all work disturbed to match existing.				
B	door ope size 1500 x 2100 mm in existing 215 mm thick blockwork wall	nr	1		
C	door ope size 1100 x 2100 mm in existing 215 mm thick blockwork wall	nr	1		
	Form new opening in existing external blockwork insulated cavity wall (215/110/100mm) and cladding; include for removal of existing wall and disposal off site, all necessary shoring, breaking through wall, forming jambs, inserting 2 nr. galvanised 203 x 102 x 23 kg/m UB steel lintels, flashing to cladding, adjustments and supports; concrete bearing pads / support brackets to each side of opening to support end of structural steel; making good all work disturbed to match existing.				
D	door ope size 3650 x 4500 mm in existing 215 mm thick blockwork wall / cladding as per Architects Drawing Nr. 2101 & 4002	nr	1		

	(00) DEMOLITIONS & ALTERATIONS (PIPE FITTING) (Cont)				
	(Cont) (00) DEMOLITIONS AND ALTERATIONS: **(Cont) Demolitions and Alterations**				
	Carefully remove and set aside for re-use as necessary existing specialist equipment & fume hoods; reinstate on completion to match existing; make good any finishes disturbed; contractor is to visit the site to get a full understanding of the scope involved (ref. to Architects Enabling Works Proposals Summer Works 2026 - Facade Upgrade)				
	Removing; existing stairs and mezzanine				
	Carefully take down and remove from site existing stairs and mezzanine structure and making good finishes where removed to match the existing as per Architects Drawing 2101				
A	generally	item	1		
	Removing; existing external wall rending				
	Carefully hack off and take down and remove from site existing dash plastering and making good finishes where removed to match the existing as per Architects Drawing				
B	generally (behind where existing building was removed externally)	m2	33		
	Removing; doors				
	Carefully take down and remove from site existing internal doors complete with frames, architraves and liners etc and make good to finishes disturbed				
C	internal single door size aprox size 1000 x 2100 mm	nr	2		

	(00) DEMOLITIONS & ALTERATIONS (PIPE FITTING) (Cont)				
	(Cont) (00) DEMOLITIONS AND ALTERATIONS: **(Cont) Demolitions and Alterations**				
	Removing; floor finishes				
	Carefully take up, remove and dispose of the following existing floor finishes from the existing concrete floor; thoroughly clean, dry and remove all laitances, traces of dirt, grease and contaminants, including for the protection and all necessary making good to all structures and finishes disturbed.				
A	generally	m2	337		
	Removing; prestressed hollow core slab units				
	Carefully take down and remove from site existing 150mm thick prestressed hollow core slab units; include for saw cutting and hoisting; all necessary shoring and propping of the existing as required to facilitate the works; removal of the existing precast slabs and disposal off site; allow for protecting and making good any existing services and finishes disturbed during the course of the works and allow for repair or replacing as necessary to match the existing; as per Architects Drawing Nr. 1050				
B	150mm thick slabs	m2	139		
	Removing; blockwork walls				
	Carefully take down and remove from site existing internal blockwork wall; include for saw cutting; all necessary shoring and propping of the existing as required to facilitate the works; removal of the existing wall and disposal off site; allow for protecting and making good any existing services and finishes disturbed during the course of the works and allow for repair or replacing as necessary to match the existing; as per Architects Drawing Nr. 1050				
C	215mm thick wall; height 2500mm	m	60		

(00) DEMOLITIONS & ALTERATIONS (PIPE FITTING) (Cont)				
COLLECTION				
Page No. BQ/506				NIL
Page No. BQ/507				NIL
Page No. BQ/508				NIL
Page No. BQ/509				NIL
(00) DEMOLITIONS & ALTERATIONS (PIPE FITTING) Carried to Summary				**NIL**

	(10) BUILDING SUBSTRUCTURE (PIPE FITTING)				
	(10) BUILDING SUBSTRUCTURE				
A	It will be deemed that the Contractor has inspected the drawings and site and has consulted available information concerning sub-soil conditions before submitting his tender.	item	1		
B	The contractor's attention is drawn to the fact that earthwork support is deemed to be included in Excavation and Earthworks under the Agreed Rules of Measurement.	item	1		
C	Where concrete in foundations, beds etc. is measured as cast against the faces of the excavations; and should the Contractor opt to use shuttering the following rates for concrete shall be deemed to include for all such shuttering.	item	1		
D	By pricing these works the Contractor will be held to have visited the site and formed his own opinion as to the extent of the actual work involved, including for all temporary works over and above those measured below, and for monitoring the adjacent buildings for both movement and vibration, as necessary to properly carry out the works.	item	1		
E	The quantities for excavation items are based on the volume as per the substructure design and no allowance is made for overdig, the contractor's operational requirements or temporary works when excavating other than as required in the Agreed Rules of Measurement e.g. working space and formwork to bulk concrete blinding.	item	1		
F	The Contractor shall ensure that he has allowed either in the preliminaries section or in the various rates in his pricing document for all costs associated with achieving the airtightness requirements. It should be noted that taping, sealants and seals are generally not specifically itemised in the pricing document but should be included for in the rates for the various elements or in the preliminaries section.	item	1		

	(10) BUILDING SUBSTRUCTURE (PIPE FITTING) (Cont)				
	(Cont) (10) BUILDING SUBSTRUCTURE				
A	Starting level for measurement purposes is taken from formation level. All works in association with works to formation are taken within the Prepared Site Element of the Bill of Quantities.	item	1		
B	For details of ground conditions see the Site Investigation Report	item	1		
C	The Contractor shall have overall responsibility for all necessary tempory works required for the excavation / protection / maintenance of adjacent embankments	item	1		
D	The Contractor shall note the position of all existing underground and overground services within and adjacent to the site.	item	1		
E	Contractor to undertake site investigation at formation level with 10nr. Dynamic cone penetration (DCP) test to verify ground bearing pressure of 150kN/m2; as per Engineers Drawings Nr. 0200	item	1		
	EXCAVATION AND EARTHWORKS				
	Excavation				
	Excavation; at formation level; depth				
F	< or = 2.00m in foundation trenches including associated pads	m3	102		
G	< or = 2.00m in isolated pits - 4 nr. locations	m3	16		
H	< or = 2.00m in soft spots	m3	3		
	Extra over excavating items irrespective of depth for:				
J	breaking out existing 275mm thick reinforced concrete floor; for new foundation trench and rising walls (within the existing building)	m2	45		
K	saw cutting to last existing 275mm thick reinforced concrete floor, making good areas disturbed	m	83		

	(10) BUILDING SUBSTRUCTURE (PIPE FITTING) (Cont)				
	(Cont) EXCAVATION AND EARTHWORKS				
	(Cont) Excavation				
	(Cont) Extra over excavating items irrespective of depth for:				
A	breaking out existing 275mm thick reinforced concrete floor; for new isolated pads, making good areas disturbed (within the existing building) - 4 nr locations	m2	7		
B	saw cutting to last existing 275mm thick reinforced concrete floor, making good areas disturbed - 4 nr locations	m	21		
C	The Contractor shall include here against this item for any overdig and associated reinstatement (in excess of net foundation plan size) he deems necessary to complete the works	item	1		
D	around existing services; parallel to excavations	m	5		
E	around existing services crossing excavations	nr	5		
F	being next to existing buildings	m2	9		
G	extra breaking out reinforced concrete foundations	m3	2		
	Disposal of water				
H	surface	item	1		
J	ground	item	1		
	Disposal of excavated material				
K	off site	m3	121		

	(10) BUILDING SUBSTRUCTURE (PIPE FITTING) (Cont)				
	(Cont) EXCAVATION AND EARTHWORKS				
	(Cont) Excavation				
	Filling				
	Hardcore filling to be SR21-Annex 1 hardcore material; T.2 Permeable:4/40mm Gas Permeable layer (Radon) Min depth 200mm.; Radon sump to be positioned in this layer; laid and compacted in 225mm layers as per Engineers Specification and Drawings				
	To excavations				
A	> 250mm	m3	5		
	To make up levels under slab				
B	> 250mm (in foundation trenches including associated pads)	m3	14		
C	> 250mm (in isolated pits - 4 nr. locations)	m3	3		
	T.3 Blinding: 0/4mm blinding layer for T.2 max depth 50mm max. This layer is to protect radon membrane from damage; laid on hardcore base as per Engineers Specification and Drawings				
D	50 mm thick (in foundation trenches including associated pads)	m2	45		
E	50 mm thick (in isolated pits - 4 nr. locations)	m2	7		
	CONCRETE WORK				
	Insitu Concrete				
	Plain, in-situ concrete, grade C16/20 (IS EN 206), poured on or against earth or unblinded hardcore as outlined in Engineers Specification				
F	Blinding below foundations and associated pads	m3	45		
G	Blinding below isolated pads - 7 nr.	m3	7		
H	Soft Spots	m3	3		

	(10) BUILDING SUBSTRUCTURE (PIPE FITTING) (Cont)				
	(Cont) CONCRETE WORK				
	(Cont) Insitu Concrete				
	Reinforced, In-situ concrete, grade C30/37 (to ISEN 206), exposure class XC2 / XC4; minimum cement content of 320 kg/m3; poured on or against earth or unblinded hardcore and well vibrated around reinforcement in:				
A	Foundations and associated pads	m3	7		
B	Isolated foundations	m3	3		
C	Beds, > 150mm (in foundation trenches including associated pads)	m3	13		
D	Beds, > 150mm (in isolated pits - 4 nr. locations)	m3	2		
E	Column casings, cross sectional area > 0.10m2	m3	2		
	Sundries				
	Designed joints				
	Form isolation joint to concrete slab and column encasement, 10mm Flexcell filled with two part polysulphate sealant as per Engineers Drawing DR-0111				
F	depth 150 - 300mm	m	20		
	Formed isolation dowelled joint in concrete slab with existing; with 600mm long stainless steel 12mm bars drilled in and chemically fixed into existing slab edge at 400mm centres with Hilti Hit HY150 chemical grout, debonding sleeve at one end; 10mm Flexcell filled with two part polysulphate sealant				
G	depth 150 - 300mm (in foundation trenches including associated pads)	m	83		
H	depth 150 - 300mm (in isolated pits - 4 nr. locations)	m	21		

	(10) BUILDING SUBSTRUCTURE (PIPE FITTING) (Cont)				
	(Cont) CONCRETE WORK				
	(Cont) Sundries				
	Surface finishes				
A	power floating beds (in foundation trenches including associated pads)	m2	45		
B	power floating beds (in isolated pits - 4 nr. locations)	m2	7		
	Reinforcement				
	Reinforcement bars; high yield type 2 deformed steel bars to BS 4449 and BS 8666				
	Bar; straight or bent (Spacers and chairs at contractors discretion)				
C	nominal size > 12 < or = to 25 mm diameter (Pads as per Engineers rebar schedules)	t	0.25		
	Reinforcement mesh fabric; BS 4483;				
	Reference A393 (6.16kg/m2); 300mm minimum side and end laps				
D	horizontal to strip foundations (x 2 layer)	m2	46		
E	horizontal to slab (in foundation trenches including associated pads)	m2	89		
F	horizontal to slab (in isolated pits - 4 nr. locations)	m2	14		
	Reference D49 (0.77kg/m2); 300mm minimum side and end laps				
G	vertical wrapping around structure members at column locations	m2	13		
	Formwork				
	Formwork surface finish to concrete; Type "Ordinary" finish as defined in Section 1.9 of the National Structural Concrete Specification (NSCS) 4th edition				
	Sides of foundations				

	(10) BUILDING SUBSTRUCTURE (PIPE FITTING) (Cont)				
	(Cont) CONCRETE WORK				
	(Cont) Formwork				
	(Cont) Formwork surface finish to concrete; Type "Ordinary" finish as defined in Section 1.9 of the National Structural Concrete Specification (NSCS) 4th edition				
A	height, > 250 < or = to 500mm, to strip and associated pad foundations	m	76		
B	height, > 250 < or = to 500mm, to isolated pad foundations	m	29		
	Formwork surface finish to concrete; Type "Plain" finish as defined in Section 1.9 of the National Structural Concrete Specification (NSCS) 4th edition				
	Columns				
C	isolated, rectangular	m2	13		
	BRICKWORK AND BLOCKWORK:				
	Blockwork				
	Solid concrete blockwork to BS EN 771-3:2011+A1:2015, Group 1 configuration, minimum density 2000 kg/m3 compressive strength of 7.5 N/mm2, laid in stretcher bond, as Architects Specification 6.0 EW9016/JC; bedded and jointed in mortar with compressive strength class M6, masonry cement:sand mix 1:4 to 5 , designation (iii) and to the requirements of SR 18 on the use of IS EN 13139:2002 in:-				
	Walls in trenches				
D	215 mm thick	m2	26		

	(10) BUILDING SUBSTRUCTURE (PIPE FITTING) (Cont)				
	(Cont) BRICKWORK AND BLOCKWORK:				
	(Cont) Blockwork				
	(Cont) Solid concrete blockwork to BS EN 771-3:2011+A1:2015, Group 1 configuration, minimum density 2000 kg/m3 compressive strength of 7.5 N/mm2, laid in stretcher bond, as Architects Specification 6.0 EW9016/JC; bedded and jointed in mortar with compressive strength class M6, masonry cement:sand mix 1:4 to 5 , designation (iii) and to the requirements of SR 18 on the use of IS EN 13139:2002 in:-				
A	extra over 215mm thick blockwork above for 1 nr courses of blocks laid on flat at internal walls, as per Detail on Engineers Drawing 0110 with Autoclaved aerated concrete thermal blockwork to BS EN 771-4 with thermal conductivity of 0.33 W/mK, solid configuration, minimum density 760 kg/m3 compressive strength of 7.5 N/mm2 as Architects Specification	m	38		
	Labours				
B	on blockwork	item	1		
	Ancillaries to Blockwork				
	Damp Proof Course				
	Damp proof courses; polyethylene continuous, as Architects Specification and Architects Drawing Nr. 6101 with minimum 100 mm laps; no allowance in measurement for laps				
C	Horizontal, < or = to 225mm wide.	m	38		
	Sundries				
	Forming ope for services, in concrete block wall, necessary precast concrete lintels				
D	size 225 mm x 225 mm in 215 mm concrete block wall, including filling openings around pipe with expanding foam	nr	3		

	(10) BUILDING SUBSTRUCTURE (PIPE FITTING) (Cont)				
	ROOFING CLADDING AND WATERPROOFING				
	Mastic Asphalt, Waterproof and Gas Proof Non Metal Flexible Sheet Coverings				
	Reinforced polyethylene gas retardant / damproof membrane with HPDE grid; 0.40mm thick, 407 g/m2 weight, reduce and maintain concentration levels below 200 Bq/m3; lapped 150mm at all joints on sand blinded base; sealed with two strips of 30mm radon resistant sealant tape and mastic sealer; all in accordance with Architects Specification (measured nett).				
	Gas Proofing				
A	horizontal, girth > 300mm, including for all lapping, taping and sealing (in foundation trenches including associated pads)	m2	45		
B	extra over for taping and sealing to existing radon barrier	m	83		
C	horizontal, girth > 300mm, including for all lapping, taping and sealing (in isolated pits - 4 nr. locations)	m2	7		
D	extra over for taping and sealing to existing radon barrier	m	21		
E	vertical, girth > 300 mm to blockwork with radon fixing straps, including for all lapping, taping and sealing	m2	21		
	Sundries.				
	Seal around service pipe penetrations with universal approved top hat pipe seals; fixed with retension clips and 30mm radon resistant sealant tape; all in accordance manufactures written instructions.				
F	holes, < or = to 0.50m girth	nr	5		

	(10) BUILDING SUBSTRUCTURE (PIPE FITTING) (Cont)				
	WOODWORK:				
	Ironmongery, Accessories and Sundries				
	Insulation				
	25 mm thick rigid floil faced floor insulation with maximum thermal conductivity of 0.021 w/mK laid and butt jointed with taped joints as per manufactures instructions in preparation for the concrete slab, all as per Architects Specification				
A	vertical, girth < or = to 300 mm and dressed to internal face of blockwork	m	75		
	150mm thick rigid PIR foil faced floor insulation with maximum thermal conductivity of 0.022 w/mK laid in 2 nr 100mm layers and butt jointed with taped joints as per manufactures instructions in preparation for the concrete slab, all as per Specification				
B	horizontal, girth >300mm (in foundation trenches including associated pads)	m2	45		
C	horizontal, girth >300mm (in isolated pits - 4 nr. locations)	m2	7		

(10) BUILDING SUBSTRUCTURE (PIPE FITTING) (Cont)				
COLLECTION				
Page No. BQ/511				NIL
Page No. BQ/512				NIL
Page No. BQ/513				NIL
Page No. BQ/514				NIL
Page No. BQ/515				NIL
Page No. BQ/516				NIL
Page No. BQ/517				NIL
Page No. BQ/518				NIL
Page No. BQ/519				NIL
Page No. BQ/520				NIL
(10) BUILDING SUBSTRUCTURE (PIPE FITTING) Carried to Summary				**NIL**

	(22) INTERNAL WALLS PARTITIONS (PIPE FITTING)				
	(22) INTERNAL WALLS PARTITIONS				
	CONCRETE WORK:				
	Precast				
	Precast concrete, prestressed concrete lintel, standard or stock pattern units; include for hoisting into position, bedding in cement mortar (1:3) and temporary propping in:-				
	Lintels				
	215mm x 65mm				
A	1450 mm long	nr	3		
B	2350 mm long	nr	1		
	BRICKWORK AND BLOCKWORK:				
	Blockwork				
	Solid fairfaced concrete blockwork to BS EN 771-3:2011+A1:2015 and shall have a air tightness properties better that 3m3/hr/m2 at 50 Pascals, Group 1 configuration, minimum density 1900 kg/m3 compressive strength of 7.5 N/mm2, laid in stretcher bond, as Architects Specification 04 20 00 and BLK-003; bedded and jointed in mortar with compressive strength class M4, masonry cement:sand mix 1:4 to 5, designation (iii) and to the requirements of SR 18 on the use of IS EN 13139:2002 in:-				
	Walls				
C	thickness 215 mm (gf)	m2	92		
	Labours				
D	on blockwork	item	1		

	(22) INTERNAL WALLS PARTITIONS (PIPE FITTING) (Cont)				
	(Cont) BRICKWORK AND BLOCKWORK:				
	(Cont) Blockwork				
	Fire proofing				
	Stopseal LJS fire resistant linear joint sealing system strip; size 129 x 100 mm thick, continuous to achieve fire rating; include for one part water based acrylic acoustic intumescent seal both sides; as per Architects Specification P12				
A	fixed between top of 215 mm concrete block wall and underside of roof	m	22		
	FLOOR, WALL AND CEILING FINISHINGS:				
	Stud Partitions				
	GypWall or equivalent hot dipped galvanised mild steel stud partition system; consisting of stud partition system consisting of 70 C 50 mm vertical studs at 600 mm centres; fitted between and including 72 FEC 50 mm wide deep flange floor and ceiling channels, include for all necessary intermediate noggings, bearers, GSF1 fixing straps and 99FC50 channels; assemble, erect, plug and screw fix to concrete floor slab at base and underside of concrete floor slab at top; leave ready for plasterboard (plasterboard m/e); as per Architects Details on Drawings Nr. 6002 and Specification Section K10.				
	Partitions				
B	height average between 2500mm sloping (IWS-04 - Top of blockwork as per Architects Detail Drawing Nr. 5002)	m	23		
	Extra over for				
C	angles to partitions	nr	2		
D	abutments with other finishes	nr	2		

	(22) INTERNAL WALLS PARTITIONS (PIPE FITTING) (Cont)				
	(Cont) FLOOR, WALL AND CEILING FINISHINGS:				
	(Cont) Stud Partitions				
	Labours				
	Making good and / or cutting around obstructions				
A	girth < or = to 300 mm	nr	5		
	Sundries to partitions:-				
B	Seal faces around perimeter of metal stud partition system at junction with concrete / blockwork with one part water based acrylic acoustic intumescent sealant; as per Architects Specification K10	m	90		
	Fire stopping				
C	70 mm wide x 19 mm thick coreboard firestop with rockwool 70 x 200mm deep trapezoidal firestrip to match profile of metal decking in forming deflection head between top of stud partition and underside floor; to achieve 30 / 30 rating; include for one part water based acrylic acoustic intumescent seal both sides; as per Architects Details on Drawing and Specification	m	23		
	Insulation				
	Mineral wool acoustic insulation (16kg/m3); but jointed tightly packed into partition wall cavity between vertical studs and noggings etc, including taping / fastening to retain insulation and prevent slumping; as per Architects Details and Specification K10				
D	50 mm thick	m2	56		

(22) INTERNAL WALLS PARTITIONS (PIPE FITTING) (Cont)				
COLLECTION				
Page No. BQ/522				NIL
Page No. BQ/523				NIL
Page No. BQ/524				NIL
(22) INTERNAL WALLS PARTITIONS (PIPE FITTING) Carried to Summary				**NIL**

	(28) FRAME (PIPE FITTING)				
	STRUCTURAL:				
	Steelwork				
	The following shall be fabricated steel grade S355 to BS EN 10025 hot rolled sections and plates; all joints V-butt welded joints prepared and ground flush; include for all site welding and adjustments; shot blast clean to remove all traces of loose rust, grit etc; apply blast primer at the workshop, site holding primer and spot prime after erection; include for all site fixing, forming mortice and all necessary bolts, all to the Engineers Drawings, Specification and approval				
	Fabricated members; beams; > 25 < or = to 50 kg/m member profile.				
A	305 x 165 x 46 kg/m UB (B02)	t	2.04		
	Fabricated members; beams; < or = to 25kg/m member profile.				
B	305 x 102 x 25 kg/m UB (B04)	t	2.02		
C	203 x 102 x 23 kg/m UB (C06)	t	1.14		
	Fabricated members; fittings				
D	allow for all necessary caps, bases, haunches, gussets, end plates, splice plates, cleats, brackets, stiffeners, distance pieces and the like as required.	t	0.78		

	(28) FRAME (PIPE FITTING) (Cont)				
	(Cont) STRUCTURAL:				
	(Cont) Steelwork				
	Protective coatings				
A	Surface treatment off site; shot blast to BS7079 and cleaning to remove all traces of loose rust, grit etc to SA 2.5 of Sweedish Standard IS EN ISO 8501, 8502, 8504 and apply airless spray coat of two pack epoxy zinc rich primer to a dry film thickness of 25 microns, spot priming after fabrication, and apply one coat high build zinc Phosphate Epoxy primer to a dry film thickness of 75 microns (and apply a second cost of high build epoxy MIO to a dry film thickness of 100microns to fully/partially external steel), to Engineers Specification and approval	t	5.97		
	Holding down bolt assemblies.				
B	Ref. B08 base plate bolted to reinforced concrete base with 4 no grade 8.8 M20 holding down bolts (60mm min treaded protection), minimum 320mm embedment into pads 500mm deep bedded on 20mm non shrink 5 star grout , 70 x 70 x 6mm RSA steel restraints to bolts set in 75mm diameter steel tubes grout all as detailed on Engineers Drawing Nr. 0110	nr	8		
	Shimming and grouting.				
C	Grout under 500 x 500mm 12mm thick base plates with 25 mm thick non shrink grout; include for all necessary formwork etc. (Column B08) as per Engineers Drawing Nr. 0110	nr	8		

	(28) FRAME (PIPE FITTING) (Cont)				
	PAINTING AND DECORATING:				
	Painting				
	Surface treatment on site, after erection, touch up and patch prime apply Shot blast to Sa 2.5 (maximum surface profile 100 microns) and paint with Hempadur Primer 1557 (Hempels Industrial Coatings) to a minimum dry film thickness of 50 microns. (b) Apply one intermediate coat of Hampadur LTC 4514 to a minimum dry film thickness of 200 microns. (c) Apply one top coat of Hempathene Enamel 5510 to a minimum dry film thickness of 50 microns to Architects colour requirement.by airless spray to structural steelwork and to Engineers Specification and approval				
	Structural metalwork (Exposed Beams & Columns)				
A	general surfaces; girth > 300 mm girth	item	1		

(28) FRAME (PIPE FITTING) (Cont)				
COLLECTION				
Page No. BQ/526				NIL
Page No. BQ/527				NIL
Page No. BQ/528				NIL
(28) FRAME (PIPE FITTING) **Carried to Summary**				**NIL**

	(31) EXTERNAL WALL COMPLETIONS (PIPE FITTING)				
	EXTERNAL WALL COMPLETIONS:				
	METALWORK:				
	Non - Structural				
A	The prices hereunder shall include for all work in the design, supply, delivery, erection and protection of the following composite double glazed windows and doors.	Note			
B	The prices below are deemed to include for all profit, ironmongery, mastic sealing, general and special attendance.	Note			
C	All work shall be carried out in accordance with Architects Drawings, Schedules & Specifications.	Note			
D	Door leaves together with associated frames are collectively described as doorsets and enumerated	Note			
E	All glazing to be kitemark certified	Note			
F	All units are to be cleaned on completion and all protective films are to be removed	Note			
G	The Contractors rates & prices are deemed to include for all necesssary ventilation to comply with the Building Regulations, as noted in the Architects Drawings.	item	1		
H	Allow for submitting proposals including data sheets and sample for approval of windows and doorsets	item	1		
J	The Contractor shall allow for full coordination and integration of all door systems, including fire-rated doors, access-controlled doors, and doors connected to fire alarm and security systems, including all associated wiring, interfaces, controls, ironmongery and commissioning.	Item	1		

	(31) EXTERNAL WALL COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) METALWORK:				
	(Cont) Non - Structural				
A	The Contractor shall allow for full design coordination, supply, installation and integration of curtain walling, window systems and spandrel panels, including all interfaces with structure, weathering, roofing, doors and building services.	Item	1		

	(31) EXTERNAL WALL COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) METALWORK:				
	Composite items; windows				
	Thermally broken aluminium double glazed window system Reynaers MasterWall or equivalent approved; thermal performance (U-Value maximum) Part L Target - U-1.60 W/m2K (Area-Weighted Average) or better. MasterWall High Insulation: Uf = 1.3 W/m2K. Standard MasterWall: Utj = 2.1 W/m2; aluminium sections with polyester powder coated to BS EN 12206-1 RAL 7021 in matt finish, Polyester powder coated finishes shall be electro statically applied in factory to a film thickness of 60 microns standard manufacturer-selected ironmongery to suit sash arrangements (outward opening windows to be fitted with a handle-operated adjustable friction brake); double glazed thermally broken units to IGU configuration - Refer to Architects Specification Item L40/655, comprising of 2no. Panes Annealed Laminated Safety Glass with low "E" Argon filled cavity (90%), including all necessary trickle vents, fixings, sealing, glazing beads and neoprene gaskets; bedded in mastic bed, and EPDM tape-seal bonded to structure to detail, safety restrictors to all windows above ground floor level; all fixed complete in accordance with the manufacturers written instructions and (ref. Drg Nr. ZZ-SH-A-7002 & 7004); all as per Architects Window Specification HL10/330 & L40/370 and as detailed on Architects Drawings 25002-AFEC-01-ZZ-DR-A-4001, 4002 and 25002-AFEC-01-ZZ-SH-A 7002 & 7004				
A	to suit overall structural opening size 1073 x 1965mm high; complete with 1nr. solid spandrel panel (measured elsewhere) fixed to window with 1 nr. fixed safety glazing panel window; size 1073 x 1240mm Architect's Drawing Nr. ZZ-SH-A-7002, Window Type 6 (WIN-00-006).	nr	1		

To Collection € **NIL**

	(31) EXTERNAL WALL COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) METALWORK:				
	Composite items; spandrel panels				
	Aluminium Panel Systems Styroglaze - 25mm thick Glazing infill panel with Colorcoat (R) LG steel faces: Form insulated spandrel panel comprising 2mm pressed aluminium inner and outer faces which encapsulate with XPS rigid insulation. All aluminium surfaces to be powder coated in identical RAL colour 7021 as glazing in which it sits. Spandrel is to be formed so as to fully integrate with aluminium curtain wall & windows and to provide a fully airtight and watertight seal, all as per Architects Specification H11/110, L40/370 & L40/655 and Architects Drawings 25002-AFEC-01-ZZ-DR-A-4001, 4002 and 25002-AFEC-01-ZZ-SH-A 7002 & 7004				
A	Allow for insulated spandrel panel to Window Type 6 (WIN-00-006); size; 1073mm x 725mm high; including associated flashings, trimmings and fixings	nr	1		

	(31) EXTERNAL WALL COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) METALWORK:				
	Composite items; steel doors and frames to include factory fixed butt hinges, the number and size suitable for size and weight of door.				
	Pre-finished external polyester powder-coated (medium to high risk) mild steel personal door sets; 45 mm thick; "KCC Group / Fireblock" or equivalent and approved steel door sets range consisting of 2 skins of galvanized steel; insulated with Thermal performance (U-value maximum): Whole door U-value: Part L Target - U-1.60 W/m2K (Area-Weighted Average) or better and sound deadened with bonded ceramic boards with acoustic performance to manufacturers standards, mechanical strength to BS EN 1192 Class 4; reinforced pads fitted within the door leaf to suit hardware options; hung on and including pre drilled double rebated steel metal frame, timber subframe and bedded in mastic; door and frames primed and powder coated 40% gloss to RAL Colour 7021 (RAL colour matched to existing external doors in C90/110 Alteration works- Proposed Pipefitting Workshop).; include for rockwool packing to all gaps, frame fixings; mastic pointing,; "liquid plastics Ltd" or equivalent and approved acrylic anti-microbial mastic pointing sealant of selected colour to both sides of frame; all in accordance with the Engineer's Specification and manufacturer's written instructions and as per Architects Specification L480 on Drawing 25002-AFEC-00-ZZ-SH-A-7002 & 25002-AFEC-01-ZZ-DR-A-4001				
A	Composite items; door and frame sets				

	(31) EXTERNAL WALL COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) METALWORK:				
	(Cont) Composite items; steel doors and frames to include factory fixed butt hinges, the number and size suitable for size and weight of door.				
	(Cont) Pre-finished external polyester powder-coated (medium to high risk) mild steel personal door sets; 45 mm thick; "KCC Group / Fireblock" or equivalent and approved steel door sets range consisting of 2 skins of galvanized steel; insulated with Thermal performance (U-value maximum): Whole door U-value: Part L Target - U-1.60 W/m2K (Area-Weighted Average) or better and sound deadened with bonded ceramic boards with acoustic performance to manufacturers standards, mechanical strength to BS EN 1192 Class 4; reinforced pads fitted within the door leaf to suit hardware options; hung on and including pre drilled double rebated steel metal frame, timber subframe and bedded in mastic; door and frames primed and powder coated 40% gloss to RAL Colour 7021 (RAL colour matched to existing external doors in C90/110 Alteration works- Proposed Pipefitting Workshop).; include for rockwool packing to all gaps, frame fixings; mastic pointing,; "liquid plastics Ltd" or equivalent and approved acrylic anti-microbial mastic pointing sealant of selected colour to both sides of frame; all in accordance with the Engineer's Specification and manufacturer's written instructions and as per Architects Specification L480 on Drawing 25002-AFEC-00-ZZ-SH-A-7002 & 25002-AFEC-01-ZZ-DR-A-4001				
A	Single Door and half leaf & frameset, to suit overall opening size 1550 x 2135mm high; clear single door opening 950mm x 2080mm and half leaf door opening 387mm x 2080mm; 45 mm thick with panic bars inside (lever handles on outside with dead lock), 1(one) hour Fire Rated, steel doors and frames to include door closers, and butt hinges the number and size suitable for size and weight of door complete (Ref: EXT.00.005 External Steel Door)	nr	1		

	(31) EXTERNAL WALL COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) METALWORK:				
	(Cont) Composite items; steel doors and frames to include factory fixed butt hinges, the number and size suitable for size and weight of door.				
	(Cont) Pre-finished external polyester powder-coated (medium to high risk) mild steel personal door sets; 45 mm thick; "KCC Group / Fireblock" or equivalent and approved steel door sets range consisting of 2 skins of galvanized steel; insulated with Thermal performance (U-value maximum): Whole door U-value: Part L Target - U-1.60 W/m2K (Area-Weighted Average) or better and sound deadened with bonded ceramic boards with acoustic performance to manufacturers standards, mechanical strength to BS EN 1192 Class 4; reinforced pads fitted within the door leaf to suit hardware options; hung on and including pre drilled double rebated steel metal frame, timber subframe and bedded in mastic; door and frames primed and powder coated 40% gloss to RAL Colour 7021 (RAL colour matched to existing external doors in C90/110 Alteration works- Proposed Pipefitting Workshop).; include for rockwool packing to all gaps, frame fixings; mastic pointing,; "liquid plastics Ltd" or equivalent and approved acrylic anti-microbial mastic pointing sealant of selected colour to both sides of frame; all in accordance with the Engineer's Specification and manufacturer's written instructions and as per Architects Specification L480 on Drawing 25002-AFEC-00-ZZ-SH-A-7002 & 25002-AFEC-01-ZZ-DR-A-4001				
A	Single Door & frameset, to suit overall opening size 1173 x 2135mm high; clear opening 1065mm x 2080mm; 45 mm thick with panic bar inside (lever handle on outside with dead lock), 1(one) hour Fire Rated, steel doors and frames to include door closers, and butt hinges the number and size suitable for size and weight of door complete (Ref: EXT.00.007 External Steel Door)	nr	1		

	(31) EXTERNAL WALL COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) METALWORK:				
	Composite Item; Sectional Doors				
	Electrically operated (with key switch) (manual override by chain hoist) Double skinned insulated steel sectional overhead door with lightweight aluminium sandwich panels - SPU F42 Section window type E Uniform field division by Hormann or equivalent approved 42-mm-thick PU-foamed section with finger trap protection; finished Plastisol to RAL Colour 7021; with a Thermal performance: Whole door U-value: Part L Target - U-1.60 W/m2K (AreaWeighted Average) or better; High lift track arrangement or vertical lift track arrangement - dictated by adjacent gantry crane structure, Track system Heavy-gauge cold-rolled galvanized steel; with and including all screws, angles, tracks, lugs, brackets, bolts, drum soffit and head and reveal flashings, EDPM Seals etc as necessary all in accordance with manufacturers instructions.; including all necessary fixings; all in accordance with the manufactures written instructions as per Architects Specification L20/615 and Drawings 25002-AFEC-00-ZZ-SH-A-7002 & 25002-AFEC-01-ZZ-DR-A-4001				
	EXT.00.006 - Sectional Overhead Door				
A	size 3365 mm wide x 4510 mm high	nr	1		
	WOODWORK:				
	Structural and first fixings				
	The following shall be sawn white deal softwood unless otherwise stated; structural grade Class C; vac - vac treated; include for all necessary fixings.				
	First fixings; grounds				
B	50 x 25 mm shot fixed to structural steel	m	24		

	(31) EXTERNAL WALL COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) WOODWORK:				
	Ironmongery, Accessories and Sundries (Doors)				
	Accessories				
A	Low profile stainless steel external quality threshold weatherstrip, fixed to concrete floor	m	3		
	Supply and Fix the following brushed stainless steel ironmongery to aluminium door & framesets.				
	Hardware Set 12 (External Leaf & Half Escape Door (Access Controlled)				
B	Cam-Motion Door Closers.	nr	2		
C	Double Door Mechanical Coordinator.	nr	1		
D	Heavy Duty Electrical Escape Lock	nr	1		
E	Panic Bars.	nr	2		
F	SS Euro Single Cylinder & 2 Keys.	nr	1		
G	SS External Lever Handle on Rose.	nr	1		
H	Door Position Switch connected to Security Alarm System.	nr	2		
J	Door to be pre-wired for Automation subject to compliance with TGD M 2022 1.2.4.2 (a) Opening Forces	Item	1		
	Hardware Set 13 (External Single Escape Door)				
K	Cam-Motion Door Closer	nr	1		
L	Heavy Duty Mechanical Escape Lock with Panic Bar	nr	1		
M	Door Position Switch connected to Security Alarm System	nr	1		

	(31) EXTERNAL WALL COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Ironmongery, Accessories and Sundries (Doors)				
	Manifestations				
A	Manifestation In compliance with TGD Part M and DAC. Refer 25002-AFEC-00-ZZ-SH-A-7002_External Door Schedule; Coatex or equivalent approved; Product Metamark Frost Etch Glass Effect Film to clause 436- 3 layer based - Layer 1: High optical quality polyester with printed design. Layer 2: PS adhesive, glass polymerization within 15 days. Layer 3: Protection release liner disposable after installation; heights set at 850mm approx. & 1475mm above FFL all as per Architects Specification and Drawing 25002-AFEC-00-ZZ-SH-A-7002	nr	12		
	Ironmongery, Accessories and Sundries (Windows & Doors)				
	Sundries				
B	10 mm thick "Compriband" or equivalent and approved compressible filler between window frame and window boards with anti-fungal silicone seal.	m	24		
	Mastic Sealing.				
C	Clean,prepare,prime and point one side in silicone mastic sealer,of a selected colour, joint size 12 x 12mm ,between frame and masonary	m	24		
	Mastic Sealing.				
D	Clean,prepare,prime and point one side in silicone mastic sealer,of a selected colour, joint size 12 x 12mm ,between frame and masonary	m	24		

	(31) EXTERNAL WALL COMPLETIONS (PIPE FITTING) (Cont)				
	AIR TIGHTNESS				
	Air Tightness				
	Air tightness and vapour barrier tape, continuous sealing between curtain walling / glazing and adjacent building component / structure; fixing to internal face of adjacent structure and dressed in frame system to seal junctions, as per Architects Drawing Series 6000 and Specifications				
A	Heads, Vertical Jambs and Horizontal cills of curtain walling / windows / doors, girth < or = 300mm (all sides)	m	27		

(31) EXTERNAL WALL COMPLETIONS (PIPE FITTING) (Cont)				
COLLECTION				
Page No. BQ/530				NIL
Page No. BQ/531				NIL
Page No. BQ/532				NIL
Page No. BQ/533				NIL
Page No. BQ/534				NIL
Page No. BQ/535				NIL
Page No. BQ/536				NIL
Page No. BQ/537				NIL
Page No. BQ/538				NIL
Page No. BQ/539				NIL
Page No. BQ/540				NIL
(31) EXTERNAL WALL COMPLETIONS (PIPE FITTING) Carried to Summary				**NIL**

	(32) INTERNAL WALL COMPLETIONS (PIPE FITTING)				
	INTERNAL WALL COMPLETIONS				
A	The Contractor shall allow for full coordination and integration of all door systems, including fire-rated doors, access-controlled doors, and doors connected to fire alarm and security systems, including all associated wiring, interfaces, controls, ironmongery and commissioning.	Item	1		
B	The Contractor shall include for all specialist joinery and glazed screen systems, including fire-rated glazed screens, manifestation, interfaces with structure and services, and all associated supports, fixings and making good.	Item	1		
	WOODWORK:				
	Structural And First Fixings				
	The following shall be in wrot vac vac treated red deal unless otherwise stated;; plugged and screwed to composite metal deck/in situ concrete floor; include for all necessary fixings, counter sinking and making good with matching pellates; protected for finishes:				
	First fixings; fixing grounds				
C	32 x 50 mm	m	28		
	Boarding and second fixings				
	WBP plywood; 15 mm thick; fixed to blockwork wall; include for all necessary fixings.				
	Boarding and sheeting; walls				
D	< or = to 300 mm wide, around door openings	m	28		

	(32) INTERNAL WALL COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Boarding and second fixings				
	The following shall be painted mdf (moisture resistant) in compliance with EN 622 parts 1 & 5 unless otherwise stated; plugged and screwed to blockwork / concrete and stud partitions; include for all necessary fixings and making good to punch holes; as per Architects Specification on Drawing 25002-AFEC-00-ZZ-SH-A-7001				
	Second fixings; architraves				
A	100 x 25 mm, rebated MDF	m	56		
	Second fixings; hardwood quadrants				
B	25 x 25 mm to vision panels	m	16		
	Composite items; Doors				
	FD30S: 30 minutes integrity rating in accordance with BS 476 part 8, 20 and 22 and to have a leakage rate not exceeding 3m3 / hour when tested at 25 Pa under BS 476 Section 31.1. 30 minute fire door to have a min. density of 550 kg/cubic metre.	Note			
	FD60S: 60 minutes integrity rating in accordance with BS 476 part 8, 20 and 22 and to have a leakage rate not exceeding 3m3 / hour when tested at 25 Pa under BS 476 Section 31.1. 60 minute fire door to have a min. density of 650 kg/cubic metre.	Note			
	All fire doors and screens shall be tested to B.S.476 p.8.1972, entire door sets to be installed in accordance with Test Certificate issued, a copy of which shall be supplied to the Architect, fire doors shall carry Trada fire door codes for various ratings	Note			
	The following door sets and screens are referenced by types to the Architects drawings mentioned above and schedules and should be read in conjunction with the Architects Specification	Note			

	(32) INTERNAL WALL COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Composite items; Doors				
	30 Minute Fire Rated Doors				
	KCC Group / Carrolls Joinery 44mm thick Solid - core flush varnished paint grade door; internal single action; with hardwood European Oak veneer (or equivalent) with mechanical strength to 1To BS EN 1192 Class 2-3; Acoustic and Thermal Performances to manufacturers standards; with and including lipping to all edges 44 x 8 mm thick; faced both sides with 5mm hardwood veneered plywood finished as full stain system, as spec section M60; neatly cut and fitted to margins; all glued together and hydraulically pressed to approval intumescent strips, smoke seals and nylon sweeps as required to door frame and leaves; with and including 1 number glazed vision panels (various sizes); 20 x 15 mm splayed and rebated wrot hardwood glazing beads fixed, sunk, screwed and pelleted to both sided of door and bedded in intumescent paste; 20 x 4 mm 100 PSA fire seal strips to both sides of glazing to achieve 30 minute fire rating (vp glazing and ironmongery measured separately); all in accordance with the Architects Specification as per Drawing 25002-AFEC-00-ZZ-SH-A-7001				
	Door Type 3 (INT-D03) - Door Nr 13				
	Composite items; single doors				
A	to suit overall structural opening size 1010 x 2110mm high; Solid Single Door size; 925 x 2070 mm high; 44 mm thick;	nr	1		
	Door Type 4 (INT-D04) - Door Nr 12				
	Composite items; single doors				
B	to suit overall structural opening size 1010 x 2110mm high; Solid Single Door size; 925 x 2070 mm high with vision panel; size 546mm x 1350mm high; 44 mm thick;	nr	1		

	(32) INTERNAL WALL COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Composite items; Doors				
	(Cont) KCC Group / Carrolls Joinery 44mm thick Solid - core flush varnished paint grade door; internal single action; with hardwood European Oak veneer (or equivalent) with mechanical strength to lTo BS EN 1192 Class 2-3; Acoustic and Thermal Performances to manufacturers standards; with and including lipping to all edges 44 x 8 mm thick; faced both sides with 5mm hardwood veneered plywood finished as full stain system, as spec section M60; neatly cut and fitted to margins; all glued together and hydraulically pressed to approval intumescent strips, smoke seals and nylon sweeps as required to door frame and leaves; with and including 1 number glazed vision panels (various sizes); 20 x 15 mm splayed and rebated wrot hardwood glazing beads fixed, sunk, screwed and pelleted to both sided of door and bedded in intumescent paste; 20 x 4 mm 100 PSA fire seal strips to both sides of glazing to achieve 30 minute fire rating (vp glazing and ironmongery measured separately); all in accordance with the Architects Specification as per Drawing 25002-AFEC-00-ZZ-SH-A-7001				
	Door Type 6 (INT-D06) - Door Nr 15				
	Composite items; double doors				
A	to suit overall structural opening size 1985 x 2110mm high; 2no. Solid Single leaf Doors size; 983 x 2070 mm high; 44 mm thick;	nr	1		
	Door Type 7 (INT-D07) - Door Nr 11				
	Composite items; single doors				
B	to suit overall structural opening size 1010 x 2110mm high; Solid Single Door size; 925 x 2070 mm high with vision panel; size 200mm x 1350mm high; 44 mm thick;	nr	1		

	(32) INTERNAL WALL COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Composite items; Doors				
	(Cont) KCC Group / Carrolls Joinery 44mm thick Solid - core flush varnished paint grade door; internal single action; with hardwood European Oak veneer (or equivalent) with mechanical strength to 1To BS EN 1192 Class 2-3; Acoustic and Thermal Performances to manufacturers standards; with and including lipping to all edges 44 x 8 mm thick; faced both sides with 5mm hardwood veneered plywood finished as full stain system, as spec section M60; neatly cut and fitted to margins; all glued together and hydraulically pressed to approval intumescent strips, smoke seals and nylon sweeps as required to door frame and leaves; with and including 1 number glazed vision panels (various sizes); 20 x 15 mm splayed and rebated wrot hardwood glazing beads fixed, sunk, screwed and pelleted to both sided of door and bedded in intumescent paste; 20 x 4 mm 100 PSA fire seal strips to both sides of glazing to achieve 30 minute fire rating (vp glazing and ironmongery measured separately); all in accordance with the Architects Specification as per Drawing 25002-AFEC-00-ZZ-SH-A-7001				
	Door Type 13 (INT-D13) - Door Nr 18				
	Composite items; single doors				
A	to suit overall structural opening size 995 x 2110mm high; Solid Single Door size; 910 x 2070 mm high; 44 mm thick;	nr	1		

	(32) INTERNAL WALL COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Composite items; Doors				
	Framing				
	The following shall be in treated hardwood European Oak unless otherwise stated; plugged and screwed to blockwork/stud partitions; include for all necessary fixings, counter sinking and making good with matching pellates; protected for finishes; all in accordance with the Architects Drawings and Specification L20/410:				
	Framing; jambs and heads				
A	126 x 44 mm; 2 times rebated.	m	28		
	Ironmongery, Accessories and Sundries				
	Provide and fit the following ironmongery to solid doors and frames as per Architects Specification on Drawing 25002-AFEC-00-ZZ-SH-A-7001				
	Hardware Set 4 (Single Circulation Door (Fire Rated))				
B	SS Concealed Bearing Hinge with Integral Security Dog Bolt & Intumescent Pads.	nr	12		
C	Heavy Duty Electrical Escape Lock & Intumescent Kit.	nr	4		
D	SS Euro Single Cylinder & 2 Keys.	nr	4		
E	SS Lever Handle Set on Rose.	Set	4		
F	Automatic Drop Seal - Concealed.	nr	4		
G	Kickplate - Grade 304 -200mm High - Width to suit door width.	nr	8		
H	75mm Diameter "FIRE DOOR KEEP SHUT" Sign -Stainless Steel / Blue Disc.	nr	8		
	Hardware Set 8 (Double Secure Door - Access Controlled (Fire Rated))				
J	SS Concealed Bearing Hinge with Integral Security Dog Bolt & Intumescent Pads.	nr	1		

	(32) INTERNAL WALL COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Ironmongery, Accessories and Sundries				
	(Cont) Provide and fit the following ironmongery to solid doors and frames as per Architects Specification on Drawing 25002-AFEC-00-ZZ-SH-A-7001				
	(Cont) Hardware Set 8 (Double Secure Door - Access Controlled (Fire Rated))				
A	Cam-Motion Door Closers.	nr	1		
B	Double Door Mechanical Coordinator.	nr	1		
C	Heavy Duty Electrical Escape Lock & Intumescent Kit.	nr	1		
D	SS Euro Single Cylinder & 2 Keys.	nr	1		
E	SS Lever Handle Set on Rose.	Set	1		
F	Flush Bolt with Dust Socket for Inactive Leaf.	nr	1		
G	Kickplate - Grade 304 -200mm High - Width to suit door width.	nr	4		
H	75mm Diameter "FIRE DOOR KEEP SHUT" Sign -Stainless Steel / Blue Disc.	nr	4		
	Sundries; bedding and pointing				
	Sundries; seals				
	Mineral "Rockwool" packing to fire rated doors as per manufacturers instructions.				
J	30 minute fire rated door frame 126 mm wide.	m	28		
	Sundries; intumescent seals				
	"Dufaylite" or equal approved intumescent fire seal strip with combined smoke seal; fixed into and including form any necessary groove within the door and door frames for the following:				
K	10 x 5 mm approved smoke seal to achieve 30 & 60 minute fire rating.	m	28		

	(32) INTERNAL WALL COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) WOODWORK:				
	(Cont) Ironmongery, Accessories and Sundries				
	(Cont) Sundries; bedding and pointing				
	Fixings; drilled				
A	"Hilti" or equally approved expanding anchor bolt set type HT 10 / 92; including for forming mortice in hardwood timber frames and solid concrete blockwork walls; including all necessary drilling and fixing; counter sink and making good and pelleted, maximum 150mm from ends of each jamb and at 600mm maximum centres.	nr	47		
	Bed door frame in 10 mm thick fire rated intumescent bedding compound to achieve 30 & 60 minute fire rating; include for Tightly Packed Mineral Fibre Capped on Both Sides with a 10mm Depth of Acrylic Intumescent Mastic, Fire Rated for this Application to BS 476: Part 22: 1987 or BS EN 163 -1 or full depth Expanding PU foam, Fire Tested for this Application; to 30 & 60 minutes fire rating to both sides of frame.				
B	door frame 126 mm wide (30min)	m	28		
	GLAZING:				
	General glazing (Vision Panels to Doors)				
	Fire Rated (30 minutes)				

	(32) INTERNAL WALL COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) GLAZING:				
	(Cont) General glazing (Vision Panels to Doors)				
	Fire Rated EI30 (30/30) 17.3mm thick Pyrobel 16 with 2 ply annealed laminated or toughened glass, All glazing = 250mm wide to achieve a 1B1 classification in accordance with IS EN 12600; Manufacturer & Product: Pyrobel by AGC Glass UK Limited or equivalent in accordance with BS 6262-4, clear fire resisting safety glazing; Colour: Clear Sealant or equivalent; secured with 25 x 25mm hardwood glazing beads to timber doors / vision panels; all to achieve 30 minute fire rating; all in accordance with Architects Specification L40/505				
A	glazing; area 0.15 - 5.00m2; multiple glazed panes (viewing panels to doors).	m2	1		
	PAINTING AND DECORATING:				
	Painting				
	Prepare, knot, prime, stop and apply one coat of primer, one coat of undercoat/ base coat, two finishing coats of Dulux waterborne paint -Dulux diamond satinwood / eggshell to selected RAL colour range; as per Architects Specification M60/150				
	General surfaces; frames to doors				
B	< or = 300 mm	m	56		
	General surfaces; architraves, quadrants / beading				
C	< or = 300 mm	m	72		
	General surfaces; all doors (including vision panels)				
D	> 300 mm	m2	26		

(32) INTERNAL WALL COMPLETIONS (PIPE FITTING) (Cont)

COLLECTION

Page No. BQ/542				NIL
Page No. BQ/543				NIL
Page No. BQ/544				NIL
Page No. BQ/545				NIL
Page No. BQ/546				NIL
Page No. BQ/547				NIL
Page No. BQ/548				NIL
Page No. BQ/549				NIL
Page No. BQ/550				NIL
(32) INTERNAL WALL COMPLETIONS (PIPE FITTING) Carried to Summary				**NIL**

	(37) ROOF COMPLETIONS (PIPE FITTING)				
	METALWORK:				
	Non - Structural				
	ROOF MOUNTED WINDCATCHER / AIR LOUVRES (as outlined on M&E Drawings)				
	Contractor to allow for forming Wind Catcher / Air Louvre opes in Existing Pipe-fitting Roof (100mm thick cladding), approx. size; 905mm x 915mm including associated grounds, upstands, site applied and mineral wool insulation, with and including the installation of an Air tightness / VCL layer and vapour barrier tape to provide a continuous sealed area / junctions, flashings, trimmings and fixings attachments, seals, etc. installed in accordance with the manufacturers recommendations and as per the Architects instructions all as outlined on Architects Drawings RL-DR-M-2200, ZZ-DR-A-2002 & Section Drawings Series 6000 (6307)				
A	905mm wide x 915mm long x 250mm high (approx.)	nr	2		

	(37) ROOF COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) Non - Structural				
	(Cont) ROOF MOUNTED WINDCATCHER / AIR LOUVRES (as outlined on M&E Drawings)				
	Flashings to Existing Roof Cladding & New Roof Completion Items				
	PPC Pressed aluminium metal flashings, 1.0mm thick aluminium coated externally in RAL Colour 7016 to match cladding or equivalent, 200 microns thick with a polyester coating internally; in selected colours; flashings lapped 100mm to 150mm at all joints allow for fixing with low profile stitching screws with min 14mm diameter non-ferrous EPDM backed washers fitted at max. 450mm centres with 4mm diameter butyl rubber sealant; include for all necessary butt straps and sealed with two unbroken runs of 9mm wide x 3mm thick butyl rubber sealant tape at all joints, site applied LPCB certified PIR insulation board with and including the installation of an Air tightness / VCL layer and vapour barrier tape to provide a continuous sealed area / junctions and mineral wool firestop batt (providing continuity of fire rating to external wall opes etc.) to any gaps filled with fire rated canister insulation; include for all necessary grounds mastic sealing, from sealing stitching and riveting to provide air and water tight weather seals as per manufacturers written instructions; as per Architects Specification H72/470 and Architects Drawing Details RL-DR-M-2200, ZZ-DR-A-2002 & Section Drawings Series 6000 (6307)				
	Apron Flashings to Wind Catcher / Air Louvre & Roof Cladding; 2/3 times bent; as outlined on Drawing RL-DR-M-2200, ZZ-DR-A-2002 and Section Drawings Series 6000 (6307)				
A	girth 300 - 450mm; laid horizontal to Wind Catcher / Air Louvre opes as outlined on Drawing RL-DR-M-2200	m	8		

	(37) ROOF COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) Non - Structural				
	ROOF MOUNTED EXTRACT FANS - EF.02.01 & EF.02.02 (as outlined on M&E Drawings)				
	Contractor to allow for forming Roof Mounted Fan opes in Existing Pipe-fitting Roof (100mm thick cladding), approx. size; 1000mm x 1000mm including associated grounds, upstands, site applied and mineral wool insulation, with and including the installation of an Air tightness / VCL layer and vapour barrier tape to provide a continuous sealed area / junctions, flashings, trimmings and fixings attachments, seals, etc. installed in accordance with the manufacturers recommendations and as per the Architects instructions all as outlined on Architects Drawings RL-DR-M-2200, ZZ-DR-A-2002 & Section Drawings Series 6000 (6307)				
A	1000mm wide x 1000mm long x 250mm high (approx.)	nr	2		

To Collection € **NIL**

	(37) ROOF COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) Non - Structural				
	(Cont) ROOF MOUNTED EXTRACT FANS - EF.02.01 & EF.02.02 (as outlined on M&E Drawings)				
	Flashings to Existing Roof Cladding & New Roof Completion Items				
	PPC Pressed aluminium metal flashings, 1.0mm thick aluminium coated externally in RAL Colour 7016 to match cladding or equivalent, 200 microns thick with a polyester coating internally; in selected colours; flashings lapped 100mm to 150mm at all joints allow for fixing with low profile stitching screws with min 14mm diameter non-ferrous EPDM backed washers fitted at max. 450mm centres with 4mm diameter butyl rubber sealant; include for all necessary butt straps and sealed with two unbroken runs of 9mm wide x 3mm thick butyl rubber sealant tape at all joints, site applied LPCB certified PIR insulation board with and including the installation of an Air tightness / VCL layer and vapour barrier tape to provide a continuous sealed area / junctions and mineral wool firestop batt (providing continuity of fire rating to external wall opes etc.) to any gaps filled with fire rated canister insulation; include for all necessary grounds mastic sealing, from sealing stitching and riveting to provide air and water tight weather seals as per manufacturers written instructions; as per Architects Specification H72/470 and Architects Drawing Details RL-DR-M-2200, ZZ-DR-A-2002 & Section Drawings Series 6000 (6307)				
	Apron Flashings to Roof Mounted Extract Fans & Roof Cladding; 2/3 times bent; as outlined on Drawing RL-DR-M-2200, ZZ-DR-A-2002 and Section Drawings Series 6000 (6307)				
A	girth 300 - 450mm; laid horizontal to Roof Mounted Extract Fan opes as outlined on Drawing RL-DR-M-2200	m	8		

	(37) ROOF COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) Non - Structural				
	GOOSNECK DUCT TERMINATION (as outlined on M&E Drawings)				
A	Contractor to allow for forming opes in Existing Pipe-fitting Roof (100mm thick cladding) and new Retrofit 450mm diameter Gooseneck Duct Termination penetration system c/w silencer with Dektite EPDM Flashing; service entry consisting of spun aluminium base with large area to bond to the waterproofing, detachable lid for ease of access, sufficient clearance for future re-roofing under existing services and pipe/duct/cable port plate with knock-out holes including all necessary drillings, fixings, attachments, seals, flashings, and the like etc. installed in accordance with the manufacturers recommendations and as per the Architects instructions as outlined on Drawing RL-DR-M-2200,	nr	1		
B	Contractor to allow for forming opes in Existing Pipe-fitting Roof (100mm thick cladding) and Retrofit new 500mm diameter Gooseneck Duct Termination penetration system c/w silencer with Dektite EPDM Flashing; service entry consisting of spun aluminium base with large area to bond to the waterproofing, detachable lid for ease of access, sufficient clearance for future re-roofing under existing services and pipe/duct/cable port plate with knock-out holes including all necessary drillings, fixings, attachments, seals, flashings, and the like etc. installed in accordance with the manufacturers recommendations and as per the Architects instructions as outlined on Drawing RL-DR-M-2200,	nr	2		

	(37) ROOF COMPLETIONS (PIPE FITTING) (Cont)				
	(Cont) Non - Structural				
	ROOF SERVICE ENTRY (as outlined on M&E Drawings)				
A	Contractor to allow for forming opes in Existing Pipe-fitting Roof (100mm thick cladding) and Retrofit new swan-neck cable penetration system with Dektite EPDM Flashing; service entry consisting of spun aluminium base with large area to bond to the waterproofing, detachable lid for ease of access, sufficient clearance for future re-roofing under existing services and pipe/cable port plate with knock-out holes including all necessary drillings, fixings, attachments, seals, flashings, and the like etc. installed in accordance with the manufacturers recommendations and as per the Architects instructions	nr	3		

(37) ROOF COMPLETIONS (PIPE FITTING) (Cont)				
COLLECTION				
Page No. BQ/552				NIL
Page No. BQ/553				NIL
Page No. BQ/554				NIL
Page No. BQ/555				NIL
Page No. BQ/556				NIL
Page No. BQ/557				NIL
(37) ROOF COMPLETIONS (PIPE FITTING) Carried to Summary				**NIL**

	(41) WALL FINISHES EXTERNALLY (PIPE FITTING)				
	WALL FINISHES EXTERNALLY				
	FLOOR, WALL AND CEILING FINISHES:				
	Finishes				
	In - situ Finishes.				
	Scud in cement and sand (1:3), apply two coats of cement, lime and sand (1:0.5:4-4.5) undercoat (10mm thick) and one coat of white portland cement, lime and sand (1:0.5:4-4.5) final coat (10mm thick) total thickness 30 mm; finish in selected light-tone pebble a dry dash from an approved source; all in accordance with Architects Specification M20				
	Walls; blockwork base				
A	> 300 mm wide (make good wall where existing building removed)	m2	20		
	Scud in cement and sand (1:3), apply two coats of cement, lime and sand (1:1:5-6) undercoat (10mm thick) and one coat of white portland cement, lime and sand (1:1:5-6) final coat (8mm thick) total thickness 20 mm; finish with a wood float with a fine nap surface all in accordance with Architects Specification M20				
	Walls; blockwork base				
B	< or = to 300 mm; reveals	m	14		
C	extra over last for patent reveals, 80 mm wide and projecting 20 mm over adjoining plaster	m	14		
	Plinths; blockwork base				
D	girth 150 - 300 mm	m	8		

To Collection € **NIL**

	(41) WALL FINISHES EXTERNALLY (PIPE FITTING) (Cont)				
	(Cont) Finishes				
	(Cont) In - situ Finishes.				
	Expamet, or equivalent approved, austenitic stainless steel expanded metal lathing and beading to BS EN 10088-1, fixed in accordance with the manufacturers instructions using s/s fixings as outlined in Architects Specification				
A	angle bead; ref. 506	m	14		
B	render stop; ref. 507	m	14		
C	bellcast to plinth	m	8		
D	movement bead: ref.544	m	5		
	Labours				
	Labours; making good, cutting around obstructions				
E	girth; < or = 300 mm	nr	3		
F	girth 300 mm - 1.00m	nr	1		
	PAINTING AND DECORATING:				
	Painting				
	Prepare and paint two coats of Dulux Weathershield or equivalent approved exterior quality paint, in selected colours; all in accordance with the manufactures written instructions.				
	Walls; roughcast plastered base				
G	> 300 mm girth	m2	23		
H	< or = to 300 mm girth, reveals	m	17		
J	< or = to 300 mm girth, plinths	m	9		

(41) WALL FINISHES EXTERNALLY (PIPE FITTING) (Cont)				
COLLECTION				
Page No. BQ/559				NIL
Page No. BQ/560				NIL
(41) WALL FINISHES EXTERNALLY (PIPE FITTING) Carried to Summary				**NIL**

	(42) WALL FINISHES INTERNALLY (PIPE FITTING)				
	WALL FINISHES INTERNALLY				
	FLOOR WALL AND CEILING FINISHES:				
	Board Finishes:				
	1 layers of 20 mm "Gyproc" F Firecase or equivalent fire rated structural steel, comprising of Gypframe FEA1 steel angles system fixed to structural steel members at 600mm centres; all butt joints, joints staggered; fixing with proprietary Firecase screws at 150mm centres, joints taped with joint tape, include for filling and sealing joints with include for one part water based acrylic acoustic intumescent sealant in preparation for skim finish; 'Gyproc Skimcoat plaster, 2 mm thick applied to plasterboard base; to achieve 60 / 60 rating; to structural steelwork, all in accordance with Architects Specification P12 and manufacturers instructions				
	Beams				
A	columns, girth 1250mm to 4 sides (existing column)	m	11		
	Sundries				
	"Expamet" or equal approved galvanized mild steel; expanded metal lathing and beading fixed in accordance with manufacturers instructions				
	Beads				
B	angle bead; uPVC or proptietary stainless steel beads to grade 304 of BS 1449 Part 2 (fire encasement to steel)	m	21		

	(42) WALL FINISHES INTERNALLY (PIPE FITTING) (Cont)				
	FLOOR WALL AND CEILING FINISHES:				
	Board Finishes:				
	2 layers of Gyproc or equivalent plasterboard; consisting of 2 layer of 12.5m thick Soundbloc; including for staggered joints; fixing with gyproc drywall screws to metal framework at 600 mm centres (framework measured elsewhere); include all blocking and bracing as necessary; taped and filled joints and spotting nail holes in preparation for skim finish; "Gypsum" or equivalent plaster skim, 3 mm thick applied to plasterboard base; all as per Architects Specification K10				
	Walls				
A	> 300 mm wide (IWS-04)	m2	113		
	Labours				
	Labours; making good and / or cutting around obstructions				
B	girth; < or = 300 mm	nr	5		
	Sundries				
	"Expamet" or equal approved galvanized mild steel; expanded metal lathing and beading fixed in accordance with manufacturers instructions				
	Beads				
C	angle bead	m	23		
D	plaster stop bead	m	45		

	(42) WALL FINISHES INTERNALLY (PIPE FITTING) (Cont)				
	PAINTING AND DECORATING:				
	Painting				
	Thoroughly clean down; remove any grease or dirt; prepare and apply prior to application of skim finishes to plasterboard 1 coat primer of drywall PVA sealer dilution 5:1 and 1 coat reprime dilution 3:1				
	Walls; plastered base				
A	girth > 300 mm	m2	113		
B	girth > 300 mm in steel encasement	m2	14		
	Thoroughly clean down; remove any grease or dirt; prepare, apply one preparatory primer undercoat / base coat and two finishing coats of Dulux Diamond Matt or equivalent; emulsion paint finish in selected RAL colour range; all in accordance with the manufacturers written instructions and Architects Specification M60				
	Walls; plastered base				
C	girth > 300 mm	m2	113		
D	girth > 300 mm in steel encasement	m2	14		
	Walls; blockwork base				
E	girth < or = 300 mm	m	49		
F	girth > 300 mm (new blockwork)	m2	183		
G	girth > 300 mm (existing blockwork)	m2	152		

(42) WALL FINISHES INTERNALLY (PIPE FITTING) (Cont)				
COLLECTION				
Page No. BQ/562				NIL
Page No. BQ/563				NIL
Page No. BQ/564				NIL
(42) WALL FINISHES INTERNALLY (PIPE FITTING) Carried to Summary				**NIL**

	(43) FLOOR FINISHES (PIPE FITTING)				
	FLOOR FINISHES				
	INFORMATION				
	Conditions for laying floor coverings				
A	Before laying the floor coverings, their bases shall be swept and porous bases shall be primed as recommended by the Adhesive manufacturer	item	1		
B	In no circumstances should floor hardening solutions be used. Any priming coat should be allowed to dry before the adhesive is used	item	1		
C	When laying flexible P.V.C. coverings, the flooring should be kept at a room temperature of not less than 18 degrees centigrade for at least 24 hours before laying. When laying the material shall be well rolled with a floor roller, weighing approximately 65kg	item	1		
D	All other trades are to be finished	item	1		
E	All lighting and heating to be on	item	1		
F	Humidifiers to be provided	item	1		
G	Allow for protecting all floors with polythene (1000 gauge) covered with hardboard sheet taped and jointed, maintaining, removal and disposal upon completion and making good areas	item	1		
H	Areas to be completely free and protected from dust	item	1		
	New powerfloated and screeded concrete floor slabs are to be finished to an acceptable standard for floor coverings as recommended by the manufactures written instructions of the relevant sheet, tile and brush applied floor coverings and any uneven areas or blemishes are to be made good with a patent levelling screed or ground smooth where necessary at the Contractor own expense.	Note			

	(43) FLOOR FINISHES (PIPE FITTING) (Cont)				
	DEMOLITION AND ALTERATIONS:				
	Treatment / Repairs				
	Cleaning surfaces				
	Blastrac concrete floor slab to thoroughly clean, dry and remove all laitances, traces of dirt, grease and contaminants etc in preparation for the approved floor sealer in accordance with BS 8203 or DIN 18 365.				
A	concrete floor	m2	332		
	WOODWORK:				
	Boarding and Second Fixings				
	The following shall be painted mdf (type H1) in compliance with EN 622 parts 1 & 5 unless otherwise stated; plugged and screwed to blockwork / concrete and stud partitions; include for all necessary fixings and making good to punch holes; as per Architects Specification and Drawings 25002-AFEC-00-ZZ-DR-A-1004, 2103, 2201, 2202 & 6002				
	Second fixings; skirting				
B	125 x 18 mm, rebated MDF (1 x rebate 5mm x 5mm deep)	m	138		

	(43) FLOOR FINISHES (PIPE FITTING) (Cont)				
	FLOOR, WALL AND CEILING FINISHES:				
	Flexible sheet finishes:				
	Floor Finish Type 1 - Circulation Areas & Lobbies				
	Homogeneous Rubber Compound vinyl flooring to ASTM F1344 Standards - Norament 926 Grano 5307 or equivalent proprietary vinyl sheet floor covering by Interface Nora or equivalent approved; 3.5 mm thick hammered surface in selected colours; Sound rating 11dB yo ISO 10140-3, Slip Resistance (ASTM D2047) >0.5 dry/wet required, ADA Compliant; with surface roughness (Rz) minimum =20, with acoustic performance to manufacturers standards and fire classification To BS EN 13501-1, Class Bfls1 or better. In Ireland, refer to IS EN 13501-1 for the fire classification of construction products and building elements, with vinyl flooring fixed with approved adhesive Nora PU 102 & AC100 and apply Nora nTx 020 1C primer prior to laying vinyl floor finish; hot seam weld all joints as per clause 680 with welding bead to ensure watertight seams, groove cut with approved groove cutting machine with and including all trims and edgings; cemfloor liquid screeds cement base Cemfloor CT C20F4 self levelling compound; on concrete floor with and including for preparing floor level to SR1 finish and dry; and apply two coats water based UV cured sealer and dry buff with nylon pad to a matt finish; clean finished floor on completion; all in accordance with the manufacturers instructions and Architects Specification M50/150 to 895 inclusive and as per Architects Drawings 25002-AFEC-00-ZZ-DR-A-1004, 2103, 2201, 2202 & 6002				
	Floors; concrete base				
A	> 300mm wide	m2	43		

	(43) FLOOR FINISHES (PIPE FITTING) (Cont)				
	(Cont) FLOOR, WALL AND CEILING FINISHES:				
	(Cont) Floor Finish Type 1 - Circulation Areas & Lobbies				
	(Cont) Homogeneous Rubber Compound vinyl flooring to ASTM F1344 Standards - Norament 926 Grano 5307 or equivalent proprietary vinyl sheet floor covering by Interface Nora or equivalent approved; 3.5 mm thick hammered surface in selected colours; Sound rating 11dB yo ISO 10140-3, Slip Resistance (ASTM D2047) >0.5 dry/wet required, ADA Compliant; with surface roughness (Rz) minimum =20, with acoustic performance to manufacturers standards and fire classification To BS EN 13501-1, Class Bfls1 or better. In Ireland, refer to IS EN 13501-1 for the fire classification of construction products and building elements, with vinyl flooring fixed with approved adhesive Nora PU 102 & AC100 and apply Nora nTx 020 1C primer prior to laying vinyl floor finish; hot seam weld all joints as per clause 680 with welding bead to ensure watertight seams, groove cut with approved groove cutting machine with and including all trims and edgings; cemfloor liquid screeds cement base Cemfloor CT C20F4 self levelling compound; on concrete floor with and including for preparing floor level to SR1 finish and dry; and apply two coats water based UV cured sealer and dry buff with nylon pad to a matt finish; clean finished floor on completion; all in accordance with the manufacturers instructions and Architects Specification M50/150 to 895 inclusive and as per Architects Drawings 25002-AFEC-00-ZZ-DR-A-1004, 2103, 2201, 2202 & 6002				
	Labours; making good and / or cutting around obstructions				
A	girth < or = to 300mm	nr	5		
B	girth 300 to 1000 mm	nr	3		

	(43) FLOOR FINISHES (PIPE FITTING) (Cont)				
	(Cont) FLOOR, WALL AND CEILING FINISHES:				
	Ironmongery, Accessories and Sundries				
	Sundries				
	Airtightness membrane & tape sealing, mastic sealing and expanding foam, to Architects Specification and as detailed on Drawing Series 6000				
A	Horizontal Airtightness tape to create continuous seal between plaster and concrete screed at junction between skirting and floor, girth < or = 300mm,	m	138		
B	Extra over last for mastic bead at junction between skirting and floor	m	138		
	Accessories				
	Gradus or equivalent Proprietary stainless steel with brushed finish; expansion joint cover plate / dividing strips between different floor types; fixed at junction of different floor finishes and plugged and screwed to concrete floors at 600 mm c/c with and including for sealing with a silicone sealant; as per Architects Drawings 6106 & 6202 and Specification M50/740				
C	generally	m	4		
	Testing				
	Slip Resistance Testing				
D	Contractor to allow and provide slip resistance test (Pendulum Test) to all M50/150 Vinyl Sheeting to BS EN 16165 all as outlined in Architects Specification M50/861	Item	1		
	PAINTING				
	Painting				
	To Timber Skirting				

	(43) FLOOR FINISHES (PIPE FITTING) (Cont)				
	(Cont) PAINTING				
	(Cont) Painting				
	Prepare, knot, prime, stop and apply one coat of primer, one coat of undercoat/ base coat, two finishing coats of Dulux waterborne paint -Dulux diamond satinwood / eggshell to selected RAL colour range; as per Architects Specification M60/150				
	Second fixing, to timber base				
A	girth < or = to 300 mm, skirtings	m	138		
B	girth < or = to 300 mm, skirtings, primer only to backs of skirtings	m	138		
	Concrete Floor Sealer and Line Marking				
	Apply two coats Sika EVERBUILD 403 Concrete Hardener & Dustproofer or acceptable equivalent; solvent based, clear acrylic resin polymer solution used to cure, harden and seal fresh or hardened concrete; SRV to PTV to BS 7976 =36; all applied in strict accordance with the manufacturer's instructions in preparation for floor coverings as shown on Architects Drawing 25002-AFEC-00-ZZ-DR-A-2101 and as outlined in Architects Specification M60/180				
C	Floors				
D	> 300mm wide	m2	290		
	Floor lining SikafloorR2870 Line Striping				
E	100mm wide demarcation lining laid diagonally at 300mm c/c at 1700mm long to 1200mm wide circulation area / pathway as shown on Architects Drawing 25002-AFEC-00-ZZ-DR-A-2101	m2	77		
	To Vinyl Finishes				
	Apply two coats dampproof membrane; applied in strict accordance with the manufacturer's instructions in preparation for vinyl floor coverings				
	Floors				

	(43) FLOOR FINISHES (PIPE FITTING) (Cont)				
	(Cont) PAINTING				
	(Cont) Painting				
	(Cont) Apply two coats dampproof membrane; applied in strict accordance with the manufacturer's instructions in preparation for vinyl floor coverings				
A	> 300mm wide	m2	43		

To Collection € **NIL**

(43) FLOOR FINISHES (PIPE FITTING) (Cont)				
COLLECTION				
Page No. BQ/566				NIL
Page No. BQ/567				NIL
Page No. BQ/568				NIL
Page No. BQ/569				NIL
Page No. BQ/570				NIL
Page No. BQ/571				NIL
Page No. BQ/572				NIL
(43) FLOOR FINISHES (PIPE FITTING) Carried to Summary				**NIL**

	(45) CEILING FINISHES (PIPE FITTING)				
	CEILING FINISHES				
	WOODWORK:				
	Structural And First Fixings				
	The following shall be in wrot vac vac treated red deal unless otherwise stated; plugged and screwed to composite metal deck/in situ concrete floor; include for all necessary fixings, counter sinking and making good with matching pellates; protected for finishes:				
	First fixings; fixing grounds				
A	32 x 50 mm	m	25		
	First fixings; bearers				
B	50 x 50 mm	m	25		
	25 mm WBP plywood panels laid in suspended ceilings in supporting miscellaneous fittings and include for wiring to suspension system.				
	First fixings; bearers				
C	450 x 450 mm panel size	nr	5		
D	600 x 600 mm panel size	nr	5		

	(45) CEILING FINISHES (PIPE FITTING) (Cont)				
	FLOOR, WALL AND CEILING FINISHES:				
	Suspended Tile Ceilings				
	Ceiling Type - CLG-01 (Demountable) (GF Corridor)				
	Suspended ceiling system (to K40/250) To BS EN 13964; Rockfon Chicago Metallice T24 Click 2890 or equivalent, 20mm thick 600mm x 600mm mineral fibre stone wool ceiling tiles / infill units (to K40/265), lay-in grid ceiling, to White RAL Colour 9010; laid into powder coated paint finished (as Z31 at leas 60um thick) 600mm x 600mm x 24mm wide steel 'T' Concealed suspension grid system or equivalent with 32 x 19 x 3050mm steel angle trims (to K40/260), infill units fully demountable with swing down function including matching edge angle trims at perimeters, all fixed with fixing brackets to concrete floor all in accordance with the manufacturers written instructions and Architects Specification K40/250 to 530 inclusive and as per Architects Drawings 25002-AFEC-00-ZZ-DR-A-1004, 2103 & 6003				
	Ceilings; fixed to underside of precast concrete slab; depth of suspension				
A	500mm - 1500mm	m2	42		
	Labours				
B	making good, cutting around obstructions; < or = 300mm	nr	10		
C	Ditto; 300mm - 1.00m	nr	5		
	Sundries				
	Accessories				
D	Rockfon Perimeter trims; 32 x 19 mm steel angle trim, colour and finish to match exposed grid, fixed with BZP raised head screws at 450mm c/c all as per Architect's Suspended Ceiling Specification K40/260	m	50		

(45) CEILING FINISHES (PIPE FITTING) (Cont)				
COLLECTION				
Page No. BQ/574				NIL
Page No. BQ/575				NIL
(45) CEILING FINISHES (PIPE FITTING) Carried to Summary				**NIL**

	(47) ROOF FINISHES & CLADDING (PIPE FITTING)				
	WALL AND ROOF FINISHES:				
	WOODWORK:				
	Structural and First Fixings				
	White deal, structural grade Class SC1, vac -vac treated				
	First fixings				
A	50 x 50 mm grounds	m	8		

(47) ROOF FINISHES & CLADDING (PIPE FITTING) (Cont)				
ROOFING, CLADDING AND WATERPROOFING:				
Flashings to Existing Cladding				
PPC Pressed aluminium metal flashings, 1.0mm thick aluminium coated externally in RAL Colour 7016 to match cladding or equivalent, 200 microns thick with a polyester coating internally; in selected colours; flashings lapped 100mm to 150mm at all joints allow for fixing with low profile stitching screws with min 14mm diameter non-ferrous EPDM backed washers fitted at max. 450mm centres with 4mm diameter butyl rubber sealant; include for all necessary butt straps and sealed with two unbroken runs of 9mm wide x 3mm thick butyl rubber sealant tape at all joints, site applied LPCB certified PIR insulation board with and including the installation of an Air tightness / VCL layer and vapour barrier tape to provide a continuous sealed area / junctions and mineral wool firestop batt (providing continuity of fire rating to external wall opes etc.) to any gaps filled with fire rated canister insulation; include for all necessary grounds mastic sealing, from sealing stitching and riveting to provide air and water tight weather seals as per manufacturers written instructions; as per Architects Specification H72/470 and Architects Drawing Details 25002-AFEC-01-ZZ-DR-A-4002 and Series 6000				
Door Jamb Flashings to ope (Roller Door)				

(47) ROOF FINISHES & CLADDING (PIPE FITTING) (Cont)

(Cont) ROOFING, CLADDING AND WATERPROOFING:

(Cont) Flashings to Existing Cladding

(Cont) PPC Pressed aluminium metal flashings, 1.0mm thick aluminium coated externally in RAL Colour 7016 to match cladding or equivalent, 200 microns thick with a polyester coating internally; in selected colours; flashings lapped 100mm to 150mm at all joints allow for fixing with low profile stitching screws with min 14mm diameter non-ferrous EPDM backed washers fitted at max. 450mm centres with 4mm diameter butyl rubber sealant; include for all necessary butt straps and sealed with two unbroken runs of 9mm wide x 3mm thick butyl rubber sealant tape at all joints, site applied LPCB certified PIR insulation board with and including the installation of an Air tightness / VCL layer and vapour barrier tape to provide a continuous sealed area / junctions and mineral wool firestop batt (providing continuity of fire rating to external wall opes etc.) to any gaps filled with fire rated canister insulation; include for all necessary grounds mastic sealing, from sealing stitching and riveting to provide air and water tight weather seals as per manufacturers written instructions; as per Architects Specification H72/470 and Architects Drawing Details 25002-AFEC-01-ZZ-DR-A-4002 and Series 6000

(Cont) Door Jamb Flashings to ope (Roller Door)

A ^^^external jamb flashing to match existing cladding; 1.0mm thick girth 600 - 750mm overall wapped around steel channel, 3 times bent / including internal and external jamb flashing girth 300 - 450mm, 2 times bent fixed with rivets and sealed with 9mm x 3mm butyl mastic; EDPM membrane continuous and fully weather sealed at all junctions to jamb; girth 230mm; site applied PIR insulation board fixed to steelwork 50mm thick; site applied rockwool insulation loose laid fitted between steel channels 70mm thick; continuous 12mm x 6mm rear air seal installed; 50 x 50mm conrner suport angle; all stitching screws with minimum 14mm diameter non-ferrous EPDM

(47) ROOF FINISHES & CLADDING (PIPE FITTING) (Cont)				
(Cont) ROOFING, CLADDING AND WATERPROOFING:				
(Cont) Flashings to Existing Cladding (Cont) PPC Pressed aluminium metal flashings, 1.0mm thick aluminium coated externally in RAL Colour 7016 to match cladding or equivalent, 200 microns thick with a polyester coating internally; in selected colours; flashings lapped 100mm to 150mm at all joints allow for fixing with low profile stitching screws with min 14mm diameter non-ferrous EPDM backed washers fitted at max. 450mm centres with 4mm diameter butyl rubber sealant; include for all necessary butt straps and sealed with two unbroken runs of 9mm wide x 3mm thick butyl rubber sealant tape at all joints, site applied LPCB certified PIR insulation board with and including the installation of an Air tightness / VCL layer and vapour barrier tape to provide a continuous sealed area / junctions and mineral wool firestop batt (providing continuity of fire rating to external wall opes etc.) to any gaps filled with fire rated canister insulation; include for all necessary grounds mastic sealing, from sealing stitching and riveting to provide air and water tight weather seals as per manufacturers written instructions; as per Architects Specification H72/470 and Architects Drawing Details 25002-AFEC-01-ZZ-DR-A-4002 and Series 6000				
Head / Soffit / Internal Flashings to ope (Roller Door)				

(47) ROOF FINISHES & CLADDING (PIPE FITTING) (Cont)

(Cont) ROOFING, CLADDING AND WATERPROOFING:

(Cont) Flashings to Existing Cladding

(Cont) PPC Pressed aluminium metal flashings, 1.0mm thick aluminium coated externally in RAL Colour 7016 to match cladding or equivalent, 200 microns thick with a polyester coating internally; in selected colours; flashings lapped 100mm to 150mm at all joints allow for fixing with low profile stitching screws with min 14mm diameter non-ferrous EPDM backed washers fitted at max. 450mm centres with 4mm diameter butyl rubber sealant; include for all necessary butt straps and sealed with two unbroken runs of 9mm wide x 3mm thick butyl rubber sealant tape at all joints, site applied LPCB certified PIR insulation board with and including the installation of an Air tightness / VCL layer and vapour barrier tape to provide a continuous sealed area / junctions and mineral wool firestop batt (providing continuity of fire rating to external wall opes etc.) to any gaps filled with fire rated canister insulation; include for all necessary grounds mastic sealing, from sealing stitching and riveting to provide air and water tight weather seals as per manufacturers written instructions; as per Architects Specification H72/470 and Architects Drawing Details 25002-AFEC-01-ZZ-DR-A-4002 and Series 6000

(Cont) Head / Soffit / Internal Flashings to ope (Roller Door)

A ^^^profiled soffit flashing to match existing cladding; 1.0mm thick 300mm - 450mm girth overall, two time bent / drip flashing to head 300mm - 450mm girth overall, three times bent / 300mm - 450mm girth overall, three times bent flashing to wrap around steel channel; fixed with pop rivets (at 450mm c/c); sealed with 2 runs of 'C' seal tape and 2 run of 9mm x 3mm butyl mastic, with approved mastic joint sealant; 2no. site applied PIR insulation boards fitted between flashings 50mm thick, site applied rockwool insulation loose laid fitted between steel channels average thickness 150mm thick, EDPM membrane continuous and fully weather sealed at all junctions to

(47) ROOF FINISHES & CLADDING (PIPE FITTING) (Cont)				
COLLECTION				
Page No. BQ/577				NIL
Page No. BQ/578				NIL
Page No. BQ/579				NIL
Page No. BQ/580				NIL
Page No. BQ/581				NIL
(47) ROOF FINISHES & CLADDING (PIPE FITTING) Carried to Summary				**NIL**

	(59) MECHANICAL INSTALLATION (PIPE FITTING)				
	(59) MECHANICAL INSTALLATION				
	GENERAL				
A	The prices hereunder shall include for all work in the design, execution and testing of mechanical installation in accordance with the Specification.	note			
B	The prices hereunder shall include for the co-ordination of the design and installation of the mechanical installation. The Contractor shall ensure compatibility of design performance and consistency of any design assumptions for the mechanical installation.	note			
C	The work is to be undertaken as a Domestic Sub-Contract to the Main Contractor. The prices hereunder shall be deemed to include for profit, general attendance and special attendances as necessary by the Main Contractor.	note			
D	For preliminaries particulars, please refer to tender documentation.	note			
E	The Contractor shall allow for the provision, coordination and commissioning of energy metering and sub-metering systems appropriate to the building layout and Significant Energy Uses (SEUs), to support monitoring of Energy Performance Indicators (EnPIs). The Contractor shall provide all necessary data, technical information and settings to enable integration of metering systems into the Employer's energy management systems. Energy performance shall be considered as part of commissioning, with systems set up and demonstrated to operate in accordance with design intent and energy efficiency requirements.	Item	1		
F	Tenderers shall provide information on the energy performance of proposed systems, including efficiency ratings and operational energy consumption, where applicable.	note			

	(59) MECHANICAL INSTALLATION (PIPE FITTING) (Cont)				
	DESCRIPTION				
	Provide everything necessary for the proper installation of the Mechanical services system, all in accordance with the Service Engineer Information as issued by AFEC; refer to the following documents:				
	Drawings:				
A	MTUBA-AFEC-00-00-DR-M-2100	item	1		
B	MTUBA-AFEC-00-00-DR-M-2200	item	1		
C	MTUBA-AFEC-00-00-DR-M-2300	item	1		
D	MTUBA-AFEC-00-00-DR-M-2400	item	1		
E	MTUBA-AFEC-00-00-DR-M-2600	item	1		
F	MTUBA-AFEC-00-01-DR-M-2100	item	1		
G	MTUBA-AFEC-00-01-DR-M-2200	item	1		
H	MTUBA-AFEC-00-01-DR-M-2300	item	1		
J	MTUBA-AFEC-00-01-DR-M-2400	item	1		
K	MTUBA-AFEC-00-01-DR-M-2600	item	1		
L	MTUBA-AFEC-00-01-DR-M-2700	item	1		
M	MTUBA-AFEC-00-RL-DR-M-2100	item	1		
N	MTUBA-AFEC-00-RL-DR-M-2200	item	1		
P	MTUBA-AFEC-00-RL-DR-M-2600	item	1		
Q	MTUBA-AFEC-00-XX-DR-M-2000	item	1		
R	MTUBA-AFEC-00-XX-SC-M-2000	item	1		
S	MTUBA-AFEC-00-XX-SC-M-2001	item	1		
T	MTUBA-AFEC-00-XX-SC-M-2600	item	1		
U	23028-AFEC-00-XX-SP-M-0050 mechanical specification	item	1		

	(59) MECHANICAL INSTALLATION (PIPE FITTING) (Cont)				
	Tender Breakdown				
	Preliminary Items				
A	Amount for general preliminaries.	item	1		
B	Amount for marking on site builders work and attendances.	item	1		
C	Amount for record documentation	item	1		
D	Amount for as-installed drawings	item	1		
E	Amount for builders works and co-ordination drawings, construction drawings.	item	1		
F	Amount for set-up.	item	1		
G	Amount for site specific preliminaries.	item	1		
H	Works associated with As built drawings and O&M Manuals (three disks copy and three hard copies of all).	item	1		
J	Works associated with staff demonstrations and training.	item	1		
K	Works associated with recommissioning of all systems following a full year of operation.	item	1		
L	Works associated with decommissioning and removal of all redundant services	item	1		
M	Allow for any other work in this section (Tenderer to detail)	item	1		
	Insurances				
N	Amount for employers liability.	item	1		
P	Amount for third party workmans compensation.	item	1		
Q	Statutory requirements.	item	1		
R	All risks insurances.	item	1		
S	Public liability insurance.	item	1		
T	Amount for Collateral Agreement.	item	1		

To Collection € **NIL**

	(59) MECHANICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) Insurances				
A	Allow for any other work in this section (Tenderer to detail)	item	1		
	Co-ordination				
B	Amount for coordination with MTU facilities department	item	1		
	Elemental Summary (PIPE FITTING)				
	Heating (Pipe Fitting)				
	LPHW Distribution				
C	LPHW Pipework (including supports) DN35	Item	1		
D	LPHW Pipework (including supports) DN25	Item	1		
E	LPHW Pipework (including supports) DN20	Item	1		
F	LPHW Isolation Valves DN35	Item	1		
G	LPHW Isolation Valves DN20	Item	1		
H	LPHW PICV Valves	Item	1		
J	Insulation of all LPHW pipework	Item	1		
K	Supply & Installation of Radiant Panels	Item	1		
L	Thermostats & Black Bulb Sensor	Item	1		
M	Any other works (provide details)	Item	1		
	Domestic Water (Pipe Fitting)				
	Domestic Water Plant				
N	Supply and installation of Under-sink Water Heaters including valving arrangement as per manufacturer guidelines to workshop	Item	1		
	Domestic Water Distribution				
P	DW Pipework (including supports) DN15	Item	1		

	(59) MECHANICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) Elemental Summary (PIPE FITTING)				
	(Cont) Domestic Water (Pipe Fitting)				
	(Cont) Domestic Water Distribution				
A	DW Pipework (including supports) DN22	Item	1		
B	Tie into existing DW services	Item	1		
C	DW Isolation Valves	Item	1		
D	Insulation of DW Pipework	Item	1		
E	Labelling of DW Pipework	Item	1		
F	DW Drain Valves	Item	1		
G	Any other works (provide details)	Item	1		
	Ventilation (Pipe Fitting)				
	Ventilation Plant				
H	Supply and installation of 3 no. Inline Extract Fans	Item	1		
	Ventilation Distribution				
J	Extract Air Ductwork installation (including supports)	Item	1		
K	Flexible ducting connections	Item	1		
L	Extract Air Disk Grilles	Item	1		
M	Duct Attenuators	Item	1		
N	Volume Control Dampers	Item	1		
P	Exhaust Air Grilles	Item	1		
Q	Windcatcher Make Up Air Louvres	Item	1		
R	Any other works (provide details)	Item	1		
	Above Ground Drainage (Pipe Fitting)				
	Above Ground Drainage Works				
S	Drainage Pipework (including supports) DN50	Item	1		
T	Drainage Pipework (including supports) DN40	Item	1		

	(59) MECHANICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) Elemental Summary (PIPE FITTING)				
	(Cont) Above Ground Drainage (Pipe Fitting)				
	(Cont) Above Ground Drainage Works				
A	Rodding Eyes and Traps	Item	1		
B	Connections to sinks	Item	1		
C	Any other works (provide details)	Item	1		
	Gas Services (Pipe Fitting)				
	Gas Services				
D	Technical Gas Services Pipework (including supports) DN15	Item	1		
E	Technical Gas Services Pipework (including supports) DN25	Item	1		
F	Technical Gas Services Pipework (including supports) DN28	Item	1		
G	Technical Gas Services Pipework (including supports) DN32	Item	1		
H	Compressed Air Pipework (including supports) DN25	Item	1		
J	Technical Gas Services Pipework (including supports) DN35	Item	1		
K	Technical Gas Services Pipework (including supports) DN40	Item	1		
L	Supply and Installation of gas regulators and outlets	Item	1		
M	Labelling of pipework	Item	1		
N	Any other works (provide details)	Item	1		
	Other Services (Pipe Fitting)				
	Other Services Works				
P	Tie-ins	Item	1		
Q	Relocation / Stripout works	Item	1		

	(59) MECHANICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) Elemental Summary (PIPE FITTING)				
	(Cont) Other Services (Pipe Fitting)				
	(Cont) Other Services Works				
A	Testing and commissioning - all systems listed herein including pressure testing of all pipework and ducts	Item	1		
B	As-built drawings and data books (three disc copies and three hard copies of all, including builder's works and co-ordination drawings)	Item	1		
C	Staff demonstrations and training	Item	1		
D	Re-commissioning of all systems following a full year of operation	Item	1		
	General				
E	Contractor design responsibilities	Item	1		
F	Testing and commissioning	item	1		
G	Operating and maintenance manuals	item	1		
H	Working drawings	item	1		
J	Co-ordination drawings	item	1		
K	As built drawings & data books	item	1		
L	Identification plates, labels and the like	item	1		
M	Mock-ups	item	1		
N	Staff demonstrations and training	item	1		
P	Recommissioning of all systems following one full year of operation	item	1		
Q	Co-ordination of Services	item	1		
R	Decommissioning and removal of all redundant services	item	1		
S	Builders work	item	1		
T	Fire stopping and other associated fire protection work	item	1		

	(59) MECHANICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) General				
A	Allow for all other items necessary to complete the Works Requirements for this element of the Works	item	1		
	Sundries an Builders Work				
	Builders work, cutting, forming or leaving holes, mortices, chases or the like and subsequent making good to structure, including firestopping, fire barriers, smoke barriers, dust barriers and similar items				
B	generally	item	1		
	Forming and cutting holes.				
	Form or cut holes for duct; through insulated metal stud partitions; double slabbed and skim finished both sides; including grounds; include for necessary formwork; include for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification and Drawings; make good on completion; girth:				
C	< or = to 110 mm; circular	nr	2		
D	1.00 - 2.00 m; rectangular.	nr	1		
E	2.00 - 3.00 m; rectangular.	nr	1		

	(59) MECHANICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Form or cut holes for ducts; through 215 mm thick solid concrete blockwork wall; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = to 110 mm; circular	nr	2		
B	2.00 - 3.00 m; rectangular.	nr	1		

	(59) MECHANICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Form or cut holes for ducts ; through existing 120mm thick insulated cladding panel, clean, prime cladding externally and seal with layers of fibre reinforced cold applied liquid weather membrane; filled around service with site applied non-combustible insulation and include for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating and EPDM flexible pipe flashing; all sealed with 6mm bead of butyl rubber sealant; include for any necessary fixings, sealing and flashing and upstands as per Architects Specification Details and Drawings; girth;				
A	2.00 - 3.00 m; rectangular (roof).	nr	2		

	(59) MECHANICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Form or cut holes for pipes; through insulated metal stud partitions; double slabbed and skim finished both sides; including grounds; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = 55 mm; circular	nr	10		
B	55 - 110 mm; circular	nr	5		
C	>110 mm; circular	nr	3		

	(59) MECHANICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Form or cut holes for pipes; through 215 mm thick solid concrete blockwork wall; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = 55 mm	nr	10		
	Form or cut holes for pipes; through existing 215 mm thick solid concrete blockwork wall; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
B	< or = 55 mm	nr	10		

	(59) MECHANICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Form or cut holes for pipes; through existing precast wall panel wall with 215mm solid concrete blockwork wall; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Sectioninstalled 500mm either side of the seal, allow for 2no ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, precoated on both sides with high preformace ablative coating; clean opening and remove any dust and debris, cut to shape aand tightly fit and sealing around edge of opening and service penitration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = 55 mm	nr	6		

	(59) MECHANICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Form or cut holes for pipes ; through existing 120mm thick insulated cladding panel, clean, prime cladding externally and seal with layers of fibre reinforced cold applied liquid weather membrane; filled around service with site applied non-combustible insulation and include for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating and EPDM flexible pipe flashing; all sealed with 6mm bead of butyl rubber sealant; include for any necessary fixings, sealing and flashing and upstands as per Architects Specification Details and Drawing 22115_521; girth;				
A	< or = 55 mm (roof)	nr	10		
B	55 - 110 mm; circular (roof)	nr	5		

	(59) MECHANICAL INSTALLATION (PIPE FITTING) (Cont)				
	Pipe Boxing				
	Allow for the Supply and install bespoke / proprietary pipe boxing to conceal exposed heating pipe(s) dropping from soffit to radiator; powder coated steel trunking construction, colour RAL 9010; by Coverad (Standard Steel range) or other equal and approved; manufacturer to carry out a site survey to confirm final sizes prior to manufacture; including dor all necessary brackets, supports, corner pieces, joints, end caps and access provision for TRV/valve adjustment as required; fixed to wall/soffit as indicated on Architect Drawing 25002-AFEC-01-00-DR-A-2101 and all in accordance with Architects Specification P31/301				
A	girth 300 mm - 1000 mm	m	10		

(59) MECHANICAL INSTALLATION (PIPE FITTING) (Cont)				
COLLECTION				
Page No. BQ/583				NIL
Page No. BQ/584				NIL
Page No. BQ/585				NIL
Page No. BQ/586				NIL
Page No. BQ/587				NIL
Page No. BQ/588				NIL
Page No. BQ/589				NIL
Page No. BQ/590				NIL
Page No. BQ/591				NIL
Page No. BQ/592				NIL
Page No. BQ/593				NIL
Page No. BQ/594				NIL
Page No. BQ/595				NIL
Page No. BQ/596				NIL
Page No. BQ/597				NIL
(59) MECHANICAL INSTALLATION (PIPE FITTING) Carried to Summary				**NIL**

	(69) ELECTRICAL INSTALLATION (PIPE FITTING)				
	(69) ELECTRICAL INSTALLATION (PIPE FITTING)				
	GENERAL				
A	The following section measured in accordance with ARM4 Supplement 2 - Agreed Alternative Rules for the Measurement of Services Installations.	note			
B	The prices hereunder shall include for all work in the design, execution and testing of electrical installation in accordance with the Specification.	note			
C	The prices hereunder shall include for the co-ordination of the design and installation of the electrical installation. The Contractor shall ensure compatibility of design performance and consistency of any design assumptions for the electrical installation.	note			
D	The work is to be undertaken as a domestic sub-contractor to the Main Contractor. The prices hereunder shall be deemed to include for profit, general attendance and special attendances as necessary by the Main Contractor.	note			
E	The Contractors shall read the other Elements of the Bill of Quantities when pricing this section of the project, in particular (but not limited to) Elements (50.1 to 50.3) Site Services Mainly Piped and Ducted, (60) Site Services Mainly Electrical,	note			
F	For preliminaries particulars, please refer to tender documentation.	note			

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) GENERAL				
A	The Contractor shall allow for the provision, coordination and commissioning of energy metering and sub-metering systems appropriate to the building layout and Significant Energy Uses (SEUs), to support monitoring of Energy Performance Indicators (EnPIs). The Contractor shall provide all necessary data, technical information and settings to enable integration of metering systems into the Employer's energy management systems. Energy performance shall be considered as part of commissioning, with systems set up and demonstrated to operate in accordance with design intent and energy efficiency requirements.	Item	1		
B	Tenderers shall provide information on the energy performance of proposed systems, including efficiency ratings and operational energy consumption, where applicable.	note			
C	The Contractor shall allow for full coordination and integration of all door systems, including fire-rated doors, access-controlled doors, and doors connected to fire alarm and security systems, including all associated wiring, interfaces, controls, ironmongery and commissioning.	Item	1		
D	The Contractor shall include for full provision, coordination and commissioning of ICT, data, CCTV, and security systems, including integration with access control and building management systems where applicable.	Item	1		
E					
F					
G					

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	DESCRIPTION				
	Provide everything necessary for the proper installation of the Electrical services system, all in accordance with the Service Engineer Information as issued by AFEC; refer to the following documents:				
	Drawings:				
A	MTUBA-AFEC-00-XX-RG-E-0001	item	1		
B	MTUBA-AFEC-00-XX-SP-E-0050	item	1		
C	MTUBA-AFEC-00-ZZ-DR-E-1000	item	1		
D	MTUBA-AFEC-00-ZZ-DR-E-2000	item	1		
E	MTUBA-AFEC-00-00-DR-E-2050	item	1		
F	MTUBA-AFEC-00-01-DR-E-2050	item	1		
G	MTUBA-AFEC-00-RL-DR-E-2050	item	1		
H	MTUBA-AFEC-00-00-DR-E-2100	item	1		
J	MTUBA-AFEC-00-01-DR-E-2100	item	1		
K	MTUBA-AFEC-00-00-DR-E-2150	item	1		
L	MTUBA-AFEC-00-01-DR-E-2150	item	1		
M	MTUBA-AFEC-00-00-DR-E-2250	item	1		
N	MTUBA-AFEC-00-01-DR-E-2250	item	1		
P	MTUBA-AFEC-00-00-DR-E-2300	item	1		
Q	MTUBA-AFEC-00-01-DR-E-2300	item	1		
R	MTUBA-AFEC-00-RF-DR-E-2550	item	1		
	Tender Breakdown				
	Preliminary Items				
S	Amount for general preliminaries.	item	1		
T	Amount for marking on site builders work and attendances.	item	1		
U	Amount for record documentation	item	1		

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) Preliminary Items				
A	Amount for as-installed drawings	item	1		
B	Amount for builders works and co-ordination drawings, construction drawings.	item	1		
C	Amount for set-up.	item	1		
D	Amount for site specific preliminaries.	item	1		
E	Works associated with As built drawings and O&M Manuals (three disks copy and three hard copies of all).	item	1		
F	Works associated with staff demonstrations and training.	item	1		
G	Works associated with recommissioning of all systems following a full year of operation.	item	1		
H	Works associated with decommissioning and removal of all redundant services	item	1		
J	Allow for any other work in this section (Tenderer to detail)	item	1		
	Insurances				
K	Amount for employers liability.	item	1		
L	Amount for third party workmans compensation.	item	1		
M	Statutory requirements.	item	1		
N	All risks insurances.	item	1		
P	Public liability insurance.	item	1		
Q	Amount for Collateral Agreement.	item	1		
R	Allow for any other work in this section (Tenderer to detail)	item	1		
	Co-ordination				
S	Amount for coordination with MTU facilities department	item	1		

To Collection € **NIL**

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	Elemental Summary (PIPEFITTING WORKSHOP)				
	(61) Electrical Supply and Distribution				
	Containment				
A	Cable Ladder 75mm	item	1		
B	Cable Tray 300mm	item	1		
C	Cable Tray 400mm	item	1		
D	Trunking 100 x 100	item	1		
E	Trunking 200 x 100	item	1		
F	Conduit	item	1		
	Distribution Boards – including all necessary accessories				
G	SDB-03	item	1		
	Sub-mains Cabling				
H	16mm2 x 4c + 16mm2 CPC	item	1		
J	Terminations	item	1		
K	25mm2 x 4c + 16mm2 CPC	item	1		
L	Terminations	item	1		
M	70mm2 x 4c + 35mm2 CPC	item	1		
N	Terminations	item	1		
P	150mm2 x 4C + 70mm2 CPC	item	1		
Q	Terminations	item	1		
	(62) Power				
	Power Outlets				
R	Industrial socket 32A	item	1		
S	Industrial socket interlocking switch	item	1		
T	230 V Sockets	item	1		
U	Fused spur	item	1		

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) Elemental Summary (PIPEFITTING WORKSHOP)				
	(Cont) (62) Power				
	(Cont) Power Outlets				
A	Isolators	item	1		
B	Wiring	item	1		
C	Mechanical Wiring	item	1		
	(63) Lighting				
	Internal Lighting – Type:				
D	A	item	1		
E	B	item	1		
F	CE	item	1		
G	D	item	1		
H	G	item	1		
J	F	item	1		
K	Fe	item	1		
L	M – (Existing Highbay)	item	1		
	Lighting Controls				
M	DALI Daylight / Presence sensor	item	1		
N	On/Off sensor	item	1		
P	Switch 1	item	1		
	Emergency Lighting – Type:				
Q	E1 – Emergency spot recessed	item	1		
R	E2 – Emergency spot surface	item	1		
S	E3 – Twinspot	item	1		
T	E4 – Emergency bulkhead	item	1		
U	Exit sign	item	1		
V	Wiring	item	1		

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) Elemental Summary (PIPEFITTING WORKSHOP)				
	(64) Communications				
	Cat6 / ELV cabling including terminations to outlets:				
A	Data outlets – double	item	1		
B	Communications cabinet including all necessary patch panels and accessories	item	1		
C	Cat 6A structured cabling	item	1		
D	Conduit	item	1		
E	Fibre-optic cabling	item	1		
	(65) Security and Protection				
	Fire Alarm System:				
F	Smoke detector	item	1		
G	Heat detector	item	1		
H	Sounder	item	1		
J	Breakglass	item	1		
K	I/O	item	1		
L	ASP	item	1		
M	24V DC Sounder Supply Box	item	1		
N	Cable	item	1		
	Access Control:				
P	Maglock	item	1		
Q	Green breakglass	item	1		
R	Reader / keypad	item	1		
S	Egress button	item	1		
	Earthing and Bonding				
T	Earthing and bonding – all systems	item	1		

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) Elemental Summary (PIPEFITTING WORKSHOP)				
	(6_) Other Services				
A	Relocation / Stripout works				
B	Tie-ins	item	1		
C	Contractor design responsibilities	item	1		
	General				
D	Testing and commissioning – all systems listed herein	item	1		
E	Operating and maintenance manuals	item	1		
F	Working drawings	item	1		
G	Co-ordination drawings	item	1		
H	As-built drawings and data books (three disc copies and three hard copies of all, including builder's works and co-ordination drawings)	item	1		
J	Identification plates, labels and the like	item	1		
K	Mock-ups	item	1		
L	Staff demonstrations and training	item	1		
M	Recommissioning of all systems following one full year of operation	item	1		
N	Co-ordination of Services	item	1		
P	Decommissioning and removal of all redundant services	item	1		
Q	Builders work	item	1		
R	Fire stopping and other associated fire protection work	item	1		
S	Allow for all other items necessary to complete the Works Requirements for this element of the Works	item	1		

To Collection € **NIL**

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) Elemental Summary (PIPEFITTING WORKSHOP)				
	Sundries an Builders Work				
	Builders work, cutting, forming or leaving holes, mortices, chases or the like and subsequent making good to structure, including firestopping, fire barriers, smoke barriers, dust barriers and similar items				
A	generally	item	1		
	Recesses;				
B	In 100 mm thick blockwork chase size 100 mm wide x 60 mm deep.	m	300		
	Hole, mortices, chases and the like.				
	Holes; mortices; chases and the like for concealed metal conduit and fittings in slabbed and plastered finishes.				
C	Lighting points.	nr	50		
D	Socket points.	nr	50		
E	Fittings, equipment and control gear points.	nr	50		
	Holes; mortices; chases and the like for concealed metal conduit and fittings in 215mm collar blockwork wall				
F	Lighting points.	nr	50		
G	Socket points.	nr	50		
H	Fittings, equipment and control gear points.	nr	50		

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) Elemental Summary (PIPEFITTING WORKSHOP)				
	(Cont) Sundries an Builders Work				
	Forming and cutting holes.				
	Form or cut holes for containment cable trays; through 200 mm thick concrete floor slab on metal decking; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification and Details and Drawings; make good on completion; girth:				
A	2.00 - 3.00 m; rectangular.	nr	2		

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) Elemental Summary (PIPEFITTING WORKSHOP)				
	(Cont) Sundries an Builders Work				
	Form or cut holes for containment cable trays; through insulated metal stud partitions; double slabbed and skim finished both sides; including grounds; include for necessary formwork; include for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification and Drawings; make good on completion; girth:				
A	< or = to 110 mm; circular	nr	2		
B	1.00 - 2.00 m; rectangular.	nr	1		
C	2.00 - 3.00 m; rectangular.	nr	1		

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) Elemental Summary (PIPEFITTING WORKSHOP)				
	(Cont) Sundries an Builders Work				
	Form or cut holes for containment cable trays; through 215 mm thick solid concrete blockwork wall; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = to 110 mm; circular	nr	2		
B	2.00 - 3.00 m; rectangular.	nr	1		

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) Elemental Summary (PIPEFITTING WORKSHOP)				
	(Cont) Sundries an Builders Work				
	Form or cut holes for containment cable trays ; through existing 120mm thick insulated cladding panel, clean, prime cladding externally and seal with layers of fibre reinforced cold applied liquid weather membrane; filled around service with site applied non-combustible insulation and include for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating and EPDM flexible pipe flashing; all sealed with 6mm bead of butyl rubber sealant; include for any necessary fixings, sealing and flashing and upstands as per Architects Specification Details and Drawings; girth;				
A	2.00 - 3.00 m; rectangular (roof).	nr	2		

To Collection € **NIL**

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) Elemental Summary (PIPEFITTING WORKSHOP)				
	(Cont) Sundries an Builders Work				
	Form or cut holes for conduits; through 200 mm thick concrete floor slab on meta decking; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = 55 mm; circular	nr	15		
B	55 - 110 mm; circular	nr	5		
C	>110 mm; circular	nr	3		

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) Elemental Summary (PIPEFITTING WORKSHOP)				
	(Cont) Sundries an Builders Work				
	Form or cut holes for conduits; through insulated metal stud partitions; double slabbed and skim finished both sides; including grounds; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = 55 mm; circular	nr	15		
B	55 - 110 mm; circular	nr	5		
C	>110 mm; circular	nr	3		

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) Elemental Summary (PIPEFITTING WORKSHOP)				
	(Cont) Sundries an Builders Work				
	Form or cut holes for conduits; through 215 mm thick solid concrete blockwork wall; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = 55 mm	nr	15		

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) Elemental Summary (PIPEFITTING WORKSHOP)				
	(Cont) Sundries an Builders Work				
	Form or cut holes for conduits; through existing 215 mm thick solid concrete blockwork wall; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = 55 mm	nr	5		

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) Elemental Summary (PIPEFITTING WORKSHOP)				
	(Cont) Sundries an Builders Work				
	Form or cut holes for conduits; through existing precast wall panel wall with 215mm solid concrete blockwork wall; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Sectioninstalled 500mm either side of the seal, allow for 2no ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, precoated on both sides with high preformace ablative coating; clean opening and remove any dust and debris, cut to shape aand tightly fit and sealing around edge of opening and service penitration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = 55 mm	nr	5		
	Form or cut holes for; conduits; through roof membrane roof; include for any necessary sealing, flashing and upstands; girth;				
B	>110 mm; circular	nr	5		

To Collection € **NIL**

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) Elemental Summary (PIPEFITTING WORKSHOP)				
	(Cont) Sundries an Builders Work				
	Form or cut holes for conduits ; through 120mm thick insulated cladding panel, clean, prime cladding externally and seal with layers of fibre reinforced cold applied liquid weather membrane; filled around service with site applied non-combustible insulation and include for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating and EPDM flexible pipe flashing; all sealed with 6mm bead of butyl rubber sealant; include for any necessary fixings, sealing and flashing and upstands as per Architects Specification Details and Drawing 22115 521; girth;				
A	< or = 55 mm (roof)	nr	5		
B	55 - 110 mm; circular (roof)	nr	2		
	General				
C	Testing and commissioning	item	1		
D	Operating and maintenance manuals	item	1		
E	Working drawings	item	1		
F	Co-ordination drawings	item	1		
G	As built drawings & data books	item	1		
H	Identification plates, labels and the like	item	1		
J	Mock-ups	item	1		
K	Staff demonstrations and training	item	1		

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) General				
A	Recommissioning of all systems following one full year of operation	item	1		
B	Co-ordination of Services	item	1		
C	Decommissioning and removal of all redundant services	item	1		
D	Builders work	item	1		
E	Fire stopping and other associated fire protection work	item	1		
F	Allow for all other items necessary to complete the Works Requirements for this element of the Works	item	1		
	Sundries an Builders Work				
	Builders work, cutting, forming or leaving holes, mortices, chases or the like and subsequent making good to structure, including firestopping, fire barriers, smoke barriers, dust barriers and similar items				
G	generally	item	1		
	Recesses;				
H	In 100 mm thick blockwork chase size 100 mm wide x 60 mm deep.	m	200		
	Hole, mortices, chases and the like.				
	Holes; mortices; chases and the like for concealed metal conduit and fittings in slabbed and plastered finishes.				
J	Lighting points.	nr	10		
K	Socket points.	nr	10		
L	Fittings, equipment and control gear points.	nr	10		

To Collection € **NIL**

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Holes; mortices; chases and the like for concealed metal conduit and fittings in 215mm collar blockwork wall				
A	Lighting points.	nr	50		
B	Socket points.	nr	50		
C	Fittings, equipment and control gear points.	nr	50		
	Forming and cutting holes.				
	Form or cut holes for containment cable trays; through insulated metal stud partitions; double slabbed and skim finished both sides; including grounds; include for necessary formwork; include for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification and Drawings; make good on completion; girth:				
D	< or = to 110 mm; circular	nr	2		
E	1.00 - 2.00 m; rectangular.	nr	1		
F	2.00 - 3.00 m; rectangular.	nr	1		

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Form or cut holes for containment cable trays; through 215 mm thick solid concrete blockwork wall; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = to 110 mm; circular	nr	2		
B	2.00 - 3.00 m; rectangular.	nr	1		

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Form or cut holes for containment cable trays ; through existing 120mm thick insulated cladding panel, clean, prime cladding externally and seal with layers of fibre reinforced cold applied liquid weather membrane; filled around service with site applied non-combustible insulation and include for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating and EPDM flexible pipe flashing; all sealed with 6mm bead of butyl rubber sealant; include for any necessary fixings, sealing and flashing and upstands as per Architects Specification Details and Drawings; girth;				
A	2.00 - 3.00 m; rectangular (roof).	nr	2		

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Form or cut holes for conduits; through insulated metal stud partitions; double slabbed and skim finished both sides; including grounds; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = 55 mm; circular	nr	15		
B	55 - 110 mm; circular	nr	5		
C	>110 mm; circular	nr	3		

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Form or cut holes for conduits; through 215 mm thick solid concrete blockwork wall; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = 55 mm	nr	15		
	Form or cut holes for conduits; through existing 215 mm thick solid concrete blockwork wall; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Section installed 500mm either side of the seal, allow for 2no ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
B	< or = 55 mm	nr	5		

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Form or cut holes for conduits; through existing precast wall panel wall with 215mm solid concrete blockwork wall; include for necessary formwork; include for 40mm thick Rockwool FireTube, or Rocklap H&V Pipe Sectioninstalled 500mm either side of the seal, allow for 2no ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, precoated on both sides with high preformace ablative coating; clean opening and remove any dust and debris, cut to shape aand tightly fit and sealing around edge of opening and service penitration with 15mm thick acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating; all in accordance with the manufacturer's written instructions and Architects Specification Details and Drawings; make good on completion; girth:				
A	< or = 55 mm	nr	5		
	Form or cut holes for; conduits; through roof membrane roof; include for any necessary sealing, flashing and upstands; girth;				
B	>110 mm; circular	nr	5		

	(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
	(Cont) General				
	(Cont) Sundries an Builders Work				
	Form or cut holes for conduits ; through 120mm thick insulated cladding panel, clean, prime cladding externally and seal with layers of fibre reinforced cold applied liquid weather membrane; filled around service with site applied non-combustible insulation and include for 2no. ablative coated batt fire stop to opening; 50mm thick; consisting of high density 160 kg/m3 stone wool core, pre coated on both sides with high performance ablative coating; clean opening and remove any dust and debris, cut to shape and tightly fit and sealing around edge of opening and service penetration with 15mm thick bead Rockwool acoustic intumescent sealant both sides and ensuring all gaps between the batt and opening are fully filled; to achieve 60 / 60 fire rating and EPDM flexible pipe flashing; all sealed with 6mm bead of butyl rubber sealant; include for any necessary fixings, sealing and flashing and upstands as per Architects Specification Details and Drawing 22115_521; girth;				
A	< or = 55 mm (roof)	nr	5		
B	55 - 110 mm; circular (roof)	nr	2		

(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
COLLECTION				
Page No. BQ/599				NIL
Page No. BQ/600				NIL
Page No. BQ/601				NIL
Page No. BQ/602				NIL
Page No. BQ/603				NIL
Page No. BQ/604				NIL
Page No. BQ/605				NIL
Page No. BQ/606				NIL
Page No. BQ/607				NIL
Page No. BQ/608				NIL
Page No. BQ/609				NIL
Page No. BQ/610				NIL
Page No. BQ/611				NIL
Page No. BQ/612				NIL
Page No. BQ/613				NIL
Page No. BQ/614				NIL
Page No. BQ/615				NIL
Page No. BQ/616				NIL
Page No. BQ/617				NIL
Page No. BQ/618				NIL
Page No. BQ/619				NIL
Page No. BQ/620				NIL
Page No. BQ/621				NIL

(69) ELECTRICAL INSTALLATION (PIPE FITTING) (Cont)				
COLLECTION				
Page No. BQ/622				NIL
Page No. BQ/623				NIL
Page No. BQ/624				NIL
Page No. BQ/625				NIL
(69) ELECTRICAL INSTALLATION (PIPE FITTING) Carried to Summary				**NIL**

	(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (PIPE FITTING)				
	(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer)				
A	The drainage shall be carried out generally in accordance with Irish Water Standards and Documents Irish Water/Uisce Eireann Wastewater Infrastructure Standard Details and Irish Water/Uisce Eireann Water Infrastructure Standard Details and TII Specification for Road Works, all where necessary and applicable	Note			
	DRAINAGE:				
	Below Ground				
	The Following Work is Inside the Boundary of the Building from New Sink / Floor Gullies connecting to Existing Foul Pipeline				
	Excavate trenches; backfilling with hardcore filling to be SR21-Annex E hardcore material; T.2 Permeable:4/40mm Gas Permeable layer (Radon) Min depth 200mm.; carting surplus excavated material off site to a tip provided by the contractor; compacting in 150 mm layers all as per Engineers Specification Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011, 0012 & 0013				
	Pipes; < or = 250 mm nominal diameter				
B	average depth 500 to 1000 mm (within existing MTU Pipe fitting building)	m	23		
	Extra over excavating trenches irrespective of depth				
C	breaking up existing hard surfaces; 250 mm thick concrete floor slab, radon, insulation and hardcore; include for saw cutting both sides and reinstate and seal radon to match existing and provide painted finish to match existing colour	m	23		
D	breaking through existing 215 mm think block wall in foundation (internally) for new 100 mm uPVC pipe penetration including for new stainless steel puddle flange and grouting in.	nr	1		

	(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (PIPE FITTING) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Inside the Boundary of the Building from New Sink / Floor Gullies connecting to Existing Foul Pipeline				
	(Cont) Extra over excavating trenches irrespective of depth				
A	around existing services crossing excavations; 1 number 150 mm diameter uPVC electrical ducts.	nr	1		
	Disposal				
B	ground water	item	1		
C	surface water	item	1		
	In-situ concrete to IS EN206; Grade C30/37; 20 mm maximum size limestone aggregate; piped wrapped in 1 layer of plastic; as per Engineers Specification shown on Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011, 0012 & 0013 to the following pipes:				
	Beds and surrounds				
D	550 x 450 mm; pipe 100 mm nominal diameter	m	23		
	Vertical casing				
E	550 mm x 450 mm; pipe 100 mm nominal diameter	m	2		
	"Wavin" or equivalent approved SN8 uPVC pipes to IS 424, BS 5481, BS 5556 and BS 4660, laid and jointed with integral mechanical joints with D or O rubber sealing rings with rubber seals in running lengths, in accordance with the manufacturers instructions as per Engineers Specification shown on Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011, 0012 & 0013				
	Pipes				
F	nominal pipe diameter 100 mm	m	23		
	Extra over pipes for which they occur				

	(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (PIPE FITTING) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Inside the Boundary of the Building from New Sink / Floor Gullies connecting to Existing Foul Pipeline				
	(Cont) "Wavin" or equivalent approved SN8 uPVC pipes to IS 424, BS 5481, BS 5556 and BS 4660, laid and jointed with integral mechanical joints with D or O rubber sealing rings with rubber seals in running lengths, in accordance with the manufacturers instructions as per Engineers Specification shown on Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011, 0012 & 0013				
A	fittings; bends 100 mm diameter	nr	9		
B	Riser pieces to uPVC gully trap / sinks 100 mm diameter.	m	2		
	Pipe accessories				
	Floor Gullies to Specification, include for excavation, disposal, concrete grade C20/25 in bed and surround 100mm deep, on 100mm deep clause 804 fill, include for all necessary formwork as per Engineers Specification shown on Drawing M237-KCSE-XX-XX-DR-C-0002 & 0011, 0012 & 0013				
C	100 x 100mm, 100mm outlet, with gully grating and frames to be heavy duty grade D400A to EN 124:1994	nr	1		

To Collection € **NIL**

(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (PIPE FITTING) (Cont)

(Cont) DRAINAGE:

(Cont) The Following Work is Inside the Boundary of the Building from New Sink / Floor Gullies connecting to Existing Foul Pipeline

Mains

Connection to existing manhole

Locate existing manhole; take off cast iron cover; connect end of new pipe to existing manhole; including all necessary excavation, disposal, backfilling and reinstatement; forming openings; adapting channels and benching as required; including necessary diversion during the progress of the work; making good all work disturbed.

A	1 nr 100 mm diameter pipe; connection at average 1300mm below existing cover level to existing manhole in Court Yard (Ref: Drawing M237-KCSE-XX-XX-DR-C-0012	nr	1		

	(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (PIPE FITTING) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Inside the Boundary of the Building from New Sink / Floor Gullies connecting to Existing Foul Pipeline				
	Existing Services				
A	Particulars of all known existing services will be indicated to the Contractor on site. However, Contractors shall be entirely responsible for location the positions of all services and will be required to carry out on-site surveys including all necessary investigation pits/hand digging to determine location/route of all underground services, in grass and tarmacadam areas, together with tracing routes of overhead services, using his best endeavors to determine the position of all existing services, with results of the survey to be handed over to the Engineer prior to starting works on-site. The Contractor shall make good at his own expense, any damage whatsoever to existing services to the complete satisfaction of and in accordance with the Employers Representitve and to the satisfaction of the Statutory Authority concerned and shall keep the Employer indemnified at all times from claims in connection with the damage. All services that are encountered during the excavation, shall be adequatley supported and protected. Existing sewers and drains shall not be used for discarging of ground water from excavations without writted concent. No drain or pipe of any description shall be disturbed until it has been inspected. The Contractor shall also to ensure that services of adjoining Buildings are to remain operational throughout the Contract.	item	1		

	(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (PIPE FITTING) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Inside the Boundary of the Building from New Sink / Floor Gullies connecting to Existing Foul Pipeline				
	Survey of Existing Drainage System				
A	The Contractor shall undertake a CCTV survey of the existing drainage system serving prior to commencement of the works, and shall present same with an associated Report to the ER and Employers Consultant Engineer prior to commencement of the works. The Contractor shall allow for all associated costs for same against this item.	Item	1		
	Maintaining Existing Drains				
B	The Contractor shall allow for maintaining existing drainage during the course of the works.	item	1		
	TESTING & COMMISSIONING				
	Testing, sterilisation and commissioning (after completion of the works, and prior to Substantial Completion)				
	New Drainage System				
C	Allow for cleaning out all new drains, removal and disposal of all waste/rubble, and necessary making good upon completion.	item	1		
D	Allow for testing, sterilisation and commissioning drainage to the satisfaction of the Engineer and the Local Authority.	item	1		
E	Allow for CCTV surveys of all completed drains and submit same together with a Report to the Engineer for review prior to Substantial Completion	item	1		
F	Allow for all necessary retesting, and CCTV surveys and associated Reports, as required.	item	1		

	(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (PIPE FITTING) (Cont)				
	(Cont) DRAINAGE:				
	(Cont) The Following Work is Inside the Boundary of the Building from New Sink / Floor Gullies connecting to Existing Foul Pipeline				
	(Cont) Testing, sterilisation and commissioning (after completion of the works, and prior to Substantial Completion)				
	Existing Drainage System				
A	Allow for cleaning out all existing drains, removal and disposal of all waste/rubble, and necessary making good upon completion.	item	1		
B	Allow for testing, sterilisation and commissioning drainage to the satisfaction of the Engineer and the Local Authority.	item	1		
C	Allow for CCTV surveys of all existing drains and submit same together with a Report to the Engineer for review prior to Substantial Completion	item	1		
D	Allow for all necessary retesting, and CCTV surveys and associated Reports, as required.	item	1		

(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (PIPE FITTING) (Cont)

COLLECTION

Page No. BQ/628	NIL
Page No. BQ/629	NIL
Page No. BQ/630	NIL
Page No. BQ/631	NIL
Page No. BQ/632	NIL
Page No. BQ/633	NIL
Page No. BQ/634	NIL

(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (PIPE FITTING)
Carried to Summary **NIL**

	(10) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB)				
	(10) BUILDING SUBSTRUCTURE (AUTOMOTIVE)				
A	It will be deemed that the Contractor has inspected the drawings and site and has consulted available information concerning sub-soil conditions before submitting his tender.	item	1		
B	The contractor's attention is drawn to the fact that earthwork support is deemed to be included in Excavation and Earthworks under the Agreed Rules of Measurement.	item	1		
C	Where concrete in foundations, beds etc. is measured as cast against the faces of the excavations; and should the Contractor opt to use shuttering the following rates for concrete shall be deemed to include for all such shuttering.	item	1		
D	By pricing these works the Contractor will be held to have visited the site and formed his own opinion as to the extent of the actual work involved, including for all temporary works over and above those measured below, and for monitoring the adjacent buildings for both movement and vibration, as necessary to properly carry out the works.	item	1		
E	The quantities for excavation items are based on the volume as per the substructure design and no allowance is made for overdig, the contractor's operational requirements or temporary works when excavating other than as required in the Agreed Rules of Measurement e.g. working space and formwork to bulk concrete blinding.	item	1		
F	The Contractor shall ensure that he has allowed either in the preliminaries section or in the various rates in his pricing document for all costs associated with achieving the airtightness requirements. It should be noted that taping, sealants and seals are generally not specifically itemised in the pricing document but should be included for in the rates for the various elements or in the preliminaries section.	item	1		

	(10) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) (Cont)				
	(Cont) (10) BUILDING SUBSTRUCTURE (AUTOMOTIVE)				
A	Starting level for measurement purposes is taken from formation level. All works in association with works to formation are taken within the Prepared Site Element of the Bill of Quantities.	item	1		
B	For details of ground conditions see the Site Investigation Report	item	1		
C	The Contractor shall have overall responsibility for all necessary tempory works required for the excavation / protection / maintenance of adjacent embankments	item	1		
D	The Contractor shall note the position of all existing underground and overground services within and adjacent to the site.	item	1		
E	Contractor to undertake site investigation at formation level with 10nr. Dynamic cone penetration (DCP) test to verify ground bearing pressure of 150kN/m2; as per Engineers Drawings Nr. 0200	item	1		
F	The Contractor shall be deemed to have allowed for all excavation, filling, compaction and ground preparation works in accordance with the specification and site conditions, including any measures required to achieve formation levels and bearing capacity.	item	1		
	EXCAVATION AND EARTHWORKS				
	Excavation				
	Excavation; at formation level; depth				
G	< or = 2.00m in isolated pits - 6 nr. locations	m3	32		
H	< or = 2.00m in soft spots	m3	2		

	(10) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) (Cont)				
	(Cont) EXCAVATION AND EARTHWORKS				
	(Cont) Excavation				
	Extra over excavating items irrespective of depth for:				
A	breaking out existing 275mm thick reinforced concrete floor; for new isolated pads, making good areas disturbed (within the existing building) - 6 nr locations	m2	14		
B	saw cutting to last existing 275mm thick reinforced concrete floor, making good areas disturbed - 6 nr locations	m	36		
C	The Contractor shall include here against this item for any overdig and associated reinstatement (in excess of net foundation plan size) he deems necessary to complete the works	item	1		
D	around existing services; parallel to excavations	m	3		
E	around existing services crossing excavations	nr	2		
F	being next to existing buildings	m2	5		
G	extra breaking out reinforced concrete foundations	m3	1		
	Disposal of water				
H	surface	item	1		
J	ground	item	1		
	Disposal of excavated material				
K	off site	m3	32		

	(10) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) (Cont)				
	(Cont) EXCAVATION AND EARTHWORKS				
	(Cont) Excavation				
	Filling				
	Hardcore filling to be SR21-Annex 1 hardcore material; T.2 Permeable:4/40mm Gas Permeable layer (Radon) Min depth 200mm.; Radon sump to be positioned in this layer; laid and compacted in 225mm layers as per Engineers Specification and Drawings				
	To excavations				
A	> 250mm	m3	2		
	To make up levels under slab				
B	> 250mm (in isolated pits - 6 nr. locations)	m3	4		
	T.3 Blinding: 0/4mm blinding layer for T.2 max depth 50mm max. This layer is to protect radon membrane from damage; laid on hardcore base as per Engineers Specification and Drawings				
C	50 mm thick (in isolated pits - 6 nr. locations)	m2	14		
	CONCRETE WORK				
	Insitu Concrete				
	Plain, in-situ concrete, grade C16/20 (IS EN 206), poured on or against earth or unblinded hardcore as outlined in Engineers Specification				
D	Blinding below isolated pads - 6 nr.	m3	14		
E	Soft Spots	m3	1		
	Reinforced, In-situ concrete, grade C30/37 (to ISEN 206), exposure class XC2 / XC4; minimum cement content of 320 kg/m3; poured on or against earth or unblinded hardcore and well vibrated around reinforcement in:				
F	Isolated foundations - 6nr	m3	7		

	(10) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) (Cont)				
	(Cont) CONCRETE WORK				
	(Cont) Insitu Concrete				
	(Cont) Reinforced, In-situ concrete, grade C30/37 (to ISEN 206), exposure class XC2 / XC4; minimum cement content of 320 kg/m3; poured on or against earth or unblinded hardcore and well vibrated around reinforcement in:				
A	Beds, > 150mm (in isolated pits - 4 nr. locations)	m3	4		
	Sundries				
	Designed joints				
	Form saw cut joint to concrete slab, saw cut 5 x 25mm deep filled with two part polysulphate sealant as per Engineers Drawing DR-0111				
B	depth 150 - 300mm	m	36		
	Formed isolation dowelled joint in concrete slab with existing; with 600mm long stainless steel 12mm bars drilled in and chemically fixed into existing slab edge at 400mm centres with Hilti Hit HY150 chemical grout, debonding sleeve at one end; 10mm Flexcell filled with two part polysulphate sealant				
C	depth 150 - 300mm (in isolated pits - 6 nr. locations)	m	36		
	Formed isolation dowelled joint in concrete foundation with existing; with 600mm long stainless steel 12mm bars drilled in and chemically fixed into existing slab edge at 400mm centres with Hilti Hit HY150 chemical grout, debonding sleeve at one end; 10mm Flexcell filled with two part polysulphate sealant				
D	depth 150 - 300mm (in isolated pits - 6 nr. locations)	m	5		
	Surface finishes				
E	power floating beds (in isolated pits - 4 nr. locations)	m2	14		

	(10) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) (Cont)				
	(Cont) CONCRETE WORK				
	Reinforcement				
	Reinforcement bars; high yield type 2 deformed steel bars to BS 4449 and BS 8666				
	Bar; straight or bent (Spacers and chairs at contractors discretion)				
A	nominal size > 12 < or = to 25 mm diameter (Pads as per Engineers rebar schedules)	t	0.5		
	Reinforcement mesh fabric; BS 4483;				
	Reference A393 (6.16kg/m2); 300mm minimum side and end laps				
B	horizontal to slab (in isolated pits - 4 nr. locations)	m2	14		
	Formwork				
	Formwork surface finish to concrete; Type "Ordinary" finish as defined in Section 1.9 of the National Structural Concrete Specification (NSCS) 4th edition				
	Sides of foundations				
C	height, > 250 < or = to 500mm, to isolated pad foundations	m	36		

	(10) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) (Cont)				
	ROOFING CLADDING AND WATERPROOFING				
	Mastic Asphalt, Waterproof and Gas Proof Non Metal Flexible Sheet Coverings				
	Reinforced polyethylene gas retardant / damproof membrane with HPDE grid; 0.40mm thick, 407 g/m2 weight, reduce and maintain concentration levels below 200 Bq/m3; lapped 150mm at all joints on sand blinded base; sealed with two strips of 30mm radon resistant sealant tape and mastic sealer; all in accordance with Architects Specification (measured nett).				
	Gas Proofing				
A	horizontal, girth > 300mm, including for all lapping, taping and sealing (in isolated pits - 4 nr. locations)	m2	14		
B	extra over for taping and sealing to existing radon barrier	m	36		
	Sundries.				
	Seal around service pipe penetrations with universal approved top hat pipe seals; fixed with retension clips and 30mm radon resistant sealant tape; all in accordance manufactures written instructions.				
C	holes, < or = to 0.50m girth	nr	1		
	WOODWORK:				
	Ironmongery, Accessories and Sundries				
	Insulation				
	150mm thick rigid PIR foil faced floor insulation with maximum thermal conductivity of 0.022 w/mK laid in 2 nr 100mm layers and butt jointed with taped joints as per manufactures instructions in preparation for the concrete slab, all as per Architects Specification				
D	horizontal, girth >300mm (in isolated pits - 4 nr. locations)	m2	14		

(10) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) (Cont)

COLLECTION

Page No. BQ/636	NIL
Page No. BQ/637	NIL
Page No. BQ/638	NIL
Page No. BQ/639	NIL
Page No. BQ/640	NIL
Page No. BQ/641	NIL
Page No. BQ/642	NIL

(10) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB)
Carried to Summary **NIL**

	(10.1) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB)				
	(10.1) BUILDING SUBSTRUCTURE (AUTOMOTIVE)				
A	The Contractor shall be deemed to have allowed for all excavation, filling, compaction and ground preparation works in accordance with the specification and site conditions, including any measures required to achieve formation levels and bearing capacity.	item	1		
	EXCAVATION AND EARTHWORK:				
	Demolition				
B	Allow for all necessary temporary Works/Propping of existing structures.	item	1		
C	The Contractor shall allow for all necessary temporary works designs in advance of the works, including for all necessary liaison with the Employers Consulting Engineer on same.	item	1		
D	Allow for complying with the Engineers Drawings and Specifications	item	1		
	Excavation				
	Excavation; at existing floor level; depth				
E	< or = 2.0m deep in test lane trench	m3	9		
F	2.00m - 4.00m deep in isolated pit	m3	24		
	Extra on excavation items for:				
G	Allow for breaking out existing 250mm thick reinforced concrete floor; for new pit and new floor slab for car lift; including for all necessary reinstating and making good any structures disturbed; including saw cutting and jointing upon completion (within the existing building)	m2	19		

	(10.1) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) (Cont)				
	(Cont) EXCAVATION AND EARTHWORK:				
	(Cont) Excavation				
	(Cont) Extra on excavation items for:				
A	Allow for breaking out existing 250mm thick reinforced concrete floor; for new test lane trench including for all necessary reinstating and making good any structures disturbed; including saw cutting and jointing upon completion (within the existing building)	m2	12		
B	saw cutting to last existing 250mm thick reinforced concrete floor, making good areas disturbed	m	34		
C	around existing services; parallel to excavations	item	1		
D	around existing services crossing excavations	item	1		
E	being next to / in close proximity to existing internal boundary structures (internal walls including associated foundations)	item	1		
F	breaking out and removal of stone/block/brick rubble	m3	6		
G	Allow for probing the sub-strata to the satisfaction of the engineer during and after the excavations to detect any irregularities.	item	1		
H	Contractor to allow and provide all necessary temporary works in forming the pit and supports to existing structures as necessary	Item	1		
J	The Contractor shall include here against this item for any overdig and associated reinstatement he deems necessary to complete the works	item	1		
	Disposal				
	Disposal of water				
K	surface	Item	1		
L	ground	Item	1		

	(10.1) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) (Cont)				
	(Cont) EXCAVATION AND EARTHWORK:				
	(Cont) Excavation				
	Waste disposal shall be in compliance with EPA guidelines. All materials to be disposed must be carted in waste bins operated by an approved waste disposal contractor.				
	Disposal of all excavated material				
A	off site (existing concrete slab material & excavated material from pit and trench dig)	m3	33		
B	off site stone/block/brick rubble	m3	6		
	Working Space				
	Excavate in foundations and backfill in Annex E hardcore filling material; laid and compacted in accordance with the "Specification for Road Works" produced by the Department of the Environment				
C	2.00m - 4.00m deep to pit (This item has been measured in accordance with the method of measurement. The Contractor is to allow here for any over dig and filling as he deems necessary to complete the works in a safe and practical manner. The Contractor is also to allow and provide all necessary temporary works in forming the pit and supports to existing structures as necessary)	m2	41		
	Filling				
	Hardcore stone filling Clause 804 Type 2 Granular Fill Material to comply with Annex E to SR21:2016; well compacted in layers not exceeding 225mm thick, in accordance with Engineers Specification and Drawing M237-KCSE-XX-XX-M3-S-0400				
D	250mm thick under pit base slab, as per Engineers detail on M237-KCSE-XX-XX-M3-S-0400	m3	2		
E	250mm thick to sides of pit excavations, as per Engineers detail on Drawing	m3	11		

	(10.1) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) (Cont)				
	(Cont) EXCAVATION AND EARTHWORK:				
	(Cont) Filling				
	(Cont) Hardcore stone filling Clause 804 Type 2 Granular Fill Material to comply with Annex E to SR21:2016; well compacted in layers not exceeding 225mm thick, in accordance with Engineers Specification and Drawing M237-KCSE-XX-XX-M3-S-0400				
A	250mm thick under test lane trench, as per Engineers detail on M237-KCSE-XX-XX-M3-S-0400	m3	4		
	CONCRETE WORK:				
	In-situ Concrete				
	Plain, in-situ concrete, grade C16/20 (IS EN 206), poured on or against earth or unblinded hardcore as outlined in Engineers Specification				
B	Blinding below the pits	m3	2		
	Reinforced, in-situ concrete, Exposure Class XC2/XC4, grade C 30/37 with min. cement content of 320kg/m2; Mix A Designation to IS EN 13670; all to IS EN 206-1:2002, poured on or against earth or unblinded hardcore and well vibrated around reinforcement in accordance with Engineers Specification as outlined on Drawing M237-KCSE-XX-XX-M3-S-0400				
C	to sub floor slab to top of pit and to underside of finished floor slab surround; 150mm thick	m3	3		
D	to test lane trench base slab and surrounding finished floor slab; 250mm thick	m3	3		
E	to finished floor slab surrounding top of pit and car lift; 250mm thick	m3	1		
F	to RC pit walls; 300mm thick	m3	8		
G	to RC pit floor slabs; 300mm thick	m3	2		
	Labour Items				

	(10.1) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) (Cont)				
	(Cont) CONCRETE WORK:				
	(Cont) In-situ Concrete				
	(Cont) Reinforced, in-situ concrete, Exposure Class XC2/XC4, grade C 30/37 with min. cement content of 320kg/m2; Mix A Designation to IS EN 13670; all to IS EN 206-1:2002, poured on or against earth or unblinded hardcore and well vibrated around reinforcement in accordance with Engineers Specification as outlined on Drawing M237-KCSE-XX-XX-M3-S-0400				
A	Take from MTU Storage, deliver to site and hoist in position and allow for casting-in New Car Lift mechanism (Free Issue from the Client) into new floor slab, fixing in accordance with the manufacturers instructions and Engineers Specification as outlined on Drawing M237-KCSE-XX-XX-M3-S-0400. Note Contractor responsible for protecting, maintaining the New Car Lift mechanism once in place and making good if damaged	Item	1		
B	Allow for protecting of all works from potential damage by contractor's own personnel/subcontractors and third parties in this element during the progress of the works and clean down and leave perfect on completion	Item	1		
	Sundries				
	Surface finishes				
C	power floating, 250mm finished floor slab surrounding top of pit and car lift	m2	14		
D	power floating, 250mm finished floor slab surrounding top of test lane trench	m2	7		
E	power floating, 300mm thick RC pit floor slab	m2	4		
F	trowelling surfaces of unset concrete to sub floor slab	m2	18		
G	trowelling surfaces of unset concrete to top of RC pit walls.	m2	3		

	(10.1) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) (Cont)				
	(Cont) CONCRETE WORK:				
	(Cont) Sundries				
	(Cont) Surface finishes				
A	trowelling surfaces of unset concrete of service trenches	m2	8		
	Designed joints				
	Formed induced movement joint to concrete slab, saw cut 25 x 250mm beep filled with two part polysulphate sealant as per Engineers Specification and Drawings				
B	depth < or = to 150mm (250mm thick slab at edge of pit)	m	18		
C	depth < or = to 150mm (250mm thick slab at edge / perimeter of car lift)	m	16		
D	depth < or = to 150mm (250mm thick slab at edge of test lane trench)	m	16		
	Formed isolation dowelled joint in concrete foundation with existing; with 600mm long stainless steel 12mm bars drilled in and chemically fixed into existing slab edge at 400mm centres with Hilti Hit HY150 chemical grout, debonding sleeve at one end; 10mm Flexcell filled with two part polysulphate sealant				
E	depth 150 - 300mm (in floor slab - between new & existing)	m	33		
	Joints				
	Internally cast waterstop, type Adcor 500S 25mm x 20mm waterstop strip, thick sectioned, conformable, hydro-expansive waterstop for preventing water entry through joints in concrete sub-structures all in accordance with manufacturers instructions all as per Engineers Specification and Drawing M237-KCSE-XX-XX-M3-S-0400				
F	at junction of pits floor base and pit RC concrete walls, laid horizontal; 250mm thick	m	10		
G	at junction of pit RC concrete walls, laid vertically; 250mm thick	m	12		

	(10.1) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) (Cont)				
	(Cont) CONCRETE WORK:				
	(Cont) Designed joints				
	(Cont) Internally cast waterstop, type Adcor 500S 25mm x 20mm waterstop strip, thick sectioned, conformable, hydro-expansive waterstop for preventing water entry through joints in concrete sub-structures all in accordance with manufacturers instructions all as per Engineers Specification and Drawing M237-KCSE-XX-XX-M3-S-0400				
A	extra over for bends	nr	4		
	Reinforcement				
	Reinforcement mesh fabric; BS 4483;				
	Reference A393 mesh, 6.16kgs/m2; 400mm minimum side and end laps; lapping at corners to be chamfered as outlined on Drawing M237-KCSE-XX-XX-M3-S-0400				
B	A393 mesh, 6.16kgs/m2, lapped 150mm at all joints, 2 layers laid horizontal top & bottom set into ground bearing floor slab and include for supporting in position; (measured nett). - to finished floor around pit, car lift and test lane trench	m2	40		
C	A393 mesh, 6.16kgs/m2, lapped 150mm at all joints, 2 layers laid horizontal top & bottom set into ground bearing floor slab and include for supporting in position; (measured nett). - to floor pit & car lift sub-floor	m2	35		
D	A393 mesh, 6.16kgs/m2, lapped 150mm at all joints, 2 layers laid horizontal top & bottom set into test lane trench slab and include for supporting in position; (measured nett).	m2	15		
E	A393 mesh, 6.16kgs/m2, lapped 150mm at all joints, 2 layers laid horizontal top & bottom set into RC pit floor slabs and include for supporting in position; (measured nett).	m2	8		

	(10.1) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) (Cont)				
	(Cont) CONCRETE WORK:				
	(Cont) Reinforcement				
	(Cont) Reinforcement mesh fabric; BS 4483;				
	(Cont) Reference A393 mesh, 6.16kgs/m2; 400mm minimum side and end laps; lapping at corners to be chamfered as outlined on Drawing M237-KCSE-XX-XX-M3-S-0400				
A	A393 mesh, 6.16kgs/m2, lapped 150mm at all joints, 2 layers laid vertically set into RC pit walls and include for supporting in position; (measured nett).	m2	52		
	Reinforcement bars; high tensile steel BS 4449				
	Bar; straight or bent				
B	< or =12 mm diameter; S/S B12 U-Bars (0.89kgs/m2) laid at 200mm c/c as per Drawing M237-KCSE-XX-XX-M3-S-0400	tonne	0.09		
	Bar; links				
C	< or =12 mm diameter; S/S B12 L-Bars (0.89kgs/m2) laid at 200mm c/c as per Drawing M237-KCSE-XX-XX-M3-S-0400	tonne	0.77		
	Formwork				
	Formwork surface finish to concrete; Type "Ordinary Finish" as per CL 8.6.1.2; P.1.9 of NSCS 4th Edition; with and including Betec 350 or equivalent approved Waterproof cementitious compound for sealing tie-bar holes; all in accordance with Engineers Specification				
	Kickers				
D	walls 100mm high one side measured (300mm walls)	m	10		
	Edge of base				
E	< or = to 250mm (150mm high sub-floor base slab around pit ope)	m	8		
F	< or = to 250mm (250mm high base slab to test lane trench)	m	14		

	(10.1) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) (Cont)				
	(Cont) CONCRETE WORK:				
	(Cont) Formwork				
	(Cont) Formwork surface finish to concrete; Type "Ordinary Finish" as per CL 8.6.1.2; P.1.9 of NSCS 4th Edition; with and including Betec 350 or equivalent approved Waterproof cementitious compound for sealing tie-bar holes; all in accordance with Engineers Specification				
A	250 - 500mm (300mm high RC base to pits)	m	10		
	Formwork surface finish to concrete; Type "Plain Finish" as per CL 8.6.1.3; P.1.9 of NSCS 4th Edition; with and including Betec 350 or equivalent approved Waterproof cementitious compound for sealing tie-bar holes; all in accordance with Engineers Specification				
B	Edges of service trenches	niud			
C	250 - 500mm (280mm high floor slab to test lane trench)	m	12		
	Walls				
D	vertical to sides of 300mm thick wall	m2	52		
E	Forming recess, to top of RC pit walls for car lift unit/system; size 130mm x 75mm	m	8		
	Extra on any of the foregoing formwork categories for:				
F	upgrade formwork to achieve finish that can be seen to concrete; Type "Plain Finish" as per CL 8.6.1.3; P.1.9 of NSCS 4th Edition; all in accordance with Engineers Specification	m2	26		
G	forming 25mm x 25mm chamfer to external corners (Top of Pit Walls)	m	8		
H	forming 25mm x 25mm chamfer to external corners (Top of Test Lane Trench)	m	12		

	(10.1) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) (Cont)				
	(Cont) CONCRETE WORK:				
	(Cont) Formwork				
	Scabbling to walls				
A	Scabbling base of slab for concrete walls	m2	3		
	Hydrophilic Strip at Kicker				
B	Continuous Joint at junction of walls and base at perimeter	m	10		
C	extra over for bends & intersections	nr	4		
	TESTING				
D	Allow for Testing Pit (x 1r)	item	1		
E	Allow for Testing Test Lane Trench (x 1r)	item	1		
	ROOFING CLADDING AND WATERPROOFING				
	Mastic Asphalt,Waterproof and Gasproof Non Metal Flexible Sheet Coverings				
	Tanking				
	Allow for the supply and installation (including all testing requirements) Delta Dual Proof or equivalent approved tanking system DMS 480 comprising of soft PVC membrane + PP non-woven, 1.9mm thick to Class E: Fire resistance; all specifically designed for waterproofing and the protection of concrete slabs and below ground concrete walls poured in confined space conditions; lapped 75mm at all joints; taped at all joints with / using Delta Double-Sided Tape, Heat welded or DualProof Polymer adhesive (CEM 805) and compressed using a wooden roller, all fixed to reinforced concrete floor bases & walls; all in accordance with manufacturers instructions; as per Engineers Specification as outlined on Drawing M237-KCSE-XX-XX-M3-S-0400 and NBS J40/130 Specification				
F	horizontal > 300mm (to pit floor base)	m2	4		
G	vertical > 300mm	m2	31		

	(10.1) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) (Cont)				
	(Cont) ROOFING CLADDING AND WATERPROOFING				
	(Cont) Tanking				
	(Cont) Allow for the supply and installation (including all testing requirements) Delta Dual Proof or equivalent approved tanking system DMS 480 comprising of soft PVC membrane + PP non-woven, 1.9mm thick to Class E: Fire resistance; all specifically designed for waterproofing and the protection of concrete slabs and below ground concrete walls poured in confined space conditions; lapped 75mm at all joints; taped at all joints with / using Delta Double-Sided Tape, Heat welded or DualProof Polymer adhesive (CEM 805) and compressed using a wooden roller, all fixed to reinforced concrete floor bases & walls; all in accordance with manufacturers instructions; as per Engineers Specification as outlined on Drawing M237-KCSE-XX-XX-M3-S-0400 and NBS J40/130 Specification				
A	Allow for the supply & installation of for continuous concrete adhesion at taped edges and details; all in accordance with manufacturers instructions; as per Engineers Specification	m	62		
B	Note: The above should only be applied in compliance with Delta-membranes recommendations and approvals. Application of the above should only be carried out by Delta-membranes approved sub-contractors	NOTE			

	(10.1) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) (Cont)				
	(Cont) ROOFING CLADDING AND WATERPROOFING				
	(Cont) Tanking				
	Delta Geo Drain Quattro 9mm thick, protection board or equivalent approved DMS 006 with a Compressive Strength: >400 kN/m²: Comprising of a compact four-layer external drainage and protection membrane of a perforated sliding film, drainage fleece, dimpled sheet and laminated geotextile all to protect tanking membranes and sub-structure; in accordance with the requirements of BS 8102:1990; fixed over tanking membrane; as per Engineers Specification and NBS J40/295 Specification				
A	Horizontal protection board to tanking; girth exceeding 300mm;	m2	4		
B	vertical protection board tanking; girth exceeding 300mm, dressed up (sides) and over RC concrete pit walls,	m2	31		
C	angles (vertical & horizontal)	m	62		
	DPM				
	Polythene sheeting separation layer / Damp proof membrane				
	Visqueen 1000 gauge or equivalent approved damproof membrane barrier to be laid on insulation; all joints lapped minium 150 mm and sealed with approved tape and mastic; all in accordance with the manufacturer's written instructions as per Engineers Specification as outlined on Drawing M237-KCSE-XX-XX-M3-S-0400				
D	horizontal; > 300 mm	m2	16		
E	vertical; > 300 mm	m2	35		

	(10.1) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) (Cont)				
	(Cont) ROOFING CLADDING AND WATERPROOFING				
	Ironmongery, Accessories and Sundries				
	Insulation				
	50mm thick rigid foil faced polyisocyanurate (PIA) floor insulation, in preparation for the concrete slab, butt jointed, lapped and taped at all joints all in accordance with Architects Specification and Engineers Drawing M237-KCSE-XX-XX-M3-S-0400 (Refer to SI Report)				
A	50mm thick; laid horizontal under floor slab, girth > 300mm (x 1 layer) - to pit sub-floor surround and test lane trench surround	m2	48		
	PROTECTION				
	Protection				
B	Allow for protection of all existing areas and the works	item	1		
C	Allow for protection and maintaining of existing remaining fittings and fixtures during the construction works.	item	1		
D	Allow for compliance with the Engineers Specifications	item	1		
	SUNDRIES				
E	The Contractor shall include for all other items deemed necessary to complete this element in accordance with the works requirements	item	1		
F					

To Collection € **NIL**

(10.1) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) (Cont)				
COLLECTION				
Page No. BQ/644				NIL
Page No. BQ/645				NIL
Page No. BQ/646				NIL
Page No. BQ/647				NIL
Page No. BQ/648				NIL
Page No. BQ/649				NIL
Page No. BQ/650				NIL
Page No. BQ/651				NIL
Page No. BQ/652				NIL
Page No. BQ/653				NIL
Page No. BQ/654				NIL
Page No. BQ/655				NIL
Page No. BQ/656				NIL
(10.1) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB) Carried to Summary				**NIL**

	(69) ELECTRICAL INSTALLATION (AUTOMOTIVE LAB)				
	(69) ELECTRICAL INSTALLATION (PIPE FITTING)				
	GENERAL				
A	The following section measured in accordance with ARM4 Supplement 2 - Agreed Alternative Rules for the Measurement of Services Installations.	note			
B	The prices hereunder shall include for all work in the design, execution and testing of electrical installation in accordance with the Specification.	note			
C	The prices hereunder shall include for the co-ordination of the design and installation of the electrical installation. The Contractor shall ensure compatibility of design performance and consistency of any design assumptions for the electrical installation.	note			
D	The work is to be undertaken as a domestic sub-contractor to the Main Contractor. The prices hereunder shall be deemed to include for profit, general attendance and special attendances as necessary by the Main Contractor.	note			
E	The Contractors shall read the other Elements of the Bill of Quantities when pricing this section of the project, in particular (but not limited to) Elements (50.1 to 50.3) Site Services Mainly Piped and Ducted, (60) Site Services Mainly Electrical,	note			
F	For preliminaries particulars, please refer to tender documentation.	note			

	(69) ELECTRICAL INSTALLATION (AUTOMOTIVE LAB) (Cont)				
	(Cont) GENERAL				
A	The Contractor shall allow for the provision, coordination and commissioning of energy metering and sub-metering systems appropriate to the building layout and Significant Energy Uses (SEUs), to support monitoring of Energy Performance Indicators (EnPIs). The Contractor shall provide all necessary data, technical information and settings to enable integration of metering systems into the Employer's energy management systems. Energy performance shall be considered as part of commissioning, with systems set up and demonstrated to operate in accordance with design intent and energy efficiency requirements.	Item	1		
B	Tenderers shall provide information on the energy performance of proposed systems, including efficiency ratings and operational energy consumption, where applicable.	note			
C	The Contractor shall allow for full coordination and integration of all door systems, including fire-rated doors, access-controlled doors, and doors connected to fire alarm and security systems, including all associated wiring, interfaces, controls, ironmongery and commissioning.	Item	1		
D	The Contractor shall include for full provision, coordination and commissioning of ICT, data, CCTV, and security systems, including integration with access control and building management systems where applicable.	Item	1		
E					

To Collection € **NIL**

	(69) ELECTRICAL INSTALLATION (AUTOMOTIVE LAB) (Cont)				
	DESCRIPTION				
	Provide everything necessary for the proper installation of the Electrical services system, all in accordance with the Service Engineer Information as issued by AFEC; refer to the following documents:				
	Drawings:				
A	MTUBA-AFEC-00-XX-RG-E-0001	item	1		
B	MTUBA-AFEC-00-XX-SP-E-0050	item	1		
C	MTUBA-AFEC-00-ZZ-DR-E-1000	item	1		
D	MTUBA-AFEC-00-ZZ-DR-E-2000	item	1		
E	MTUBA-AFEC-00-00-DR-E-2050	item	1		
F	MTUBA-AFEC-00-01-DR-E-2050	item	1		
G	MTUBA-AFEC-00-RL-DR-E-2050	item	1		
H	MTUBA-AFEC-00-00-DR-E-2100	item	1		
J	MTUBA-AFEC-00-01-DR-E-2100	item	1		
K	MTUBA-AFEC-00-00-DR-E-2150	item	1		
L	MTUBA-AFEC-00-01-DR-E-2150	item	1		
M	MTUBA-AFEC-00-00-DR-E-2250	item	1		
N	MTUBA-AFEC-00-01-DR-E-2250	item	1		
P	MTUBA-AFEC-00-00-DR-E-2300	item	1		
Q	MTUBA-AFEC-00-01-DR-E-2300	item	1		
R	MTUBA-AFEC-00-RF-DR-E-2550	item	1		
	Tender Breakdown				
	Preliminary Items				
S	Amount for general preliminaries.	item	1		
T	Amount for marking on site builders work and attendances.	item	1		
U	Amount for record documentation	item	1		

	(69) ELECTRICAL INSTALLATION (AUTOMOTIVE LAB) (Cont)				
	(Cont) Preliminary Items				
A	Amount for as-installed drawings	item	1		
B	Amount for builders works and co-ordination drawings, construction drawings.	item	1		
C	Amount for set-up.	item	1		
D	Amount for site specific preliminaries.	item	1		
E	Works associated with As built drawings and O&M Manuals (three disks copy and three hard copies of all).	item	1		
F	Works associated with staff demonstrations and training.	item	1		
G	Works associated with recommissioning of all systems following a full year of operation.	item	1		
H	Works associated with decommissioning and removal of all redundant services	item	1		
J	Allow for any other work in this section (Tenderer to detail)	item	1		
	Insurances				
K	Amount for employers liability.	item	1		
L	Amount for third party workmans compensation.	item	1		
M	Statutory requirements.	item	1		
N	All risks insurances.	item	1		
P	Public liability insurance.	item	1		
Q	Amount for Collateral Agreement.	item	1		
R	Allow for any other work in this section (Tenderer to detail)	item	1		
	Co-ordination				
S	Amount for coordination with MTU facilities department	item	1		

	(69) ELECTRICAL INSTALLATION (AUTOMOTIVE LAB) (Cont)				
	Elemental Summary (AUTOMOTIVE)				
	(61) Electrical Supply and Distribution				
A	Electrical Supply and Distribution	item	1		
	(62) Power				
B	Power	item	1		
	(63) Lighting				
C	Lighting	item	1		
	(64) Communications				
D	Communications	item	1		
	(65) Security and Protection				
E	Security and Protection	item	1		
	(6_) Other Services				
F	Other Services	item	1		
	General				
G	Testing and commissioning – all systems listed herein	item	1		
H	Operating and maintenance manuals	item	1		
J	Working drawings	item	1		
K	Co-ordination drawings	item	1		
L	As-built drawings and data books (three disc copies and three hard copies of all, including builder's works and co-ordination drawings)	item	1		
M	Identification plates, labels and the like	item	1		
N	Mock-ups	item	1		
P	Staff demonstrations and training	item	1		
Q	Recommissioning of all systems following one full year of operation	item	1		
R	Co-ordination of Services	item	1		

	(69) ELECTRICAL INSTALLATION (AUTOMOTIVE LAB) (Cont)				
	(Cont) Elemental Summary (AUTOMOTIVE)				
	(Cont) General				
A	Decommissioning and removal of all redundant services	item	1		
B	Builders work	item	1		
C	Fire stopping and other associated fire protection work	item	1		
D	Allow for all other items necessary to complete the Works Requirements for this element of the Works	item	1		
	Sundries an Builders Work				
	Builders work, cutting, forming or leaving holes, mortices, chases or the like and subsequent making good to structure, including firestopping, fire barriers, smoke barriers, dust barriers and similar items				
E	generally	item	1		

(69) ELECTRICAL INSTALLATION (AUTOMOTIVE LAB) (Cont)				
COLLECTION				
Page No. BQ/658				NIL
Page No. BQ/659				NIL
Page No. BQ/660				NIL
Page No. BQ/661				NIL
Page No. BQ/662				NIL
Page No. BQ/663				NIL
(69) ELECTRICAL INSTALLATION (AUTOMOTIVE LAB) Carried to Summary				**NIL**

SUMMARY		Page No.		
(06) PROJECT PARTICULARS, PRELIMINARIES AND GENERAL CONDITIONS		BQ/133		NIL
(10) BUILDING SUBSTRUCTURE (PLASTERING)		BQ/150		NIL
(21) EXTERNAL WALLS (PLASTERING)		BQ/161		NIL
(22) INTERNAL WALLS PARTITIONS (PLASTERING)		BQ/171		NIL
(23) FLOORS AND GALLERIES & (27) ROOF STRUCTURE (PLASTERING)		BQ/186		NIL
(24) STAIRS, RAMPS (PLASTERING)		BQ/191		NIL
(31) EXTERNAL WALL COMPLETIONS (PLASTERING)		BQ/222		NIL
(32) INTERNAL WALL COMPLETIONS (PLASTERING)		BQ/240		NIL
(34) STAIRS AND RAMPS COMPLETIONS (PLASTERING)		BQ/243		NIL
(37) ROOF COMPLETIONS (PLASTERING)		BQ/248		NIL
(41) WALL FINISHES EXTERNALLY (PLASTERING)		BQ/251		NIL
(42) WALL FINISHES INTERNALLY (PLASTERING)		BQ/257		NIL
(43) FLOOR FINISHES (PLASTERING)		BQ/265		NIL
(44) STAIRS FINISHES (PLASTERING)		BQ/271		NIL
(45) CEILING FINISHES (PLASTERING)		BQ/282		NIL
(47) ROOF FINISHES & CLADDING (PLASTERING)		BQ/330		NIL
(52) DRAINAGE, RAINWATER AND REFUSE DISPOSAL		BQ/332		NIL
(59) MECHANICAL INSTALLATION (PLASTERING)		BQ/356		NIL

SUMMARY		Page No.		
(66) LIFT AND LIFT SHAFT (PLASTERING)		BQ/360		NIL
(69) ELECTRICAL INSTALLATION (PLASTERING)		BQ/380		NIL
(00) DEMOLITIONS & ALTERATIONS (PLASTERING)		BQ/387		NIL
(10) PREPARED SITE		BQ/392		NIL
(20) ANCILLARY SITE STRUCTURES		BQ/398		NIL
(30) SITE ENCLOSURES, RETAINING WALLS		BQ/401		NIL
(40) ROADS PATHS PAVINGS		BQ/415		NIL
(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (Plastering)		BQ/427		NIL
(50.2) SITE SERVICES MAINLY PIPED AND DUCTED (Surface Water)		BQ/441		NIL
(50.3) SITE SERVICES MAINLY PIPED AND DUCTED (Watermain)		BQ/451		NIL
(70) SITE FITTINGS AND FURNITURE		BQ/454		NIL
(00) DEMOLITIONS & ALTERATIONS (LINK CORRIDOR)		BQ/458		NIL
(10) BUILDING SUBSTRUCTURE (LINK CORRIDOR)		BQ/467		NIL
(22) INTERNAL WALLS PARTITIONS (LINK CORRIDOR)		BQ/472		NIL
(23) FLOORS AND GALLERIES (LINK CORRIDOR)		BQ/479		NIL
(32) INTERNAL WALL COMPLETIONS (LINK CORRIDOR)		BQ/492		NIL
(42) WALL FINISHES INTERNALLY (LINK CORRIDOR)		BQ/496		NIL
(43) FLOOR FINISHES (LINK CORRIDOR)		BQ/503		NIL
(45) CEILING FINISHES (LINK CORRIDOR)		BQ/505		NIL

SUMMARY		Page No.		
(00) DEMOLITIONS & ALTERATIONS (PIPE FITTING)		BQ/510		NIL
(10) BUILDING SUBSTRUCTURE (PIPE FITTING)		BQ/521		NIL
(22) INTERNAL WALLS PARTITIONS (PIPE FITTING)		BQ/525		NIL
(28) FRAME (PIPE FITTING)		BQ/529		NIL
(31) EXTERNAL WALL COMPLETIONS (PIPE FITTING)		BQ/541		NIL
(32) INTERNAL WALL COMPLETIONS (PIPE FITTING)		BQ/551		NIL
(37) ROOF COMPLETIONS (PIPE FITTING)		BQ/558		NIL
(41) WALL FINISHES EXTERNALLY (PIPE FITTING)		BQ/561		NIL
(42) WALL FINISHES INTERNALLY (PIPE FITTING)		BQ/565		NIL
(43) FLOOR FINISHES (PIPE FITTING)		BQ/573		NIL
(45) CEILING FINISHES (PIPE FITTING)		BQ/576		NIL
(47) ROOF FINISHES & CLADDING (PIPE FITTING)		BQ/582		NIL
(59) MECHANICAL INSTALLATION (PIPE FITTING)		BQ/598		NIL
(69) ELECTRICAL INSTALLATION (PIPE FITTING)		BQ/627		NIL
(50.1) SITE SERVICES MAINLY PIPED AND DUCTED (Foul Sewer) (PIPE FITTING)		BQ/635		NIL
(10) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB)		BQ/643		NIL
(10.1) BUILDING SUBSTRUCTURE (AUTOMOTIVE LAB)		BQ/657		NIL

SUMMARY		Page No.		
(69) ELECTRICAL INSTALLATION (AUTOMOTIVE LAB)		BQ/664		NIL
TOTAL AMOUNT TO FORM OF TENDER				**NIL**

Note: This Bill of Quantities contains pages numbered BQ/1 - BQ/664. The Sub-Contractor should ensure that...

SECTION 4.0

Summary

Collection & Form of Tender Total

Summary

COLLECTION OF BILL TOTALS

1	Project Particulars, Preliminaries and General Conditions	€
2	Building Substructure (Plastering)	€
3	External Walls (Plastering)	€
4	Internal Wall & Partitions (Plastering)	€
5	Floor and Galleries & Roof Structure (Plastering)	€
6	Stairs and Ramps (Plastering)	€
7	External Wall Completions (Plastering)	€
8	Internal Walls Completions (Plastering)	€
9	Stairs and Ramps Completions (Plastering)	€
10	Roof Completions (Plastering)	€
11	Wall Finishes Externally (Plastering)	€
12	Wall Finishes Internally (Plastering)	€
13	Floor Finishes (Plastering)	€
14	Stairs Finishes (Plastering)	€
15	Ceiling Finishes (Plastering)	€
16	Roof Finishes & Cladding (Plastering)	€
17	Drainage, Rainwater and Refuse Disposal (Plastering)	€
18	Mechanical Installation (Plastering)	€
19	Lift and Lift Shaft Installation (Plastering)	€
20	Electrical Installation (Plastering)	€
21	Demolitions & Alterations (Plastering)	€
22	Prepared Site	€
23	Ancillary Site Structures	€
24	Site Enclosures, Retaining Walls	€
25	Roads, Paths & Paving's	€
26	Site Services Mainly Piped & Ducted (Foul Sewer) (Plastering)	€
27	Site Services Mainly Piped & Ducted (Surface Water)	€
28	Site Services Mainly Piped & Ducted (Watermain)	€
29	Site Fittings & Furniture	€
30	Demolitions & Alterations (Link Corridor)	€
31	Building Substructure (Link Corridor)	€
32	Internal Wall & Partitions (Link Corridor)	€
33	Floors and Galleries (Link Corridor)	€
34	Internal Walls Completions (Link Corridor)	€
35	Wall Finishes Internally (Link Corridor)	€
36	Floor Finishes (Link Corridor)	€
37	Ceiling Finishes (Link Corridor)	€
38	Demolitions & Alterations (Pipe Fitting)	€
39	Building Substructure (Pipe Fitting)	€
40	Internal Wall & Partitions (Pipe Fitting)	€
41	Frame (Pipe Fitting)	€
42	External Wall Completions (Pipe Fitting)	€
43	Internal Walls Completions (Pipe Fitting)	€
44	Roof Completions (Pipe Fitting)	€

45	Wall Finishes Externally (Pipe Fitting)	€	
46	Wall Finishes Internally (Pipe Fitting)	€	
47	Floor Finishes (Pipe Fitting)	€	
48	Ceiling Finishes (Pipe Fitting)	€	
49	Roof Finishes & Cladding (Pipe Fitting)	€	
50	Mechanical Installation (Pipe Fitting)	€	
51	Electrical Installation (Pipe Fitting)	€	
52	Site Services Mainly Piped & Ducted (Foul Sewer) (Pipe Fitting)	€	
53	Building Substructure (Automotive Lab)	€	
54	Building Substructure (1A) (Automotive Lab)	€	
55	Electrical Installation (Automotive Lab)	€	

TOTAL CARRIED TO FORM OF TENDER (NET OF VAT) € _____