



BILL OF QUANTITIES RESTORATION WORKS SUMMARY		
Job No: 0342(112) - Restoration of South-West and North-West Facades of Delimara Lighthouse		Date
Job Address: Delimara Lighthouse (Two-Storey Building)		14-Apr-22
Bill No.	Description	Total Amount excluding VAT (€)
1.00	PRELIMINARIES	
4.00	ELEVATION - E3 (SOUTH-WEST FAÇADE)	
5.00	ELEVATION - E4 (NORTH-WEST FAÇADE)	
Subtotal excluding VAT (€) and including contingency		
Add 18% VAT		
Grand Total including VAT (€) <i>subject to measurement of works</i>		

**PREAMBLES**

- a These Bill of Quantities are to be read in conjunction with the approved planning drawings and the Restoration Method Statement. Any discrepancies between any of these documents shall be promptly communicated in writing to the Architect in Charge (AIC).
- b The Bidder is advised to inspect the site prior to pricing this document and submitting his offer. No claims resulting from lack of information regarding the site will be entertained at any stage. Any queries can be clarified with the Architect in Charge prior to pricing.
- c All costs involved in preparing and submitting this tender shall be borne by the Bidder.
- d The absence of any sum against any item in this bill will not relieve the Contractor from any obligation. The cost attributed to that item will be assumed as included elsewhere in this bill or in the unit rates for the works priced in the Bills of Quantities. No sums will be paid for any unpriced items at any stage of the Contract.
- e All works are deemed to include for the supply, transport, hoisting, etc of material and all tools and equipment necessary for the execution of works. All as per specifications and as approved by the Architect in Charge.
- f The Contractor is to organise the transportation of all material, equipment and the daily commute of the employees.
- g Allow for coordinating with service utilities (Enemalta, WSC, GO plc, etc) for making all necessary arrangements to locate/re-route/terminate/protect any existing functional services that might be servicing the site and/or passing through and/or over the site, and which shall be retained.
- h Contractor shall be able to erect a scaffold for the whole façade. The scaffold shall be only dismantled once works are approved by the authorities and architect in charge.
- i Care should be taken not to damage the surrounding historic fabric to be restored. Any damages shall be repaired as directed by the Architect in Charge, at the Contractor's expense.
- j Care should be taken not to damage the surrounding natural habitat, rubble walls, third party properties and/or roads. Any damages to third party properties and/or surrounding roads resulting from the carrying out of the works must be made good by the Contractor at his own expense. All remedial works shall be completed prior to Final Certification or Release of Retention.
- k No rubbish, debris or any other materials shall be deposited and / or stored outside the boundary / hoarding enclosing the site and / or on public or third party properties.
- l The Contractor shall not assign or sublet any part of the Works without the prior written consent of the Architect in Charge. If any proposal is reasonably not approved, the Contractor may submit alternatives at his own cost.
- m Contractor shall make sure that any equipment used during any stage of the project, does not cause disruption by excessive noise, vibration, fumes (exhaust) etc.
- n The Contractor shall coordinate with other trades on site and shall ensure that sufficient personnel are allocated to meet the stipulated working time frames.
- o All rates and lump sums included in this bill shall be exclusive of VAT.
- p Rates included hereunder shall include for all the ancillary materials and/or works required to fully complete the works as envisaged by the item description.
- q Works shall be measured and paid for according to the respective unit rates. No lump sum values shall be inserted where rates per unit are requested. Contractor shall allow for all setting out and surveys required through out the contract period. The Contractor shall be responsible for taking detailed measurements on site. The dimensions / measurements provided are only indicative and shall not be used for manufacturing purposes.
- r Rates included hereunder shall include the carting away of all resultant material to authorised dump site and any fees or taxes for the dumping of such materials.



s Payments shall be based on actual quantities measured on site after completion. Bill of Quantity rates should be only indicative. Bidder / Contractor shall allow for surveys required throughout the contract period, when requested.

Item	Description	Qty	Unit	Rate (Exc. VAT)	Amount (Exc. VAT)
1.00	PRELIMINARIES				
1.01	Allow for all insurances specified in this contract mainly, insurance against risk of damage to the facades being restored (own surrounding property), insurance against damage to third parties and insurance against each parties liability for any loss, damage, death or bodily harm, that may be caused to third parties, property belonging to third parties, and any person that is authorised to be onsite at any given time.	-	-	included	included
1.02	Allow for sum for mobile crane on site, if required, including any associated items. (Provisional)	-	-	included	included
1.03	Contractor shall allow for all setting out and surveys required through out the contract period. The Contractor shall be responsible for taking detailed measurements on site. The dimensions / measurements provided are only indicative and shall not be used for manufacturing purposes.	-	-	included	included
1.04	Supply and/or construct temporary hoarding around the periphery of the site, with a minimum height of 2m, to comply with PA and OHSA requirements. Dismantling of hoarding upon completion and re-instatement of any disturbed area around the site.	40.60	m		
1.05	Supply, erect and eventually dismantle scaffolding for the external facades, where and as directed by the Architect in Charge. Rate shall include for floor boards, toe boards, netting, plastic sheeting and all the required fittings. Scaffolding shall be certified by a competent person.	192.60	sq.m		
1.06	Appoint a Health and Safety Project Supervisor for all stages in accordance with current legislation, for complying with the safety precautions and including for all safety personal clothing and equipment for all of the workers involved. The said officer shall provide: a) A detailed risk assessment of the works involved to complete the project from initial stages up to delivery for approval by client, prior to commencement of works. b) A weekly report to be presented to the Architect in Charge for onward submission to client. The report shall include all detailed information relating to site inspections carried out, health and safety interventions requested and an on-going follow up of health and safety issues raised during site inspections.	-	-	included	included
1.07	Allow for the provision of adequate first aid arrangements for site staff and authorised visitors, including signage, safety wear, etc, as required by law, and to ensure safety of the public around the site boundaries.	-	-	included	included

Item	Description	Qty	Unit	Rate (Exc. VAT)	Amount (Exc. VAT)
1.08	Allow for providing, maintaining and dismantling on completion of works, all the necessary services, to include electricity, water, telephone, etc services required for the whole duration of works as outlined in this document and directed by the Architect in Charge. Rate is to include for the provision of a three phase electricity supply if needed and payment of all related costs and tariffs.	-	-	included	included
1.09	Allow for the daily cleaning of the property, surrounding areas and roads, etc from dust and/ or other materials generated by the works and for maintaining a dust-free environment, particularly by using appropriate industrial vacuum systems on site where and as required. No rubbish, debris or any other materials shall be deposited and/or stored outside the boundary/hoarding enclosing the site and/or on public or third party properties.	-	-	included	included
1.10	Allow for adequate storage of materials on site or off site as instructed by the Architect in Charge, including all handling and transportation costs.	-	-	included	included
1.11	Contractor to acquire all necessary permits envisaged from Local Council and any other entity in order to carry out the proposed refurbishment.	-	-	included	included
1.12	The provision, fixing and maintenance of temporary free-standing signboards, measuring 2.5m x 1.5m, including all the necessary details about the project, which shall comply to PA specifications and any other relevant authorities.	1	L.S		
TOTAL CARRIED DOWN TO SUMMARY					



Item	Description	Qty	Unit	Rate (Exc. VAT)	Amount (Exc. VAT)
4.00	ELEVATION - E3 (SOUTH-WEST FAÇADE)				
40.00	Using methods approved by the architect in charge, carefully <u>remove all metal inserts</u> , dead cables, and all other accretions, fixed to or embedded/ chased into the masonry from any area of the façade.	1	L.S		
40.01	Using a stiff bristle/nylon brush as directed by Architect in Charge, brush by hand one section at a time, to remove flaky stone, dirt, soot, etc., on any area of the wall. Patina and lichen growth shall be retained.	136.50	sq.m		
40.02	Using a <u>stiff bristle/ nylon brush and clean soft water</u> free from salts having conductivity inferior to 60µs wet brush one section at a time, dirt on any area of the wall. <u>Patina and lichen growth shall be retained.</u> (Provisional)	136.50	sq.m		
40.03	Using methods approved by the architect in charge, carefully <u>remove lime-based render</u> from any area of the façades to expose the stone substrate, ensuring as little damage as possible is sustained by the underlying fabric.	7.00	sq.m		
40.04	Using methods approved by the Architect in Charge, carefully <u>open joints</u> to remove all loose and unsound pointing and pointing deemed to contain a high level of cement, ensuring no damage is sustained by the surrounding masonry from any area of the facades.	123.00	sq.m		
40.05	<u>Repoint all open joints</u> , on any area of the wall using an hydraulic lime-based mortar with limestone dust as filler, to ensure eventual homogenous patination and to match existing pointing in colour, texture and thickness as approved by the Architect in Charge. Pointing must be as neat as possible, flush with stone surfaces and the width must be kept to a minimum as far as is technically possible.	123.00	sq.m		
40.06	<u>Chisel out, dismantle and clean</u> , up to a depth of 150mm, damaged, decayed or missing masonry elements that are instructed by the Architect in Charge. Rate is to include for the carting away of spoil material.	8.35	sq.m		
40.07	<u>Reinstate the chiselled out masonry elements</u> using good quality stone of matching size, shaped to match the existing profile and as indicated by the Architect in Charge. Rate is to include for any propping, provision of oversize ashlar, provision and laying of lime-based mortar and/or epoxy resin required to glue the new insert with the original fabric, provision and setting of carbon fibre dowels (if necessary).	8.35	sq.m		
40.08	<u>Chisel out, dismantle and clean</u> deteriorated stone lintel up to a depth of 230mm and length of 1.1m as instructed by the Architect in Charge. Rate is to include for the carting away of spoil material.	3.00	no.		



Item	Description	Qty	Unit	Rate (Exc. VAT)	Amount (Exc. VAT)
40.09	<p>Reinstate the chiselled out stone lintels using good quality stone of matching size, shaped to match the existing profile and as indicated by the Architect in Charge. Rate is to include for any propping, provision of oversize ashlar, provision and laying of lime-based mortar and/or epoxy resin required to glue the new insert with the original fabric, provision and setting of carbon fibre dowels (if necessary).</p>	3.00	no.		
40.10	<p>Carefully reinstate damaged, eroded or missing stonework on any area of the wall using <u>lime-based plastic repair</u>. This shall also include making good to resulting cavities from removal of non-historical metal fixings and any alveoli formed on any part of the masonry fabric. All plastic repairs shall be formed such as to match the adjoining stonework in colour, texture and final profile. Rate is to include for anchoring with stainless steel and/or carbon fibre rods and the addition of any mixture additive or fibre strands, etc.</p>	24.00	sq.m		
	<p><u>Timber Apertures</u></p>				
40.11	<p>Preserve timber apertures (doors and windows). Rate to include stripping, repairs, servicing of ironmongery, repainting in neutral colour as approved by Architect in Charge, and reinstalling. The severely deteriorated components of ironmongery will be replicated. Dimensions circa;</p>				
a	Window : W - 0.48m x H - 0.64m	1	nr.		
b	Window : W - 0.90m x H - 1.45m	3	nr.		
c	Window : W - 0.85m x H - 1.30m	2	nr.		
d	Window : W - 0.35m x H - 0.43m	1	nr.		
TOTAL CARRIED DOWN TO SUMMARY					



Item	Description	Qty	Unit	Rate (Exc. VAT)	Amount (Exc. VAT)
5.00	ELEVATION - E4 (NORTH-WEST FAÇADE)				
50.00	Using methods approved by the architect in charge, carefully <u>remove all metal inserts</u> , dead cables, and all other accretions, fixed to or embedded/ chased into the masonry from any area of the façade.	1	L.S		
50.01	Using a stiff bristle/nylon brush as directed by Architect in Charge, brush by hand one section at a time, to remove flaky stone, dirt, soot, etc., on any area of the wall. Patina and lichen growth shall be retained.	67.25	sq.m		
50.02	Using a <u>stiff bristle/ nylon brush and clean soft water</u> free from salts having conductivity inferior to 60µs wet brush one section at a time, dirt on any area of the wall. <u>Patina and lichen growth shall be retained.</u> (Provisional)	67.25	sq.m		
50.03	Using methods approved by the architect in charge, carefully <u>remove lime-based render</u> from any area of the façades to expose the stone substrate, ensuring as little damage as possible is sustained by the underlying fabric.	3.00	sq.m		
50.04	Using methods approved by the Architect in Charge, carefully <u>open joints</u> to remove all loose and unsound pointing and pointing deemed to contain a high level of cement, ensuring no damage is sustained by the surrounding masonry from any area of the facades.	54.00	sq.m		
50.05	<u>Repoint all open joints</u> , on any area of the wall using an hydraulic lime-based mortar with limestone dust as filler, to ensure eventual homogenous patination and to match existing pointing in colour, texture and thickness as approved by the Architect in Charge. Pointing must be as neat as possible, flush with stone surfaces and the width must be kept to a minimum as far as is technically possible.	54.00	sq.m		
50.06	<u>Chisel out, dismantle and clean</u> , up to a depth of 150mm, damaged, decayed or missing masonry elements that are instructed by the Architect in Charge. Rate is to include for the carting away of spoil material.	1.02	sq.m		
50.07	<u>Reinstate the chiselled out masonry elements</u> using good quality stone of matching size, shaped to match the existing profile and as indicated by the Architect in Charge. Rate is to include for any propping, provision of oversize ashlar, provision and laying of lime-based mortar and/or epoxy resin required to glue the new insert with the original fabric, provision and setting of carbon fibre dowels (if necessary).	1.02	sq.m		



Item	Description	Qty	Unit	Rate (Exc. VAT)	Amount (Exc. VAT)
50.08	Carefully reinstate damaged, eroded or missing stonework on any area of the wall using <u>lime-based plastic repair</u> . This shall also include making good to resulting cavities from removal of non-historical metal fixings and any alveoli formed on any part of the masonry fabric. All plastic repairs shall be formed such as to match the adjoining stonework in colour, texture and final profile. Rate is to include for anchoring with stainless steel and/or carbon fibre rods and the addition of any mixture additive or fibre strands, etc.	7.45	sq.m		
TOTAL CARRIED DOWN TO SUMMARY					