GOVERNMENT OF MONTENEGRO

MINISTRY OF SUSTAINABLE DEVELOPMENT AND TOURISM
MINISTRY OF CULTURE

MAIN DESIGN FOR THE REHABILITATION OF THE BESAC FORTIFICATION

OPEN PLAN CONSULTING
International Public Procurement

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ECONOMIC REPORTS

THE WORLD BANK

	GENERAL SUMMARY		
A.1	Architectural restoration works	463 606,64	
A.2	Barrack Furniture	1 390,00	
	to sum the above:		
A	ARCHITECTURAL - RESTORATION WORKS		464 996,64
B	STRUCTURAL CONSTRUCTION WORKS		89 613,54
C	HYDRAULIC AND SEWER PLANTS		58 302,75
D	ELECTRIC PLANTS - LOW VOLTAGE		20 756,44
E	ELECTRIC PLANTS - HIGH VOLTAGE		100 273,55
F	MECHANICAL PLANTS		44 140,56
G	FIRE EXTINGUISHER		400,00
H	ACCESS ROAD		45 892,69
	TOTAL		**824 376,17**

N°	PRICE CODE	ITEM		DIMENSIONS			Total	AMOUNT	
			quantity	lenght	width	height	Quantity.	Unit	SUM
		General conditions for construction and building construction works.							
		All views and estimate of quantities of each position include performing professional work, precision and quality in everything according to approved drawings, technical descriptions and explanations in this calculation, technical requirements and details from a study of building, static calculation, details and subsequent details of the designer, applicable technical regulations and standards of the Montenegrin supervisory authority in the relevant position if otherwise conditioned.							
		All provisions of the General Terms and above general description, are integral parts of the contract concluded between the investor and contractors.							
		All articles and materials listed in the descriptions of individual items of the invoice must be included in the offered prices of the contractors. Contracted prices are individual contractors and those prices include all costs for labour, materials with the usual wastage, external and internal transport, scaffolding and paneling for the works (if the work for certain positions are not established by this estimate), water, lighting, power supplies and energy for machines, excavating and backfilling lime, warehouses for storage of materials, temporary building site areas, offices, trade offices, direction of contractors, social contributions, all state and municipal taxes, salaries contractor and any other expenses caused by the current regulations for the establishment of the selling price of building products, including all expenses arising from special working conditions that provide standards in construction, as well as conditions listed in the preceding two paragraphs.							
		Calculation and classification of the work done will be done according to the average standards in construction, which is mandatory for investors and contractors, if the invoice descriptions of individual items of works is not otherwise indicated.							
		The contractors are also required all descriptions of works from these standards if the description of work or the respective positions in the general description states otherwise.							
		The general description is given for one type of labour and materials, contractor undertakes that any such works in certain positions carried by that description, whether in certain position calls for general description, a description of how that position is not otherwise specified. Calculation and classification of the work done will be done according to the average standards in construction, which is mandatory for investors and contractors, if the invoice descriptions of individual items of works is not otherwise indicated.							
		For all the construction works is required the use of appropriate working conditions, labour force and quality materials which must correspond to current technical regulations, standards and Yugoslav positions in the respective descriptions of the bill of quantities.							
		For each material that is installed, the contractor must submit a prior approval to the supervisory body for examination.							
		In disputed cases regarding the quality of the materials, samples will be submitted to the Department of Testing Materials, which is the authoritative for investors and contractors. If the contractor, despite the negative results of the Institute for Materials Testing has mounted low quality material, the investor must order the demolition and any further demolition that must be done by the contractor without any opposition.							
		All material for which the representative investor finds that the invoice does not correspond to the conditional and the prescribed quality, the Contractor shall immediately remove from the site, and the investor will stop working if the contractor tries to use it.							
		For all the building construction works it must be used appropriate professional skilled workforce, according to the general construction workforce rules.							
		The Contractor shall at the request of investors move away from the site negligent and incompetent workers.							
		Before the start of each work site manager is obligated to promptly request the representative investor's any necessary explanation plans and information for all works that are not defined in the project study.							
		No justifications will be accepted if the contractor, without consulting the investors, some of the works carried out some of the works incorrectly, or carried out contrary to the instructions obtained through the building daily, and contrary to the specified description, plans and details given.							
		In this case, the contractor shall, regardless of the amount of work performed, break down and remove all, and to take again the burden to follow the required plans, descriptions and details, unless such changes are approved by representatives of investors.							
		If the contractor performs a job in better and more expensive quality, he has no right to demand more payment than anticipated, if it is not previously approved by the investors during the daily construction.							
		The building contractor must keep the whole site neat and clean, and upon completion, before returning the work, the contractor is obliged to bury, all the holes, pit toilets, holes in fences and scaffolding, and level the entire area.							
		Before the technical inspection and handover, the contractor must complete the building site and clean land of debris, surplus materials, all means of production and auxiliary facilities.							
		All access building, platforms, stairs, paths and floors in all rooms must be completely clean as well as all the woodwork, metalwork, glass surface and all roof surfaces.							

			Before the submission of the building, driveway and sidewalks damaged by the works or transport, must also be put in proper condition for the technical inspection.							
			All these construction works shall not be paid separately, as they must be included in the contracted prices.							
			The contractor shall be required to remove possible damage done during the execution of works within the construction site or on adjacent buildings and bring to its original condition at his own expense.							
			It is pointed out that the contractor is the only responsible for all damage caused by the careless and irresponsible conduct of works on the adjacent, existing buildings.							
			If there is a need to put on safety foundations of existing adjacent structures, such work will be in particular paid by the investor, but the contractor will be the only responsible for all damages if he does not promptly take all necessary measures to put on safety the adjacent structures.							
			In the case of structural changes, as in the case of an increase, reduction or cancellation of certain works in the preliminary estimate resulting from surpluses or deficits, the contractor is obligated to adopt without objections and limitations, and no right to compensation, but shall in any surplus or deficit calculated conditional on prices.							
			In case you need to perform works that have conditional price in the invoice, the Contractor shall obtain approval for the same representatives of investors, to determine the price for them all to bring in a building log, and the price list of all materials and labour, which is bound to accompany the bid.							
			The investor has a right to requires a written guarantee from the contractor that the work be performed and lasting quality for the special works (roof insulation, new materials, etc.).							
			The Contractor shall coordinate the work of independent contractors who perform certain types of work, so one another would not be damaged, and if this has occurred, shall immediately remove and regulate the compensation.							
			Otherwise, the costs for removal of such damage shall be borne by the contractor. This also applies to any interference or damage which may arise due to non-compliance with the agreed schedule and sequence of individual works. The supervisory authority has the right to require the contractor to submit new materials available for the samples on which he (the supervisor) makes a choice.							
			Acquisition of these samples is not paid separately.							
			In addition to all temporary facilities that are required to the contractor for the works, the contractor must provide space for an office for the supervisor, and when the construction takes place it must regularly provided with the necessary security lighting, heating, cleaning, and necessary office inventory.							
			If contractor is required to take another site for the organization and storage of materials, in addition to another parcel of land and the adjacent sidewalks, the Contractor will use this to obtain permission from the competent authority or owner, provided that the necessary expenditure for this use cannot be separately charged by the investor							
			The Contractor shall make a study of occupational safety at the construction site, according to the "Regulations on occupational safety in construction"							
			Before any technical examination, the Contractor is required to show the investorany certificates that are provided by law and regulations (on the appointment of building on the regulation line, connections to sources of energy, water and sanitation, etc.)							
			All expenses in obtaining this documentation shall be borne by contractor.							
			The Contractor shall submit each job with the complete confirmation that the investor paid for the consumed water, electricity and other fees charged to the contractor during the execution of works.							
			The Contractor will lead construction and building log book on the basis of existing legislation, every day typing the required information, the investors will inspect and certify every day with their signature on each side.							
			In case of negotiation on a "lock in" the contractor is required to make prior control of quantities of works given in the invoice.							
			As integral part of the contract in addition to these general conditions and special conditions also for the investors, are to be considered the existing technical and legal regulations as well as a complete study of the technical documentation.							
			All work must be done with all the necessary constructive parts completely and architect details.							
			By handing building to the investor, the contractor is absolutely responsible for all of it and in case of any damage or defect shall order work at its own expense.							
			The Contractor is required to place in the site for all the time highly qualified and experienced professionals who will be responsible for technical control and accurate execution of all obligations of contractors.							
			For all works that require paneling and scaffolding, the contractor is required to retrieve the same solid construction, which is not paid separately, but is calculated into the bid price.							
			All the necessary holes and grooves in the walls and ceilings for the installation and implementation of various devices requires the contractor to make the exact details of the layout, plans, and after laying pipes and gutters and wall up.							
			This is no extra charge, but is included in the respective cost structures, masonry and plastering.							
			All commitments in these general conditions and general description are to be accepted by the contractor as an integral part of the contract concluded with the investor and he agrees to accept them without any restrictions and without complaint, and make complaints.							

A1. ARCHITECTURAL RESTORATION

N°	PRICE CODE	ITEM	DIMENSION				Total	AMOUNT	
			quantity	lenght	width	heigth / weight	Quantity.	unit	TOTAL
		A. PRELIMINARIES							
88	NP.RE.05	Supplementary cost for any additional costs incurred with respect to the prescribed specifications for the mapping and verification of existing survey. MEASUREMENTS:							
			1,00				1,00		
		SUM Lumpsum					1,00	5 100,00	5 100,00
		SUBTOTAL A. PRELIMINARIES							**5 100,00**
		B. CONSTRUCTION SITE							
2	NP.RE.24	Drinking water distribution plant, made with surface mounting tubes in Pead, including joints, connections, special part and anything necessary to hand over the work performed perfectly up to standard for the whole duration of works. MEASUREMENTS:							
			1,00				1,00		
		SUM Lumpsum					1,00	750,00	750,00
4	NP.RE.01	Performing a site plant for the supply of all necessary equipments for the performance of the restoration works. Includes the INSTALLATION of site panels type ASC fitted for the retaining of the protection organs for the lines of the temporary plant. Including every tax and accessory for the perfect performance up to standard. MEASUREMENTS:							
			1,00				1,00		
		SUM Lumpsum					1,00	2 500,00	2 500,00
		SUBTOTAL B. CONSTRUCTION SITE							**3 250,00**
		C. DAYWORKS							
183	303.02.001.002	OBLIGATED NARROW SURFACE EXCAVATION for foundations, tubes connections, cables etc until 1,5 m deepness: performed with manual means and the help of a bob cat. MEASUREMENTS: Assistance to the put in place of Mechanical and Electric Plants	59,01				59,01		
		SUM m3					59,01	69,00	4 071,69
184	203.06.001.002	BACKFILL OR FILLING EXCAVATIONS OR HOLES performed with mechanical means: with material from site excavations or demolishing. MEASUREMENTS: Assistance to the put in place of Mechanical and Electric Plants	11,82				11,82		
		SUM m3					11,82	6,92	81,79
185	001.01.001.002	HOURLY COST FOR CONSTRUCTION AND STREET CRAFTSMANSHIP established based on the national collective labor agreement for construction and to the county integrating agreements, specialized operator. MEASUREMENTS:							
			48,00				48,00		
		SUM h					48,00	31,46	1 510,08
186	001.01.001.004	HOURLY COST FOR CONSTRUCTION AND STREET CRAFTSMANSHIP established based on the national collective labor agreement for construction and to the county integrating agreements, common operator. MEASUREMENTS:							
			48,00				48,00		
		SUM h					48,00	26,42	1 268,16
		SUBTOTAL C. DAYWORKS							**6 931,72**
		D. SOUVENIR SHOP							
21	NP.RE.15	Cleaning intervention for the recovery area, with weeds removal, cutting the infesting vegetation, cleaning with mechanical and manual means, using herbicides for structure intervention, in disadvantaged area or at high gradient. Including possible earth drops of the resulting material.							

		MEASUREMENTS: Building inner area	6,60				6,60		
		SUM m2					6,60	4,00	26,40
22	NP.RE.14	Release of the environments and movement of materials present at all levels, including the earth drip, performed by hand, including the selection of the materials, the movement up to 200 ml and their stacking in the areas indicated by the architect or engineer in charge. MEASUREMENTS:	6,60				6,60		
		SUM m3					6,60	134,72	889,15
23	NP.RE.57	Assistance of the archeologist to the excavation operations including the possible preparation of the excavation documents. Excluding the possible classification of the material coming from excavation. MEASUREMENTS:	8,00				8,00		
		SUM h					8,00	42,00	336,00
24	305.01.001.001	LOAD, TRANSPORT AND UNLOAD of materials resulting from public landfills up to a maximum distance of 20 km for material measured in accumulation pad summarily adjusted before the load: by hand with truck with capacity up to mc 3,50. MEASUREMENTS:	6,00				6,00		
		SUM m3					6,00	44,80	268,80
25	NP.RE.21	Cleaning trials test and choose the most suitable cleaning methods and products according to the original materials and their state of preservation, in compliance with the prior approval by the site restoration supervisors. MEASUREMENTS:	1,00				1,00		
		SUM m2					1,00	42,00	42,00
26	NP.RE.10	Complete restoration of the external wall parameters that will be performed with: - consolidations of cleared parts, deteriorated and friable with the preventive elimination of the external elements strongly degraded and disintegrated, subsequent cleaning of the surfaces by washing with deionized waters; - spray application of the biocide product, followed by the manual removal of biomass residuals possibly present; - water cleaning of the wall parameter in rock drafts, including the preventive disposal, by hand, of the hard incrustations, with appropriate pressure water cleaner; - scarification of the inconsistent enticement joints, substitution of the discontinuous elements with new wall elements in compatible material ashlars, from the demolitions and/or new ones, their collocation with prepackaged hydraulic lime mortar type o MAPE ANTIQUE STRUTTURALE NHL and natural pozzolan of various smoothness and energy; the aggregates must have technical, granulometric and color characteristics similar to the ones of the original mortars; - grouting of the junctions and filling little cavities with the use of similar mortar including the sewing and sealing of any type of lesions, the disassembly of incompatible parts of cement mortars, metal or any other highly degraded material (that is not part of the wall) and positioned in remote ages of all parts and/or additions that are incoherent or incompatible with the characteristics of the artefact; - possible reconstruction of missing parts with compatible materials or mortars, if necessary using the do-undo technique (scuci-cuci); - final protection trough the application, even in more shots, of appropriate water based product, type ANTIPLUVIOL W MAPEI, including the taxes for the further control of the absorption and elimination of the product surplus from the treated surface. To be measured empty for full, excluding all door frames for openings, according to the vertical projection of surfaces. Including the taxes for the protection of the surrounding surfaces and every other tax and skill, also deriving from prescriptions of D..L: in installation, necessary to hand over the work performed perfectly up to standard. MEASUREMENTS:	18,16				18,16		
		SUM m2					18,16	127,20	2 309,95

27	NP.RE.23	Complete restoration of the internal wall parameters to be performed by: - consolidations of cleared parts, deteriorated and friable with the preventive elimination of the external elements strongly degraded and disintegrated, subsequent cleaning of the surfaces by washing with deionized waters; - spray application of the biocide product, followed by the manual removal of biomass residuals possibly present; - water cleaning of the wall parameter in rock drafts, including the preventive disposal, by hand, of the hard incrustations, with appropriate pressure water cleaner; - scarification of the inconsistent enticement joints, substitution of the discontinuous elements with new wall elements in compatible material ashlars, from the demolitions and/or new ones, their collocation with prepackaged hydraulic lime mortar type o MAPE ANTIQUE STRUTTURALE NHL and natural pozzolan of various smoothness and energy; the aggregates must have technical, granulometric and color characteristics similar to the ones of the original mortars; - grouting of the junctions and filling little cavities with the use of similar mortar including the sewing and sealing of any type of lesions, the disassembly of incompatible parts of cement mortars, metal or any other highly degraded material (that is not part of the wall) and positioned in remote ages of all parts and/or additions that are incoherent or incompatible with the characteristics of the artefact; - possible reconstruction of missing parts with compatible materials or mortars, if necessary using the do-undo technique (scuci-cuci); - final protection trough the application, even in more shots, of appropriate water based product, type ANTIPLUVIOL W MAPEI, including the taxes for the further control of the absorption and elimination of the product surplus from the treated surface. To be measured empty for full, excluding all door frames for openings, according to the vertical projection of surfaces. Including the taxes for the protection of the surrounding surfaces and every other tax and skill, also deriving from D.L. prescriptions in construction, necessary to hand over the work performed perfectly up to standard. MEASUREMENTS:							
			18,16				18,16		
		SUM m2					18,16	119,24	2 165,40
28	NP.RE.16	Performing a reinforced grout pediment on the heads of the masonry parameters to be performed by: - the restoration of the structural continuity of the superior moved portions, by controlled elimination of all masses that compose the last block stream, cleaning the connections, where there is a significant deposits of materials more or less coherent, and final reconstruction of the masonry repositioning the eliminated blocks, integrated with new elements only where strictly necessary; we will take care to give to the mortar laying an inclination and a profile appropriate for favoring the flow of rainwater. - perforation and grouting of galvanized steel bars, diameter 12 mm, in a number of 3/m2, in alternate position; the grouting must be made with special lime mortars, type MAPE ANTIQUE STRUTTURALE NHL; - supply and mounting of three longitudinal galvanized steel bars diameter 16 mm. According to the D.L., also in relation to the state of conservation of the material and the conditions for performing the artefact, the mortar covers can cover completely the surface to be preserved or, otherwise, limit to the portions that, because of morphologic features, are more likely to have accumulations and stagnation of water and inappropriate material of different types. The operation will be performed using pre-cast grout made of a specific totally hydraulic binder without free mortar [Ca(OH)2], water soluble salts and any form of clinker type MAPEANTIQUE STRUTTURALE NHL, with compression resistance and elastic compatible module with the nature of the masonry parameter. The application will be made after preventively wetting the surface and, if thickness makes it necessary, in more successive layings. Includes the final protection with the application also in more layers of the appropriate water repellant water base product, type ANTIPLUVIOL W MAPEI, including the taxes for the further control of absorption and elimination of product surplus from the treated surface. To be measured according to the horizontal projection of the parameter heads. Including all taxes for the protection of the surrounding surfaces and any other tax and skill, also deriving from D.L. prescriptions in construction, necessary to hand over the work performed perfectly up to standard MEASUREMENTS:							
			19,25				19,25		
		SUM m					19,25	102,91	1 981,02
29	NP.RE.61	Supply local stone material for external coating. MEASUREMENTS: External wall covering	28,00				28,00		
		SUM m2					28,00	50,00	1 400,00

30	234.03.001.001	INSTALLATION OF EXTERNAL COATING OF STONE MATERIAL, with cement mortar, including: body filling and sealing of joints, squaring of opening compartments, cleanliness of surfaces: quadrangular regular sheets, various thicknesses up to 4 cm. MEASUREMENTS: Local stone covering	28,00				28,00		
		SUM m2					28,00	28,80	806,40
31	NP.RE.41	Supply SHEET for canopy, with slightly moved edges, excluding special works: local white rock thickness 3 cm or superior. MEASUREMENTS:		2,80	0,60		1,68		
		SUM m2					1,68	80,00	134,40
33	NP.RE.33	Supply, transport and INSTALLATION of an architectural pavement performed by using concrete with durable Rck 250, visible gravel with large granulation and local sand, installed, with a minimum thickness of 8 cm. Before production of a concrete background, and any way properly calculated according to the final destination of the work (to be calculated separately) and the successive location of the dilating junctions and/or possible inserts that constitute the architectural pattern according to the prescriptions of D.L., protective treatment of curbs, plinths and any other architectural element that might get dirty during the casting of the floor, to be made with the application with a brush of a specific product, type Pieri® VBA Protector (Levocell) or similar product. Successive manufacturing of the cortical concrete projected with mix-design characteristics, nature and coloring of the aggregates that have to be accepted by D.L. after presenting samples, adding a multifunctional powder premixed product, type Pieri® Chromofi bre 1B neutral (Levocell) or similar products, studied on purpose to build full view gravel pavements. The dose of the powder premixed product, containers in "fas-pak" packaging completely water soluble will have to be 25 kg/m3. Adding such premixed product in the concrete must determine: - an increase of the resistance to frosting /defrosting cycles, to abrasion, to cracking and shocks, with the consequent elimination of the electric welded grid if not calculated; - reduction of efflorescence. The multifunctional additive must be mixed with the concrete with consistency S2 in auto cement mixer, until reaching a correct homogeneity of the mixture (minimum 7-8 minutes at maximum speed). Subsequent mounting, that will happen in the places prepared before. After the laying, leveling and possible hand smoothing of the mixture, avoiding any type of vibration or stress that might lead to the sinking of the aggregates, spray application with appropriate low pressure pump of an uniform layer of surface deactivator liquid, type Pieri® VBA Bio/VBA 2002 (Levocell) or similar products, 1 liter every 3 m2. The product, besides acting as anti-evaporating protection, slows down the superficial grip of the placement and consequently must be applied before it, immediately after the casting and leveling operations. Washing the surface with enough pressure cold water, to make the aggregates visible, to be performed after about 24 hours and, any way, MEASUREMENTS:	6,60				6,60		
		SUM m2					6,60	60,02	396,13
34	221.01.001.002	CIVIL PLASTER FOR INTERNAL SURFACES formed by a first layer of roughcast, by a second level layer with rule and plasterer's trowel between arranged guiding, finished with superior layer of fine mortar: with rough mortar, including glazing. MEASUREMENTS:	28,75				28,75		
		SUM m2					28,75	22,17	637,39
35	230.04.001.001	COVERED PLASTER PLATES CEILING spaced from 20 to 50 cm, with thinning borders, mounted on bearing and secondary structure composed of ribbed C profiles made of galvanized steel sheet with center distance 500 mm, connected with orthogonal cohesion hooks to the primary support structure with C profiles made of galvanized steel sheet with center distance 1000 mm connected to the ceiling with butterfly anchors and hooks with adjustable springs; included: seal of joints with grunt, micro-drilled tape, filling, bolts and screws, etc.: with sheet thickness 9,5 mm. MEASUREMENTS:	6,60				6,60		
		SUM m2					6,60	32,70	215,82
36	234.02.002.002	INSTALLATION OF BASEBOARDS with adhesives on already prepared base: stoneware, ceramics and similar height up to cm 15. MEASUREMENTS:	11,50				11,50		

		SUM m					11,50	7,80	89,70
37	041.01.021.001	FINE PORCELAIN STONEWARE BASEBOARD: 10x20 cm light only one color. MEASUREMENTS:							
			11,50				11,50		
		SUM m					11,50	5,89	67,74
38	235.01.001.002	COLORS performed exclusively by brush, except for different indications, including the final cleanup of the environments, including external bridges or cell suspended platforms, but including service bridges with maximum h 2 m and/or standards scaffolding, also external, movable or not, plus height works up to 4,5 m from the ground surface, except for different indications: WATER BASED FIXATIVE applied one time on walls or ceiling - acrylic. MEASUREMENTS:							
		Wall and false ceiling painting	35,35				35,35		
		SUM m2					35,35	1,89	66,81
39	235.02.001.005	COLORS performed exclusively by brush, except for different indications, including the final cleanup of the environments, including external bridges or cell suspended platforms, but including service bridges with maximum h 2 m and/or standards scaffolding, also external, movable or not, plus height works up to 4,5 m from the ground surface, except for different indications: water-repellent painting, light colors, three brush applications. MEASUREMENTS:							
		Wall and false ceiling painting	35,35				35,35		
		SUM m2					35,35	5,52	195,13
40	331.02.001.001	INSTALLATION OF THRESHOLDS, SILLS, SLABS for doors and windows: for one thickness up to cm 4. Supply excluded. MEASUREMENTS:							
		Windows and doors	7,60				7,60		
		Upper part of the covering	2,30				2,30		
		SUM m2					9,90	102,00	1 009,80
41	NP.RE.35	Supply POLISHED SHEETS on the level and on the visible things, with lightly blunt edges, excluding special works: local white rock thickness 3 cm or superior. For thresholds, sills, slabs and panels for doors and windows. MEASUREMENTS:							
		Windows and doors	7,60				7,60		
		Upper part of the covering	2,30				2,30		
		SUM m2					9,90	100,00	990,00
42	NP.RE.18	Supply and INSTALLATION of aluminum openable frames made from double glazing sp.4+12+4 mm, including the modeling, the hardware (hinges, closing system, handles and locks) of the type and material (aluminum) prescribed and chosen by the D.L. Includes the transportation of the materials and the performance of the accessory provisional works possibly necessary. Includes every tax and skills, also deriving from the D.L. prescriptions in work able to complete the work up to standards. MEASUREMENTS:							
		windows	5,00				5,00		
		SUM m2					5,00	356,00	1 780,00
43	NP.RE.08	Supply and INSTALLATION of EXTERNAL wooden DOOR, with reinforced framework , reinforcement with molded panels with vertical and crossed unframed including recovery of the possible usable shoeing and heavy type integration, built in lock (to be assessed partially): with fir framework and oak panels. MEASUREMENTS:							
		Access door	2,60				2,60		
		SUM m2					2,60	650,00	1 690,00
44	NP.RE.31	Supply and INSTALLATION of high security lock with 4 pistons + spring bolt, triple expansion, 2 turns, activated by an European cylinder. MEASUREMENTS:							
			1,00				1,00		
		SUM n.					1,00	250,00	250,00
45	NP.RE.32	Brass handle, office for the piston lock and brass nozzle. MEASUREMENTS:							
			2,00				2,00		
		SUM n.					2,00	120,00	240,00

46	228.01.003.002	WATERPROOFING WITH DOUBLE REINFORCED PLASTOMER POLYMER MEMBRANE with t.n.t. with continuous polyester thread, fire mounting, including primer of the sub floor with solvent primer; with membrane thickness mm 4. MEASUREMENTS: Floor extrados waterproofing	7,75				7,75		
		SUM m2					7,75	23,22	179,96
47	248.01.002.001	DRAIN PIPE WITH ROUND TUBE excluding special pieces: ROUND TUBE excluding special prices: copper, sp. 8/10, d. 100. MEASUREMENTS:	4,00				4,00		
		SUM m					4,00	26,60	106,40
48	NP.RE.19	Supply and INSTALLATION of galvanized steel pipe unions (Mexican) for collars with diameter cm.8, including the preparation of the installation plant and every tax and skill to hand over the work performed up to standard. MEASUREMENTS:	1,00				1,00		
		SUM n.					1,00	26,00	26,00
32	NP.RE.42	INSTALLATION of canopy for local limestone, including everything necessary to hand over the finished work perfectly up to standards. The supply of the sheet is excluded. MEASUREMENTS:	1,00				1,00		
		SUM Lumpsum					1,00	240,00	240,00
49	NP.RE.20	Restoration of existent stairs . SOUVENIR SHOP: - cleaning elements existent with low pressure water; - integration of missing elements with blocks of the same rock; - cleaning and grouting of junctions with lime mortar base type ANTIQUE STRUTTURALE NHL; - final treatment with liquid-repellent product water based, type ANTIPLUVIOL W MAPEI. MEASUREMENTS:	1,00				1,00		
		SUM Lumpsum					1,00	840,00	840,00
		SUBTOTAL D. SOUVENIR SHOP							**19 380,40**
		E. SENTRY POST A							
50	NP.RE.15	Cleaning intervention for the recovery area, with weeds removal, cutting the infesting vegetation, cleaning with mechanical and manual means, using herbicides for structure intervention, in disadvantaged area or at high gradient. Including possible earth drops of the resulting material. MEASUREMENTS: Building inner area	7,32				7,32		
		SUM m2					7,32	4,00	29,28
51	NP.RE.14	Release of the environments and movement of materials present at all levels, including the earth drip, performed by hand, including the selection of the materials, the movement up to 200 ml and their stacking in the areas indicated by the architect or engineer in charge. MEASUREMENTS:	7,32				7,32		
		SUM m3					7,32	134,72	986,15
52	305.01.001.001	LOAD, TRANSPORT AND UNLOAD of materials resulting from public landfills up to a maximum distance of 20 km for material measured in accumulation pad summarily adjusted before the load: by hand with truck with capacity up to mc 3,50. MEASUREMENTS:	7,00				7,00		
		SUM m3					7,00	44,80	313,60
53	NP.RE.57	Assistance of the archeologist to the excavation operations including the possible preparation of the excavation documents. Excluding the possible classification of the material coming from excavation. MEASUREMENTS:	8,00				8,00		
		SUM h					8,00	42,00	336,00

54	404.05.001.005	PLASTER REMOVAL by detaching manageable until finding the bare masonry: hydraulic or cement mortar in good consistency conditions. MEASUREMENTS: Inner walls (10% of total surface)	3,40				3,40		
		SUM m2					3,40	19,69	66,95
55	NP.RE.21	Cleaning trials test and choose the most suitable cleaning methods and products according to the original materials and their state of preservation, in compliance with the prior approval by the site restoration supervisors. MEASUREMENTS:	1,00				1,00		
		SUM m2					1,00	42,00	42,00
56	NP.RE.10	Complete restoration of the external wall parameters that will be performed with: - consolidations of cleared parts, deteriorated and friable with the preventive elimination of the external elements strongly degraded and disintegrated, subsequent cleaning of the surfaces by washing with deionized waters; - spray application of the biocide product, followed by the manual removal of biomass residuals possibly present; - water cleaning of the wall parameter in rock drafts, including the preventive disposal, by hand, of the hard incrustations, with appropriate pressure water cleaner; - scarification of the inconsistent enticement joints, substitution of the discontinuous elements with new wall elements in compatible material ashlars, from the demolitions and/or new ones, their collocation with prepackaged hydraulic lime mortar type o MAPE ANTIQUE STRUTTURALE NHL and natural pozzolan of various smoothness and energy; the aggregates must have technical, granulometric and color characteristics similar to the ones of the original mortars; - grouting of the junctions and filling little cavities with the use of similar mortar including the sewing and sealing of any type of lesions, the disassembly of incompatible parts of cement mortars, metal or any other highly degraded material (that is not part of the wall) and positioned in remote ages of all parts and/or additions that are incoherent or incompatible with the characteristics of the artefact; - possible reconstruction of missing parts with compatible materials or mortars, if necessary using the do-undo technique (scuci-cuci); - final protection trough the application, even in more shots, of appropriate water based product, type ANTIPLUVIOL W MAPEI, including the taxes for the further control of the absorption and elimination of the product surplus from the treated surface. To be measured empty for full, excluding all door frames for openings, according to the vertical projection of surfaces. Including the taxes for the protection of the surrounding surfaces and every other tax and skill, also deriving from prescriptions of D..L: in installation, necessary to hand over the work performed perfectly up to standard. MEASUREMENTS:	38,00				38,00		
		SUM m2					38,00	127,20	4 833,60

57	NP.RE.23	Complete restoration of the internal wall parameters to be performed by: - consolidations of cleared parts, deteriorated and friable with the preventive elimination of the external elements strongly degraded and disintegrated, subsequent cleaning of the surfaces by washing with deionized waters; - spray application of the biocide product, followed by the manual removal of biomass residuals possibly present; - water cleaning of the wall parameter in rock drafts, including the preventive disposal, by hand, of the hard incrustations, with appropriate pressure water cleaner; - scarification of the inconsistent enticement joints, substitution of the discontinuous elements with new wall elements in compatible material ashlars, from the demolitions and/or new ones, their collocation with prepackaged hydraulic lime mortar type o MAPE ANTIQUE STRUTTURALE NHL and natural pozzolan of various smoothness and energy; the aggregates must have technical, granulometric and color characteristics similar to the ones of the original mortars; - grouting of the junctions and filling little cavities with the use of similar mortar including the sewing and sealing of any type of lesions, the disassembly of incompatible parts of cement mortars, metal or any other highly degraded material (that is not part of the wall) and positioned in remote ages of all parts and/or additions that are incoherent or incompatible with the characteristics of the artefact; - possible reconstruction of missing parts with compatible materials or mortars, if necessary using the do-undo technique (scuci-cuci); - final protection trough the application, even in more shots, of appropriate water based product, type ANTIPLUVIOL W MAPEI, including the taxes for the further control of the absorption and elimination of the product surplus from the treated surface. To be measured empty for full, excluding all door frames for openings, according to the vertical projection of surfaces. Including the taxes for the protection of the surrounding surfaces and every other tax and skill, also deriving from D.L. prescriptions in construction, necessary to hand over the work performed perfectly up to standard. MEASUREMENTS:							
			34,00				34,00		
		SUM m2					34,00	119,24	4 054,16
58	NP.RE.16	Performing a reinforced grout pediment on the heads of the masonry parameters to be performed by: - the restoration of the structural continuity of the superior moved portions, by controlled elimination of all masses that compose the last block stream, cleaning the connections, where there is a significant deposits of materials more or less coherent, and final reconstruction of the masonry repositioning the eliminated blocks, integrated with new elements only where strictly necessary; we will take care to give to the mortar laying an inclination and a profile appropriate for favoring the flow of rainwater. - perforation and grouting of galvanized steel bars, diameter 12 mm, in a number of 3/m2, in alternate position; the grouting must be made with special lime mortars, type MAPE ANTIQUE STRUTTURALE NHL; - supply and mounting of three longitudinal galvanized steel bars diameter 16 mm. According to the D.L., also in relation to the state of conservation of the material and the conditions for performing the artefact, the mortar covers can cover completely the surface to be preserved or, otherwise, limit to the portions that, because of morphologic features, are more likely to have accumulations and stagnation of water and inappropriate material of different types. The operation will be performed using pre-cast grout made of a specific totally hydraulic binder without free mortar [Ca(OH)2], water soluble salts and any form of clinker type MAPEANTIQUE STRUTTURALE NHL, with compression resistance and elastic compatible module with the nature of the masonry parameter. The application will be made after preventively wetting the surface and, if thickness makes it necessary, in more successive layings. Includes the final protection with the application also in more layers of the appropriate water repellant water base product, type ANTIPLUVIOL W MAPEI, including the taxes for the further control of absorption and elimination of product surplus from the treated surface. To be measured according to the horizontal projection of the parameter heads. Including all taxes for the protection of the surrounding surfaces and any other tax and skill, also deriving from D.L. prescriptions in construction, necessary to hand over the work performed perfectly up to standard MEASUREMENTS:							
			13,20				13,20		
		SUM m					13,20	102,91	1 358,41

59	NP.RE.33	Supply, transport and INSTALLATION of an architectural pavement performed by using concrete with durable Rck 250, visible gravel with large granulation and local sand, installed, with a minimum thickness of 8 cm. Before production of a concrete background, and any way properly calculated according to the final destination of the work (to be calculated separately) and the successive location of the dilating junctions and/or possible inserts that constitute the architectural pattern according to the prescriptions of D.L., protective treatment of curbs, plinths and any other architectural element that might get dirty during the casting of the floor, to be made with the application with a brush of a specific product, type Pieri® VBA Protector (Levocell) or similar product. Successive manufacturing of the cortical concrete projected with mix-design characteristics, nature and coloring of the aggregates that have to be accepted by D.L. after presenting samples, adding a multifunctional powder premixed product, type Pieri® Chromofi bre 1B neutral (Levocell) or similar products, studied on purpose to build full view gravel pavements. The dose of the powder premixed product, containers in "fas-pak" packaging completely water soluble will have to be 25 kg/m3. Adding such premixed product in the concrete must determine: - an increase of the resistance to frosting /defrosting cycles, to abrasion, to cracking and shocks, with the consequent elimination of the electric welded grid if not calculated; - reduction of efflorescence. The multifunctional additive must be mixed with the concrete with consistency S2 in auto cement mixer, until reaching a correct homogeneity of the mixture (minimum 7-8 minutes at maximum speed). Subsequent mounting, that will happen in the places prepared before. After the laying, leveling and possible hand smoothing of the mixture, avoiding any type of vibration or stress that might lead to the sinking of the aggregates, spray application with appropriate low pressure pump of an uniform layer of surface deactivator liquid, type Pieri® VBA Bio/VBA 2002 (Levocell) or similar products, 1 liter every 3 m2. The product, besides acting as anti-evaporating protection, slows down the superficial grip of the placement and consequently must be applied before it, immediately after the casting and leveling operations. Washing the surface with enough pressure cold water, to make the aggregates visible, to be performed after about 24 hours and, any way, MEASUREMENTS:							
			7,32				7,32		
		SUM m2					7,32	60,02	439,35
60	NP.RE.22	Supply and INSTALLATION of mechanical scale with three steps, made of almond-pattern press-bent sheet, according to the picture, painted steel. The color will be established with the work management, but we recommend the corten effect. MEASUREMENTS:							
			1,00				1,00		
		SUM Lumpsum					1,00	848,00	848,00
		SUBTOTAL E. SENTRY POST A							**13 307,50**
		F. SENTRY BOX							
61	NP.RE.15	Cleaning intervention for the recovery area, with weeds removal, cutting the infesting vegetation, cleaning with mechanical and manual means, using herbicides for structure intervention, in disadvantaged area or at high gradient. Including possible earth drops of the resulting material. MEASUREMENTS: Building inner area	1,38				1,38		
		SUM m2					1,38	4,00	5,52
62	NP.RE.25	Removal of the filling materials for the abutments of the vaults performed with particular care including the movement of the materials in the environments in subject; including the taxes related to the approach, from the environments to the temporary storage place, waiting for the discharge, of the resulting material and the down drop MEASUREMENTS:							
			1,00				1,00		
		SUM m3					1,00	66,60	66,60
63	305.01.001.001	LOAD, TRANSPORT AND UNLOAD of materials resulting from public landfills up to a maximum distance of 20 km for material measured in accumulation pad summarily adjusted before the load: by hand with truck with capacity up to mc 3,50. MEASUREMENTS:							
			1,00				1,00		
		SUM m3					1,00	44,80	44,80

64	NP.RE.26	Cleaning and pest control and conservative restoration of stone surfaces that constitutes the intrados/extrados of masonry vaults to be performed by: - preliminary brush elimination of the superficial deposits such as dust, soil, guano, etc. made with soft brushes; - possible manual and chemical elimination of weeds; - elimination of blands, incrustations and repainting strong and adherent to the original surfaces and integrations with cement plasters or grouts that have lost their conservative and esthetic functions, through mechanical precision action performed with the help of a vibro-engraver and microchisel; - elimination of metallic elements such as rollers, brackets or clamps that result to be a possible degrading reason or are no longer useful, including the disassembly of incompatible parts of cement mortar, metal or any other highly degraded material (that is not part of the wall) and positioned in remote ages of all parts and/or additions that are incoherent or incompatible with the characteristics of the artefact; - , ; - aero abrasive cleaning bland for the removal of compact deposits that adhere to surfaces and of the biological films; - biocide brush or spray application for the inhibition of biologic attacks, including the rinse with deionized water; - scarification of the inconsistent enticement joints, substitution of the discontinued elements with new masonry elements with compatible materials, that come from demolitions and/or new ones, substitution of the discontinuous elements with new wall elements in compatible material ashlars, from the demolitions and/or new ones, their collocation with prepackaged hydraulic lime mortar type o MAPE ANTIQUE STRUTTURALE NHL and natural pozzolan of various smoothness and energy; the aggregates must have technical, granulometric and color characteristics similar to the ones of the original mortars; - grouting of the junctions and filling little cavities with the use of similar mortar including the sewing and sealing of any type of lesions,; - possible reconstruction of missing parts with compatible materials or mortars, if necessary using the do-undo technique (scuci-cuci); - final protection trough the application, even in more shots, of appropriate water based product, type ANTIPLUVIOL W MAPEI, including the taxes for the further control of the absorption and elimination of the product surplus from the MEASUREMENTS:							
		Intrados	1,33			1,33			
		Extrados	3,60			3,60			
		SUM m2				4,93	89,12	439,36
65	NP.RE.10	Complete restoration of the external wall parameters that will be performed with: - consolidations of cleared parts, deteriorated and friable with the preventive elimination of the external elements strongly degraded and disintegrated, subsequent cleaning of the surfaces by washing with deionized waters; - spray application of the biocide product, followed by the manual removal of biomass residuals possibly present; - water cleaning of the wall parameter in rock drafts, including the preventive disposal, by hand, of the hard incrustations, with appropriate pressure water cleaner; - scarification of the inconsistent enticement joints, substitution of the discontinuous elements with new wall elements in compatible material ashlars, from the demolitions and/or new ones, their collocation with prepackaged hydraulic lime mortar type o MAPE ANTIQUE STRUTTURALE NHL and natural pozzolan of various smoothness and energy; the aggregates must have technical, granulometric and color characteristics similar to the ones of the original mortars; - grouting of the junctions and filling little cavities with the use of similar mortar including the sewing and sealing of any type of lesions, the disassembly of incompatible parts of cement mortars, metal or any other highly degraded material (that is not part of the wall) and positioned in remote ages of all parts and/or additions that are incoherent or incompatible with the characteristics of the artefact; - possible reconstruction of missing parts with compatible materials or mortars, if necessary using the do-undo technique (scuci-cuci); - final protection trough the application, even in more shots, of appropriate water based product, type ANTIPLUVIOL W MAPEI, including the taxes for the further control of the absorption and elimination of the product surplus from the treated surface. To be measured empty for full, excluding all door frames for openings, according to the vertical projection of surfaces. Including the taxes for the protection of the surrounding surfaces and every other tax and skill, also deriving from prescriptions of D..L: in installation, necessary to hand over the work performed perfectly up to standard. MEASUREMENTS:							
			10,90			10,90			
		SUM m2				10,90	127,20	1 386,48

66	NP.RE.23	Complete restoration of the internal wall parameters to be performed by: - consolidations of cleared parts, deteriorated and friable with the preventive elimination of the external elements strongly degraded and disintegrated, subsequent cleaning of the surfaces by washing with deionized waters; - spray application of the biocide product, followed by the manual removal of biomass residuals possibly present; - water cleaning of the wall parameter in rock drafts, including the preventive disposal, by hand, of the hard incrustations, with appropriate pressure water cleaner; - scarification of the inconsistent enticement joints, substitution of the discontinuous elements with new wall elements in compatible material ashlars, from the demolitions and/or new ones, their collocation with prepackaged hydraulic lime mortar type o MAPE ANTIQUE STRUTTURALE NHL and natural pozzolan of various smoothness and energy; the aggregates must have technical, granulometric and color characteristics similar to the ones of the original mortars; - grouting of the junctions and filling little cavities with the use of similar mortar including the sewing and sealing of any type of lesions, the disassembly of incompatible parts of cement mortars, metal or any other highly degraded material (that is not part of the wall) and positioned in remote ages of all parts and/or additions that are incoherent or incompatible with the characteristics of the artefact; - possible reconstruction of missing parts with compatible materials or mortars, if necessary using the do-undo technique (scuci-cuci); - final protection trough the application, even in more shots, of appropriate water based product, type ANTIPLUVIOL W MAPEI, including the taxes for the further control of the absorption and elimination of the product surplus from the treated surface. To be measured empty for full, excluding all door frames for openings, according to the vertical projection of surfaces. Including the taxes for the protection of the surrounding surfaces and every other tax and skill, also deriving from D.L. prescriptions in construction, necessary to hand over the work performed perfectly up to standard. MEASUREMENTS:							
			9,50				9,50		
		SUM m2					9,50	119,24	1 132,78
67	NP.RE.28	Waterproofing of the consolidation intervention of the vault performed with two applications by spatula or spray with plasterer, with elastic bio-component cement based mortar, selected aggregated with fine grain. synthetic fibers and special acrylic raisins in water dispersion, for a final thickness not bigger than 2 mm (type Mapelastic from MAPEI S.p.A.). The product must be according to the requirements of EN 1504-2, according to the principles PI, MC and IR for the protection of concrete. If on the cement background we expect adjustment cracks between the first and the second layer of the product we will have to interpose, Mapenet 150 alkali network resistant 4,5x4 mm. To improve further the elongation to rupture as well as the crack-bridging of Mapelastic, we recommend the insertion of Mapetex Sel, polypropylene non-woven fabric. The waterproofing product can be refinished based on sponge float on a zero finishing coat. MEASUREMENTS: Vault extrados							
			3,60				3,60		
		SUM m2					3,60	25,00	90,00
68	NP.RE.27	Performing finishing surfaces of the vault cap performed through mixture of lime based mortar, without cement, type STRUCTURAL ANTIQUE MAPE NHL, by adding local rock blocks, in order to give a finite regular look and similar to the existent walls. Including final protection with the application, even in more layers, of the appropriate water repellant water based product, type ANTIPLUVIOL W MAPEI, including the taxes related to the subsequent control of the absorption and the elimination of the product surplus of the treated surface. MEASUREMENTS:							
			3,60				3,60		
		SUM m2					3,60	100,50	361,80
70	318.01.005.002	ARMED SCREED thickness 5 cm of reinforced concrete with characteristic resistance C16/20, regular, with welded steel grid Fe B 450 C controller: grid diameter 6 mm. MEASUREMENTS:							
			1,38				1,38		
		SUM m2					1,38	26,90	37,12

71	NP.RE.33	Supply, transport and INSTALLATION of an architectural pavement performed by using concrete with durable Rck 250, visible gravel with large granulation and local sand, installed, with a minimum thickness of 8 cm. Before production of a concrete background, and any way properly calculated according to the final destination of the work (to be calculated separately) and the successive location of the dilating junctions and/or possible inserts that constitute the architectural pattern according to the prescriptions of D.L., protective treatment of curbs, plinths and any other architectural element that might get dirty during the casting of the floor, to be made with the application with a brush of a specific product, type Pieri® VBA Protector (Levocell) or similar product. Successive manufacturing of the cortical concrete projected with mix-design characteristics, nature and coloring of the aggregates that have to be accepted by D.L. after presenting samples, adding a multifunctional powder premixed product, type Pieri® Chromofi bre 1B neutral (Levocell) or similar products, studied on purpose to build full view gravel pavements. The dose of the powder premixed product, containers in "fas-pak" packaging completely water soluble will have to be 25 kg/m3. Adding such premixed product in the concrete must determine: - an increase of the resistance to frosting /defrosting cycles, to abrasion, to cracking and shocks, with the consequent elimination of the electric welded grid if not calculated; - reduction of efflorescence. The multifunctional additive must be mixed with the concrete with consistency S2 in auto cement mixer, until reaching a correct homogeneity of the mixture (minimum 7-8 minutes at maximum speed). Subsequent mounting, that will happen in the places prepared before. After the laying, leveling and possible hand smoothing of the mixture, avoiding any type of vibration or stress that might lead to the sinking of the aggregates, spray application with appropriate low pressure pump of an uniform layer of surface deactivator liquid, type Pieri® VBA Bio/VBA 2002 (Levocell) or similar products, 1 liter every 3 m2. The product, besides acting as anti-evaporating protection, slows down the superficial grip of the placement and consequently must be applied before it, immediately after the casting and leveling operations. Washing the surface with enough pressure cold water, to make the aggregates visible, to be performed after about 24 hours and, any way, MEASUREMENTS:							
			1,38			1,38			
		SUM m2				1,38	60,02	82,83
72	250.01.003.001	ASSISTANCE FOR MOUNTING GATES made of full iron and/or box girder and commercial designs: weight up to 25 kg/sqm mounted on masonry supports. MEASUREMENTS:							
			1,36			1,36			
		SUM m2				1,36	35,80	48,69
73	250.06.001.001	Simple design GATE with plate iron, elements, welded or bolded, fixes on proper section uprights with accessories for support, movement, closure with latch and key lock type Yale: weight up to 20 kg/sqm. MEASUREMENTS:							
		Simple shape Gate 20 kg/m2*1,4 m2	28,00			28,00			
		SUM kg				28,00	11,02	308,56
74	NP.RE.29	Supply and INSTALLATION of wooden window grating, with simple design, including wall assistance upon mounting. MEASUREMENTS:							
		Simple shape railing 35 kg/m2*0,2 m2	7,00			7,00			
		SUM kg				7,00	11,02	77,14
75	NP.RE.62	ASSISTANCE FOR THE INSTALLATION OF PORTCULLIS made of full iron and/or frame of sections and commercial designs: weight up to 25 kg/sqm located on masonry supports.. MEASUREMENTS:							
			0,20			0,20			
		SUM m2				0,20	35,80	7,16
76	236.01.002.002	Synthetic anti-rust, red or gray, for carpentry and iron fixtures, one application. MEASUREMENTS:							
		Gate	1,36			1,36			
		Grating	0,20			0,20			
		SUM m2				1,56	6,13	9,56
77	236.04.001.004	PAINTING IRON OR IRON ALLOYS WORKS, internal and external, with one protection application to be calculated separately, after sand papering, with two applications of enamel color. on handrails or grates, corten effect. MEASUREMENTS:							
		Gate	1,36			1,36			
		Grating	0,20			0,20			

		SUM m2					1,56	19,60	30,58
		SUBTOTAL F. SENTRY BOX							**4 128,98**
		G. BARRACKS							
78	NP.RE.15	Cleaning intervention for the recovery area, with weeds removal, cutting the infesting vegetation, cleaning with mechanical and manual means, using herbicides for structure intervention, in disadvantaged area or at high gradient. Including possible earth drops of the resulting material.							
		MEASUREMENTS:							
			78,00				78,00		
		SUM m2					78,00	4,00	312,00
80	304.01.003.002	WALL DEMOLITION with stone cement mortar, full bricks or mixed: outside the ground.							
		MEASUREMENTS:							
		Walled door	1,08				1,08		
		SUM m3					1,08	149,00	160,92
81	305.01.001.001	LOAD, TRANSPORT AND UNLOAD of materials resulting from public landfills up to a maximum distance of 20 km for material measured in accumulation pad summarily adjusted before the load: by hand with truck with capacity up to mc 3,50.							
		MEASUREMENTS:							
		Exavation for lowering	15,60				15,60		
		Demolition walled door	1,08				1,08		
		SUM m3					16,68	44,80	747,26
82	NP.RE.57	Assistance of the archeologist to the excavation operations including the possible preparation of the excavation documents. Excluding the possible classification of the material coming from excavation.							
		MEASUREMENTS:							
			16,00				16,00		
		SUM h					16,00	42,00	672,00
83	NP.RE.21	Cleaning trials test and choose the most suitable cleaning methods and products according to the original materials and their state of preservation, in compliance with the prior approval by the site restoration supervisors.							
		MEASUREMENTS:							
			2,00				2,00		
		SUM m2					2,00	42,00	84,00
84	404.05.001.005	PLASTER REMOVAL by detaching manageable until finding the bare masonry: hydraulic or cement mortar in good consistency conditions.							
		MEASUREMENTS:							
		Internal Faces (40% of total surface)	69,38				69,38		
		External Faces (30% of total surface)	50,45				50,45		
		SUM m2					119,83	19,69	2 359,45

85	NP.RE.23	Complete restoration of the internal wall parameters to be performed by: - consolidations of cleared parts, deteriorated and friable with the preventive elimination of the external elements strongly degraded and disintegrated, subsequent cleaning of the surfaces by washing with deionized waters; - spray application of the biocide product, followed by the manual removal of biomass residuals possibly present; - water cleaning of the wall parameter in rock drafts, including the preventive disposal, by hand, of the hard incrustations, with appropriate pressure water cleaner; - scarification of the inconsistent enticement joints, substitution of the discontinuous elements with new wall elements in compatible material ashlars, from the demolitions and/or new ones, their collocation with prepackaged hydraulic lime mortar type o MAPE ANTIQUE STRUTTURALE NHL and natural pozzolan of various smoothness and energy; the aggregates must have technical, granulometric and color characteristics similar to the ones of the original mortars; - grouting of the junctions and filling little cavities with the use of similar mortar including the sewing and sealing of any type of lesions, the disassembly of incompatible parts of cement mortars, metal or any other highly degraded material (that is not part of the wall) and positioned in remote ages of all parts and/or additions that are incoherent or incompatible with the characteristics of the artefact; - possible reconstruction of missing parts with compatible materials or mortars, if necessary using the do-undo technique (scuci-cuci); - final protection trough the application, even in more shots, of appropriate water based product, type ANTIPLUVIOL W MAPEI, including the taxes for the further control of the absorption and elimination of the product surplus from the treated surface. To be measured empty for full, excluding all door frames for openings, according to the vertical projection of surfaces. Including the taxes for the protection of the surrounding surfaces and every other tax and skill, also deriving from D.L. prescriptions in construction, necessary to hand over the work performed perfectly up to standard. MEASUREMENTS:							
			173,44				173,44		
		SUM m2					173,44	119,24	20 680,99
86	NP.RE.10	Complete restoration of the external wall parameters that will be performed with: - consolidations of cleared parts, deteriorated and friable with the preventive elimination of the external elements strongly degraded and disintegrated, subsequent cleaning of the surfaces by washing with deionized waters; - spray application of the biocide product, followed by the manual removal of biomass residuals possibly present; - water cleaning of the wall parameter in rock drafts, including the preventive disposal, by hand, of the hard incrustations, with appropriate pressure water cleaner; - scarification of the inconsistent enticement joints, substitution of the discontinuous elements with new wall elements in compatible material ashlars, from the demolitions and/or new ones, their collocation with prepackaged hydraulic lime mortar type o MAPE ANTIQUE STRUTTURALE NHL and natural pozzolan of various smoothness and energy; the aggregates must have technical, granulometric and color characteristics similar to the ones of the original mortars; - grouting of the junctions and filling little cavities with the use of similar mortar including the sewing and sealing of any type of lesions, the disassembly of incompatible parts of cement mortars, metal or any other highly degraded material (that is not part of the wall) and positioned in remote ages of all parts and/or additions that are incoherent or incompatible with the characteristics of the artefact; - possible reconstruction of missing parts with compatible materials or mortars, if necessary using the do-undo technique (scuci-cuci); - final protection trough the application, even in more shots, of appropriate water based product, type ANTIPLUVIOL W MAPEI, including the taxes for the further control of the absorption and elimination of the product surplus from the treated surface. To be measured empty for full, excluding all door frames for openings, according to the vertical projection of surfaces. Including the taxes for the protection of the surrounding surfaces and every other tax and skill, also deriving from prescriptions of D..L: in installation, necessary to hand over the work performed perfectly up to standard. MEASUREMENTS:							
			168,18				168,18		
		SUM m2					168,18	127,20	21 392,50

89	NP.RE.33	Supply, transport and INSTALLATION of an architectural pavement performed by using concrete with durable Rck 250, visible gravel with large granulation and local sand, installed, with a minimum thickness of 8 cm. Before production of a concrete background, and any way properly calculated according to the final destination of the work (to be calculated separately) and the successive location of the dilating junctions and/or possible inserts that constitute the architectural pattern according to the prescriptions of D.L., protective treatment of curbs, plinths and any other architectural element that might get dirty during the casting of the floor, to be made with the application with a brush of a specific product, type Pieri® VBA Protector (Levocell) or similar product. Successive manufacturing of the cortical concrete projected with mix-design characteristics, nature and coloring of the aggregates that have to be accepted by D.L. after presenting samples, adding a multifunctional powder premixed product, type Pieri® Chromofi bre 1B neutral (Levocell) or similar products, studied on purpose to build full view gravel pavements. The dose of the powder premixed product, containers in "fas-pak" packaging completely water soluble will have to be 25 kg/m3. Adding such premixed product in the concrete must determine: - an increase of the resistance to frosting /defrosting cycles, to abrasion, to cracking and shocks, with the consequent elimination of the electric welded grid if not calculated; - reduction of efflorescence. The multifunctional additive must be mixed with the concrete with consistency S2 in auto cement mixer, until reaching a correct homogeneity of the mixture (minimum 7-8 minutes at maximum speed). Subsequent mounting, that will happen in the places prepared before. After the laying, leveling and possible hand smoothing of the mixture, avoiding any type of vibration or stress that might lead to the sinking of the aggregates, spray application with appropriate low pressure pump of an uniform layer of surface deactivator liquid, type Pieri® VBA Bio/VBA 2002 (Levocell) or similar products, 1 liter every 3 m2. The product, besides acting as anti-evaporating protection, slows down the superficial grip of the placement and consequently must be applied before it, immediately after the casting and leveling operations. Washing the surface with enough pressure cold water, to make the aggregates visible, to be performed after about 24 hours and, any way, MEASUREMENTS:							
			78,00				78,00		
		SUM m2					78,00	60,02	4 681,56
90	NP.RE.30	Restoration and change of cornices for doors and windows and assistance when mounting the frame to be performed: - after the restoration and cleaning operations of the masonry parameters we will make the masonry works necessary to reconstruct and integrate the straps in order to guarantee the correct mounting of the fixtures; - beside the necessary works we include the possible demolitions, minimum and localized, of parts of the wall, the performance and/or integration of parts of plaster with identical mortars to the ones used for restoration works, the consolidation of possible detachments and the restoration and cleaning operations after fixing the frames. Includes assistance for the qualified restorer for mounting windows and doors. To be measured according to the vertical projection of the holes surfaces. Includes the taxes for the protection of the surrounding surfaces and every other tax and skill, also deriving from prescriptions of the D.L. in construction, necessary to hand over the work performed perfectly up to standard. MEASUREMENTS:							
		Windows	8,76				8,76		
		Doors	8,41				8,41		
		SUM m2					17,17	64,67	1 110,38
91	331.02.001.001	INSTALLATION OF THRESHOLDS, SILLS, SLABS for doors and windows: for one thickness up to cm 4. Supply excluded. MEASUREMENTS:							
		Thresholds	2,18				2,18		
		Windowsills	3,78				3,78		
		SUM m2					5,96	102,00	607,92
92	NP.RE.35	Supply POLISHED SHEETS on the level and on the visible things, with lightly blunt edges, excluding special works: local white rock thickness 3 cm or superior. For thresholds, sills, slabs and panels for doors and windows. MEASUREMENTS:							
		Thresholds	2,18				2,18		
		Windowsills	3,78				3,78		
		SUM m2					5,96	100,00	596,00

93	451.01.001.004	Wood WINDOW with one or two wings reconstructed with the finished thickness of 55 mm, with racks of the frame and the shutters with parrot beak edge and double rabbet, channel for locating the rubber gasket on the external rabbet edge and well marked frame drip worked round with holes fro water evacuation, connections to the internal and external edges "mounted on corners", intermediate wood crossbars and characteristic, glass-radius bricks, adequate channel for glass housing, support plating in two or three heavy traditional points type with iron wedges with pointed edge, candle with three chocking slobs: fir, with shutters. MEASUREMENTS:							
			8,76				8,76		
		SUM m2					8,76	462,00	4 047,12
94	053.04.001.006	DOUBLE-GLAZING, minimum invoicing sqm 0,50: thickness 4/12/4 mm. MEASUREMENTS:							
			8,76				8,76		
		SUM m2					8,76	33,10	289,96
95	254.01.008.006	MOUNTING INSULATING GLASS with the use of synthetic and silicon sealing: double glazing sp. 4/12/4 mm. MEASUREMENTS:							
			8,76				8,76		
		SUM m2					8,76	22,50	197,10
96	NP.RE.08	Supply and INSTALLATION of EXTERNAL wooden DOOR, with reinforced framework , reinforcement with molded panels with vertical and crossed unframed including recovery of the possible usable shoeing and heavy type integration, built in lock (to be assessed partially): with fir framework and oak panels. MEASUREMENTS:							
			8,41				8,41		
		SUM m2					8,41	650,00	5 466,50
97	NP.RE.31	Supply and INSTALLATION of high security lock with 4 pistons + spring bolt, triple expansion, 2 turns, activated by an European cylinder. MEASUREMENTS:							
			3,00				3,00		
		SUM n.					3,00	250,00	750,00
98	NP.RE.32	Brass handle, office for the piston lock and brass nozzle. MEASUREMENTS:							
			6,00				6,00		
		SUM n.					6,00	120,00	720,00
99	NP.RE.53	Supply and INSTALLATION of inclined pitched roof, according to the drawing: - TILES COVERING MANTLE made of new terracotta, including the masonry of the first row of eaves and the castings excluded: with pressed tiles, machine manufactured; - WATERPROOFING with reinforce plastomeric polymer sheath with polyester continuous thread non woven fabric: thickness mm 4; - THERMAL INSULATION made with mineral fibers rigid panel treated with thermosetting raisins and a waterproof side: with glass wool panel thickness mm 40; - DOUBLE FIR FLOOR with tables attached with finer joint for ceiling construction, including: supply, cut to size, scrap, planning, trimming and nails necessary for fixing, excluding possible preservation treatments measured for the actual surface: for a maximum section of the plates of cm 2,5x16 and a maximum length of m 4,00. MEASUREMENTS:							
			133,60				133,60		
		SUM m2					133,60	163,30	21 816,88
100	316.04.002.001	FIR CURRENTS sharp corner, for horizontal ceiling structures, recovery performance bunkhouses in the masonry, lock of the locations; excluding the taxes for the creation of the housing locations, and possible conservatory treatments measured for the volume effect applied: for sections from cm 6x6 to cm 10x15 and length up to m 6,00. MEASUREMENTS:							
		Joist 10*10 cm		31,23	0,10	0,10	0,31		
		SUM m3					0,31	1 320,00	409,20
101	027.01.004.005	Fir BEAMS, sharp corner, raw saw, for any section, up to 5 m. MEASUREMENTS:							
		Horizontal beam 15*15 cm		31,23	0,15	0,15	0,70		

		SUM m3					0,70	588,22	411,75
102	NP.RE.54	Supply and INSTALLATION of local stone unpolished sheets, dimensions 40x60x3 cm, for the formation of the eaves plan. MEASUREMENTS:							
			12,50				12,50		
		SUM m2					12,50	80,00	1 000,00
103	NP.RE.43	Construction of access stairs for the barracks. Including supply of the material and installation. According to the drawing MEASUREMENTS:							
			2,00				2,00		
		SUM Lumpsum					2,00	440,00	880,00
		SUBTOTAL G. BARRACKS							**89 393,49**
		H. FORT WITH TOWERS							
104	NP.RE.15	Cleaning intervention for the recovery area, with weeds removal, cutting the infesting vegetation, cleaning with mechanical and manual means, using herbicides for structure intervention, in disadvantaged area or at high gradient. Including possible earth drops of the resulting material. MEASUREMENTS:							
		Terrace Plan	56,60				56,60		
		South Tower	8,00				8,00		
		SUM m2					64,60	4,00	258,40
105	NP.RE.14	Release of the environments and movement of materials present at all levels, including the earth drip, performed by hand, including the selection of the materials, the movement up to 200 ml and their stacking in the areas indicated by the architect or engineer in charge. MEASUREMENTS:							
		Terrace Plan	5,60				5,60		
		Ground Floor	4,50				4,50		
		SUM m3					10,10	134,72	1 360,67
106	NP.RE.57	Assistance of the archeologist to the excavation operations including the possible preparation of the excavation documents. Excluding the possible classification of the material coming from excavation. MEASUREMENTS:							
			16,00				16,00		
		SUM h					16,00	42,00	672,00
107	NP.RE.03	Cutting adult trees, including every tax, equipment, machine, operating machine, as well as the collection and disposal of resulting material, excluding removal of the log.. MEASUREMENTS:							
		South Tower	1,00				1,00		
		SUM n.					1,00	118,00	118,00
108	NP.RE.04	Extirpation or crushing of stump with mechanical means, including the gathering and disposal of the resulting material. MEASUREMENTS:							
		South Tower	1,00				1,00		
		SUM n.					1,00	43,00	43,00
109	431.05.001.002	WEEDING AND ERADICATION of vegetation from vertical and horizontal, internal or external walls, excluding masonry gap filling, assessed for the whole surface of the walls in subject: manually with pressure water, paint removers and small tools, final brushing and cleaning. MEASUREMENTS:							
			10,00				10,00		
		SUM m2					10,00	17,40	174,00
111	304.01.003.002	WALL DEMOLITION with stone cement mortar, full bricks or mixed: outside the ground. MEASUREMENTS:							
		Southern tower walled door	0,80				0,80		
		Northern tower walled door	0,72				0,72		
		SUM m3					1,52	149,00	226,48
112	404.08.003.001	Cement SCREED REMOVAL: up to thickness 8 cm. MEASUREMENTS:							
		North Tower	7,07				7,07		

		SUM m2					7,07	16,86	119,20
113	305.01.001.001	LOAD, TRANSPORT AND UNLOAD of materials resulting from public landfills up to a maximum distance of 20 km for material measured in accumulation pad summarily adjusted before the load: by hand with truck with capacity up to mc 3,50. MEASUREMENTS:							
			25,00				25,00		
		SUM m3					25,00	44,80	1 120,00
114	404.05.001.005	PLASTER REMOVAL by detaching manageable until finding the bare masonry: hydraulic or cement mortar in good consistency conditions. MEASUREMENTS: External Faces (70% of total surface)	231,20				231,20		
		SUM m2					231,20	19,69	4 552,33
115	NP.RE.21	Cleaning trials test and choose the most suitable cleaning methods and products according to the original materials and their state of preservation, in compliance with the prior approval by the site restoration supervisors. MEASUREMENTS:							
			2,00				2,00		
		SUM m2					2,00	42,00	84,00
116	NP.RE.10	Complete restoration of the external wall parameters that will be performed with: - consolidations of cleared parts, deteriorated and friable with the preventive elimination of the external elements strongly degraded and disintegrated, subsequent cleaning of the surfaces by washing with deionized waters; - spray application of the biocide product, followed by the manual removal of biomass residuals possibly present; - water cleaning of the wall parameter in rock drafts, including the preventive disposal, by hand, of the hard incrustations, with appropriate pressure water cleaner; - scarification of the inconsistent enticement joints, substitution of the discontinuous elements with new wall elements in compatible material ashlars, from the demolitions and/or new ones, their collocation with prepackaged hydraulic lime mortar type o MAPE ANTIQUE STRUTTURALE NHL and natural pozzolan of various smoothness and energy; the aggregates must have technical, granulometric and color characteristics similar to the ones of the original mortars; - grouting of the junctions and filling little cavities with the use of similar mortar including the sewing and sealing of any type of lesions, the disassembly of incompatible parts of cement mortars, metal or any other highly degraded material (that is not part of the wall) and positioned in remote ages of all parts and/or additions that are incoherent or incompatible with the characteristics of the artefact; - possible reconstruction of missing parts with compatible materials or mortars, if necessary using the do-undo technique (scuci-cuci); - final protection trough the application, even in more shots, of appropriate water based product, type ANTIPLUVIOL W MAPEI, including the taxes for the further control of the absorption and elimination of the product surplus from the treated surface. To be measured empty for full, excluding all door frames for openings, according to the vertical projection of surfaces. Including the taxes for the protection of the surrounding surfaces and every other tax and skill, also deriving from prescriptions of D..L: in installation, necessary to hand over the work performed perfectly up to standard. MEASUREMENTS:							
			330,28				330,28		
		SUM m2					330,28	127,20	42 011,62

117	NP.RE.23	Complete restoration of the internal wall parameters to be performed by: - consolidations of cleared parts, deteriorated and friable with the preventive elimination of the external elements strongly degraded and disintegrated, subsequent cleaning of the surfaces by washing with deionized waters; - spray application of the biocide product, followed by the manual removal of biomass residuals possibly present; - water cleaning of the wall parameter in rock drafts, including the preventive disposal, by hand, of the hard incrustations, with appropriate pressure water cleaner; - scarification of the inconsistent enticement joints, substitution of the discontinuous elements with new wall elements in compatible material ashlars, from the demolitions and/or new ones, their collocation with prepackaged hydraulic lime mortar type o MAPE ANTIQUE STRUTTURALE NHL and natural pozzolan of various smoothness and energy; the aggregates must have technical, granulometric and color characteristics similar to the ones of the original mortars; - grouting of the junctions and filling little cavities with the use of similar mortar including the sewing and sealing of any type of lesions, the disassembly of incompatible parts of cement mortars, metal or any other highly degraded material (that is not part of the wall) and positioned in remote ages of all parts and/or additions that are incoherent or incompatible with the characteristics of the artefact; - possible reconstruction of missing parts with compatible materials or mortars, if necessary using the do-undo technique (scuci-cuci); - final protection trough the application, even in more shots, of appropriate water based product, type ANTIPLUVIOL W MAPEI, including the taxes for the further control of the absorption and elimination of the product surplus from the treated surface. To be measured empty for full, excluding all door frames for openings, according to the vertical projection of surfaces. Including the taxes for the protection of the surrounding surfaces and every other tax and skill, also deriving from D.L. prescriptions in construction, necessary to hand over the work performed perfectly up to standard. MEASUREMENTS: South Tower North Tower Fort	

119	NP.RE.36	Restoration of existent scales. FORT: cleaning the existent elements with low pressure water; - integration of missing elements with blocks from the same rock; cleaning and grouting the junctions with lime based mortar type MAPE ANTIQUE STRUTTURALE NHL; - final treatment with liquid-repellent product water based, type ANTIPLUVIOL W MAPEI. MEASUREMENTS:							
			1,00				1,00		
		SUM Lumpsum					1,00	1 680,00	1 680,00
120	NP.RE.37	Restoration of existent scales. NORTH TOWER: cleaning the existent elements with low pressure water; - integration of missing elements with blocks from the same rock; cleaning and grouting the junctions with lime based mortar type MAPE ANTIQUE STRUTTURALE NHL; - final treatment with liquid-repellent product water based, type ANTIPLUVIOL W MAPEI. MEASUREMENTS:							
			1,00				1,00		
		SUM Lumpsum					1,00	500,00	500,00
121	328.02.001.002	FOUNDATION WATERPROOFING with pre-established sheathing of plastomer and elastomer polymers reinforced with glass film, fire mounted, including elevation of at least cm 10 , excluding excavations and backfills: thickness mm 4. MEASUREMENTS:							
		Fort	45,00				45,00		
		North Tower	7,07				7,07		
		South Tower	8,00				8,00		
		Connection Areas	3,23				3,23		
		SUM m2					63,30	9,62	608,95
122	NP.RE.17	Team sawn rock SLABS PAVEMENT, hinted, polished on the plane and ribbed, walled with rough mortar, including final cleaning: local calcareous rock slabs, same thickness with the original ones of the fort, but with more accurate processing and finer finishing, in order to emphasize the difference between the old and the new pavement. MEASUREMENTS:							
		Fort	45,00				45,00		
		South Tower	7,07				7,07		
		North Tower	8,00				8,00		
		Connection Areas	8,00				8,00		
		SUM m2					68,07	158,00	10 755,06
123	328.01.002.002	Double WATERPROOFING sheathing made with reinforced plastomer polymer with unthreaded tissue with continuous polyester thread: thickness mm 4. MEASUREMENTS:							
		Fort Terrace Plan	56,60				56,60		
		New South Tower Floor	10,22				10,22		
		SUM m2					66,82	27,80	1 857,60

124	NP.RE.33	Supply, transport and INSTALLATION of an architectural pavement performed by using concrete with durable Rck 250, visible gravel with large granulation and local sand, installed, with a minimum thickness of 8 cm. Before production of a concrete background, and any way properly calculated according to the final destination of the work (to be calculated separately) and the successive location of the dilating junctions and/or possible inserts that constitute the architectural pattern according to the prescriptions of D.L., protective treatment of curbs, plinths and any other architectural element that might get dirty during the casting of the floor, to be made with the application with a brush of a specific product, type Pieri® VBA Protector (Levocell) or similar product. Successive manufacturing of the cortical concrete projected with mix-design characteristics, nature and coloring of the aggregates that have to be accepted by D.L. after presenting samples, adding a multifunctional powder premixed product, type Pieri® Chromofi bre 1B neutral (Levocell) or similar products, studied on purpose to build full view gravel pavements. The dose of the powder premixed product, containers in "fas-pak" packaging completely water soluble will have to be 25 kg/m3. Adding such premixed product in the concrete must determine: - an increase of the resistance to frosting /defrosting cycles, to abrasion, to cracking and shocks, with the consequent elimination of the electric welded grid if not calculated; - reduction of efflorescence. The multifunctional additive must be mixed with the concrete with consistency S2 in auto cement mixer, until reaching a correct homogeneity of the mixture (minimum 7-8 minutes at maximum speed). Subsequent mounting, that will happen in the places prepared before. After the laying, leveling and possible hand smoothing of the mixture, avoiding any type of vibration or stress that might lead to the sinking of the aggregates, spray application with appropriate low pressure pump of an uniform layer of surface deactivator liquid, type Pieri® VBA Bio/VBA 2002 (Levocell) or similar products, 1 liter every 3 m2. The product, besides acting as anti-evaporating protection, slows down the superficial grip of the placement and consequently must be applied before it, immediately after the casting and leveling operations. Washing the surface with enough pressure cold water, to make the aggregates visible, to be performed after about 24 hours and, any way, MEASUREMENTS: Fort Terrace Plan New South Tower Floor	56,60 10,22				56,60 10,22		
		SUM m2					66,82	60,02	4 010,54
125	NP.RE.30	Restoration and change of cornices for doors and windows and assistance when mounting the frame to be performed: - after the restoration and cleaning operations of the masonry parameters we will make the masonry works necessary to reconstruct and integrate the straps in order to guarantee the correct mounting of the fixtures; - beside the necessary works we include the possible demolitions, minimum and localized, of parts of the wall, the performance and/or integration of parts of plaster with identical mortars to the ones used for restoration works, the consolidation of possible detachments and the restoration and cleaning operations after fixing the frames. Includes assistance for the qualified restorer for mounting windows and doors. To be measured according to the vertical projection of the holes surfaces. Includes the taxes for the protection of the surrounding surfaces and every other tax and skill, also deriving from prescriptions of the D.L. in construction, necessary to hand over the work performed perfectly up to standard. MEASUREMENTS: Doors Windows	10,22 7,20				10,22 7,20		
		SUM m2					17,42	64,67	1 126,55
126	331.02.001.001	INSTALLATION OF THRESHOLDS, SILLS, SLABS for doors and windows: for one thickness up to cm 4. Supply excluded. MEASUREMENTS: Thresholds Windowsills	3,75 2,00				3,75 2,00		
		SUM m2					5,75	102,00	586,50
127	NP.RE.35	Supply POLISHED SHEETS on the level and on the visible things, with lightly blunt edges, excluding special works: local white rock thickness 3 cm or superior. For thresholds, sills, slabs and panels for doors and windows. MEASUREMENTS: Thresholds Windowsills	3,75 2,00				3,75 2,00		
		SUM m2					5,75	100,00	575,00
128	251.02.001.002	FIR COUNTER FRAME, with appropriate galvanized sheet brackets, for walls. MEASUREMENTS:	2,00				2,00		

		SUM m					2,00	4,29	8,58
129	251.02.002.001	GLAZING WOOD WINDOW first choice, racks of 55 mm, no shutters, complete with heavy hardware and brass handle, industrial painting, (minimum invoicing measure sqm 1,50 with external frame measuring): fir. Flap opening. MEASUREMENTS:							
			2,20				2,20		
		SUM m2					2,20	165,00	363,00
130	251.03.001.001	IRON FRAMES for doors and windows with fixed elements, also for transom windows, with possible sheet panels including: handles, accessories, application of anti-rust: in tubular galvanized profiles up to 10 kg/sqm. MEASUREMENTS:							
			5,20				5,20		
		SUM m2					5,20	75,00	390,00
131	053.04.001.006	DOUBLE-GLAZING, minimum invoicing sqm 0,50: thickness 4/12/4 mm. MEASUREMENTS: Wooden and metal Windows/doors	7,20				7,20		
		SUM m2					7,20	33,10	238,32
132	254.01.008.006	MOUNTING INSULATING GLASS with the use of synthetic and silicon sealing: double glazing sp. 4/12/4 mm. MEASUREMENTS: Iron and wooden window frames	7,20				7,20		
		SUM m2					7,20	22,50	162,00
133	236.01.002.002	Synthetic anti-rust, red or gray, for carpentry and iron fixtures, one application. MEASUREMENTS: Iron Frames	5,20				5,20		
		SUM m2					5,20	6,13	31,88
134	236.04.001.001	PAINTING IRON OR IRON ALLOYS WORKS, internal and external, with one protection application to be calculated separately, by sand papering, with two applications of enamel color. On fixtures and doors, windows and shutters, corten effect. MEASUREMENTS: Iron Frames	5,20				5,20		
		SUM m2					5,20	17,50	91,00
135	NP.RE.45	EXTERNAL wooden DOOR covered with metal panel, with reinforced framework, reinforcement with molded panels with vertical and transversal racks without frames, including the recovery of possible usable shoeing and integration with the heavy type, built in lock (to be assessed separately): with fir framework and oak panels. Performed according to the drawing, with metal and socket. MEASUREMENTS:							
			4,22				4,22		
		SUM m2					4,22	1 250,00	5 275,00
136	NP.RE.31	Supply and INSTALLATION of high security lock with 4 pistons + spring bolt, triple expansion, 2 turns, activated by an European cylinder. MEASUREMENTS:							
			1,00				1,00		
		SUM n.					1,00	250,00	250,00
137	NP.RE.38	Brass handles, knobs for piston closing and brass nozzle for the entrance door of the fort. MEASUREMENTS:							
			2,00				2,00		
		SUM n.					2,00	210,00	420,00
138	251.03.004.001	DOOR OR FRENCH WINDOW performed from iron profiles with iron sheet flounce, grazing beads, with screws, with movement and closing hardware, latch and key lock type Yale, heavy brass lever handle (minimum invoice 1,50 sqm). MEASUREMENTS: Fort-tower connection door	4,00				4,00		
		SUM m2					4,00	218,00	872,00

140	NP.RE.16	Performing a reinforced grout pediment on the heads of the masonry parameters to be performed by: - the restoration of the structural continuity of the superior moved portions, by controlled elimination of all masses that compose the last block stream, cleaning the connections, where there is a significant deposits of materials more or less coherent, and final reconstruction of the masonry repositioning the eliminated blocks, integrated with new elements only where strictly necessary; we will take care to give to the mortar laying an inclination and a profile appropriate for favoring the flow of rainwater. - perforation and grouting of galvanized steel bars, diameter 12 mm, in a number of 3/m2, in alternate position; the grouting must be made with special lime mortars, type MAPE ANTIQUE STRUTTURALE NHL; - supply and mounting of three longitudinal galvanized steel bars diameter 16 mm. According to the D.L., also in relation to the state of conservation of the material and the conditions for performing the artefact, the mortar covers can cover completely the surface to be preserved or, otherwise, limit to the portions that, because of morphologic features, are more likely to have accumulations and stagnation of water and inappropriate material of different types. The operation will be performed using pre-cast grout made of a specific totally hydraulic binder without free mortar [Ca(OH)2], water soluble salts and any form of clinker type MAPEANTIQUE STRUTTURALE NHL, with compression resistance and elastic compatible module with the nature of the masonry parameter. The application will be made after preventively wetting the surface and, if thickness makes it necessary, in more successive layings. Includes the final protection with the application also in more layers of the appropriate water repellant water base product, type ANTIPLUVIOL W MAPEI, including the taxes for the further control of absorption and elimination of product surplus from the treated surface. To be measured according to the horizontal projection of the parameter heads. Including all taxes for the protection of the surrounding surfaces and any other tax and skill, also deriving from D.L. prescriptions in construction, necessary to hand over the work performed perfectly up to standard MEASUREMENTS:							
			70,00				70,00		
		SUM m					70,00	102,91	7 203,70
141	250.01.001.001	ASSISTANCE FOR BANNISTER MOUNTING for balconies, enclosures etc made of full iron or profiles and/or box girder: weight up to 25 kg/sqm mounted on concrete roof or walls. MEASUREMENTS: Terrace Plan Railing	25,30				25,30		
		SUM m2					25,30	20,80	526,24
142	250.03.002.001	SIMPLE DESIGN RAILING made of full iron with commercial sections, round or quarry tile and using partially box grinders with rectangular or round section: weight up to 20 kg/sqm. MEASUREMENTS: Simple shape railing 20 kg/m2 di lunghezza 23		23,00	1,10	20,00	506,00		
		SUM kg					506,00	5,80	2 934,80
143	236.01.002.002	Synthetic anti-rust, red or gray, for carpentry and iron fixtures, one application. MEASUREMENTS:							
			25,30				25,30		
		SUM m2					25,30	6,13	155,09
144	236.04.001.004	PAINTING IRON OR IRON ALLOYS WORKS, internal and external, with one protection application to be calculated separately, after sand papering, with two applications of enamel color. on handrails or grates, corten effect. MEASUREMENTS:							
			25,30				25,30		
		SUM m2					25,30	19,60	495,88
147	248.01.002.001	DRAIN PIPE WITH ROUND TUBE excluding special pieces: ROUND TUBE excluding special prices: copper, sp. 8/10, d. 100. MEASUREMENTS:							
			20,00				20,00		
		SUM m					20,00	26,60	532,00
148	NP.RE.19	Supply and INSTALLATION of galvanized steel pipe unions (Mexican) for collars with diameter cm.8, including the preparation of the installation plant and every tax and skill to hand over the work performed up to standard. MEASUREMENTS:							
			3,00				3,00		
		SUM n.					3,00	26,00	78,00

139	NP.RE.39	Supply and INSTALLATION of walkable fixed skylight with low emission glass and isolated base. . white PVC frame and shutter (RAL 9010) or made of metal elements, transparent polycarbonate infill with fire reaction class AA (Standard BS 476-3). With stratified safety isolating glass with low emissions with protection function against hailstorm, self cleaning [(6mm(safety layer PVB - internal) + 15mm(Argon) + 4mm (temperated - external)]. Uwindow=1,4 W(m²K), Uglass=1,0 W(m²K), ²K), Uframe=0,6 W(m²K), g=0,52, air permeability=class 3, light transmittance tw=0,68. CE Marking(EN 14351-1). MEASUREMENTS:							
			1,00				1,00		
		SUM Lumpsum					1,00	3 000,00	3 000,00
145	NP.RE.40	Supply and INSTALLATION of metallic spiral staircase, made of almond-pattern press-bent sheet, according to the drawing, with painted steel structure. Handrail included, landing planes, holes on the sheet for the flow of rainwater. The color will have to be established with the work management, but we recommend the corten effect. MEASUREMENTS:							
			1,00				1,00		
		SUM Lumpsum					1,00	15 000,00	15 000,00
146	NP.RE.44	Supply and INSTALLATION of metal stairs with one stair, performed with almond-pattern press-bent sheet, according to the drawing, with painted steel structure. The color will be established with the work management, but we recommend the corten effect. MEASUREMENTS: Stairs connecting the new Southern tower floor with the terrace	1,00				1,00		
		SUM Lumpsum					1,00	250,00	250,00
149	NP.RE.63	Supply and INSTALLATION of stone bench with h 55 cm and length 40 cm. White local stone. MEASUREMENTS: Terrace seatings	1,00				1,00		
		SUM n.					1,00	1 500,00	1 500,00
		SUBTOTAL H. FORT WITH TOWERS							**140 433,73**
		I. SENTRY POST B							
150	NP.RE.15	Cleaning intervention for the recovery area, with weeds removal, cutting the infesting vegetation, cleaning with mechanical and manual means, using herbicides for structure intervention, in disadvantaged area or at high gradient. Including possible earth drops of the resulting material. MEASUREMENTS:							
			4,30				4,30		
		SUM m2					4,30	4,00	17,20
151	NP.RE.14	Release of the environments and movement of materials present at all levels, including the earth drip, performed by hand, including the selection of the materials, the movement up to 200 ml and their stacking in the areas indicated by the architect or engineer in charge. MEASUREMENTS:							
			2,50				2,50		
		SUM m3					2,50	134,72	336,80
152	305.01.001.001	LOAD, TRANSPORT AND UNLOAD of materials resulting from public landfills up to a maximum distance of 20 km for material measured in accumulation pad summarily adjusted before the load: by hand with truck with capacity up to mc 3,50. MEASUREMENTS:							
			3,00				3,00		
		SUM m3					3,00	44,80	134,40
153	NP.RE.57	Assistance of the archeologist to the excavation operations including the possible preparation of the excavation documents. Excluding the possible classification of the material coming from excavation. MEASUREMENTS:							
			8,00				8,00		
		SUM h					8,00	42,00	336,00
154	404.05.001.005	PLASTER REMOVAL by detaching manageable until finding the bare masonry: hydraulic or cement mortar in good consistency conditions. MEASUREMENTS:							

		Internal Face (10% of total surface)	6,00				6,00		
		SUM m2					6,00	19,69	118,14
155	NP.RE.21	Cleaning trials test and choose the most suitable cleaning methods and products according to the original materials and their state of preservation, in compliance with the prior approval by the site restoration supervisors. MEASUREMENTS:							
			1,00				1,00		
		SUM m2					1,00	42,00	42,00
156	NP.RE.10	Complete restoration of the external wall parameters that will be performed with: - consolidations of cleared parts, deteriorated and friable with the preventive elimination of the external elements strongly degraded and disintegrated, subsequent cleaning of the surfaces by washing with deionized waters; - spray application of the biocide product, followed by the manual removal of biomass residuals possibly present; - water cleaning of the wall parameter in rock drafts, including the preventive disposal, by hand, of the hard incrustations, with appropriate pressure water cleaner; - scarification of the inconsistent enticement joints, substitution of the discontinuous elements with new wall elements in compatible material ashlars, from the demolitions and/or new ones, their collocation with prepackaged hydraulic lime mortar type o MAPE ANTIQUE STRUTTURALE NHL and natural pozzolan of various smoothness and energy; the aggregates must have technical, granulometric and color characteristics similar to the ones of the original mortars; - grouting of the junctions and filling little cavities with the use of similar mortar including the sewing and sealing of any type of lesions, the disassembly of incompatible parts of cement mortars, metal or any other highly degraded material (that is not part of the wall) and positioned in remote ages of all parts and/or additions that are incoherent or incompatible with the characteristics of the artefact; - possible reconstruction of missing parts with compatible materials or mortars, if necessary using the do-undo technique (scuci-cuci); - final protection trough the application, even in more shots, of appropriate water based product, type ANTIPLUVIOL W MAPEI, including the taxes for the further control of the absorption and elimination of the product surplus from the treated surface. To be measured empty for full, excluding all door frames for openings, according to the vertical projection of surfaces. Including the taxes for the protection of the surrounding surfaces and every other tax and skill, also deriving from prescriptions of D..L: in installation, necessary to hand over the work performed perfectly up to standard. MEASUREMENTS:							
			66,00				66,00		
		SUM m2					66,00	127,20	8 395,20

157	NP.RE.23	Complete restoration of the internal wall parameters to be performed by: - consolidations of cleared parts, deteriorated and friable with the preventive elimination of the external elements strongly degraded and disintegrated, subsequent cleaning of the surfaces by washing with deionized waters; - spray application of the biocide product, followed by the manual removal of biomass residuals possibly present; - water cleaning of the wall parameter in rock drafts, including the preventive disposal, by hand, of the hard incrustations, with appropriate pressure water cleaner; - scarification of the inconsistent enticement joints, substitution of the discontinuous elements with new wall elements in compatible material ashlars, from the demolitions and/or new ones, their collocation with prepackaged hydraulic lime mortar type o MAPE ANTIQUE STRUTTURALE NHL and natural pozzolan of various smoothness and energy; the aggregates must have technical, granulometric and color characteristics similar to the ones of the original mortars; - grouting of the junctions and filling little cavities with the use of similar mortar including the sewing and sealing of any type of lesions, the disassembly of incompatible parts of cement mortars, metal or any other highly degraded material (that is not part of the wall) and positioned in remote ages of all parts and/or additions that are incoherent or incompatible with the characteristics of the artefact; - possible reconstruction of missing parts with compatible materials or mortars, if necessary using the do-undo technique (scuci-cuci); - final protection trough the application, even in more shots, of appropriate water based product, type ANTIPLUVIOL W MAPEI, including the taxes for the further control of the absorption and elimination of the product surplus from the treated surface. To be measured empty for full, excluding all door frames for openings, according to the vertical projection of surfaces. Including the taxes for the protection of the surrounding surfaces and every other tax and skill, also deriving from D.L. prescriptions in construction, necessary to hand over the work performed perfectly up to standard. MEASUREMENTS:							
			60,00				60,00		
		SUM m2					60,00	119,24	7 154,40
158	NP.RE.16	Performing a reinforced grout pediment on the heads of the masonry parameters to be performed by: - the restoration of the structural continuity of the superior moved portions, by controlled elimination of all masses that compose the last block stream, cleaning the connections, where there is a significant deposits of materials more or less coherent, and final reconstruction of the masonry repositioning the eliminated blocks, integrated with new elements only where strictly necessary; we will take care to give to the mortar laying an inclination and a profile appropriate for favoring the flow of rainwater. - perforation and grouting of galvanized steel bars, diameter 12 mm, in a number of 3/m2, in alternate position; the grouting must be made with special lime mortars, type MAPE ANTIQUE STRUTTURALE NHL; - supply and mounting of three longitudinal galvanized steel bars diameter 16 mm. According to the D.L., also in relation to the state of conservation of the material and the conditions for performing the artefact, the mortar covers can cover completely the surface to be preserved or, otherwise, limit to the portions that, because of morphologic features, are more likely to have accumulations and stagnation of water and inappropriate material of different types. The operation will be performed using pre-cast grout made of a specific totally hydraulic binder without free mortar [Ca(OH)2], water soluble salts and any form of clinker type MAPEANTIQUE STRUTTURALE NHL, with compression resistance and elastic compatible module with the nature of the masonry parameter. The application will be made after preventively wetting the surface and, if thickness makes it necessary, in more successive layings. Includes the final protection with the application also in more layers of the appropriate water repellant water base product, type ANTIPLUVIOL W MAPEI, including the taxes for the further control of absorption and elimination of product surplus from the treated surface. To be measured according to the horizontal projection of the parameter heads. Including all taxes for the protection of the surrounding surfaces and any other tax and skill, also deriving from D.L. prescriptions in construction, necessary to hand over the work performed perfectly up to standard MEASUREMENTS:							
			15,40				15,40		
		SUM m					15,40	102,91	1 584,81
159	NP.RE.47	Supply of IRON BEAMS for roof, including: cut to size, swarf and housing in the housing locations , excluding the formation and subsequent raw recovery of housing locations in the masonry: for any type and section. Excluding painting. MEASUREMENTS:							

						250,00	250,00		
		SUM kg					250,00	4,50	1 125,00
161	236.01.002.002	Synthetic anti-rust, red or gray, for carpentry and iron fixtures, one application. MEASUREMENTS:							
			4,30				4,30		
		SUM m2					4,30	6,13	26,36
162	236.04.001.004	PAINTING IRON OR IRON ALLOYS WORKS, internal and external, with one protection application to be calculated separately, after sand papering, with two applications of enamel color. on handrails or grates, corten effect. MEASUREMENTS:							
			4,30				4,30		
		SUM m2					4,30	19,60	84,28
163	316.14.001.002	SUPPORT with surface of maximum dimensions 30x15 cm; raw: with rock wall plate. MEASUREMENTS:							
			8,00				8,00		
		SUM n.					8,00	17,10	136,80
164	NP.RE.49	Masonry assistance at the installation of the iron floor. Including wall perforations. MEASUREMENTS:							
			1,00				1,00		
		SUM Lumpsum					1,00	240,00	240,00
165	NP.RE.50	Supply stratified walkable glass capacity 400 kg/sqm, with three glass slabs and 2 PBS sheets (stratified with three slabs) for steel-glass flooring). Includes anti-slip treatment. MEASUREMENTS:							
			4,30				4,30		
		SUM m2					4,30	250,00	1 075,00
166	NP.RE.51	INSTALLATION of walkable glass, including grouting gaskets and neoprene insulations. MEASUREMENTS:							
			4,30				4,30		
		SUM m2					4,30	40,00	172,00
167	A006	CORE PERFORMED WITH DIAMOND CORERS with electric, electro-hydraulic and air engine, for laboratory tests, inspections, controls, ventilation, INSTALLATION of plants, drain pipes, drainages etc. Positioning until the diameter of 350 mm. MEASUREMENTS:							
			6,00				6,00		
		SUM n.					6,00	41,83	250,98
168	NP.RE.52	Supply and INSTALLATION of copper ventilation grid, fixed with metal anchors to the masonry . For the wholes diameter 35 mm MEASUREMENTS:							
			6,00				6,00		
		SUM n.					6,00	50,00	300,00
169	248.01.002.001	DRAIN PIPE WITH ROUND TUBE excluding special pieces: ROUND TUBE excluding special prices: copper, sp. 8/10, d. 100. MEASUREMENTS:							
			10,00				10,00		
		SUM m					10,00	26,60	266,00
170	NP.RE.19	Supply and INSTALLATION of galvanized steel pipe unions (Mexican) for collars with diameter cm.8, including the preparation of the installation plant and every tax and skill to hand over the work performed up to standard. MEASUREMENTS:							
			2,00				2,00		
		SUM n.					2,00	26,00	52,00
160	NP.RE.48	INSTALLATION of steel floor. MEASUREMENTS:							
			1,00				1,00		
		SUM Lumpsum					1,00	480,00	480,00
		SUBTOTAL I. SENTRY POST B							**22 327,37**
		J. ENTRANCE PATH							

6	NP.RE.03	Cutting adult trees, including every tax, equipment, machine, operating machine, as well as the collection and disposal of resulting material, excluding removal of the log.. MEASUREMENTS:							
			1,00				1,00		
		SUM n.					1,00	118,00	118,00
7	NP.RE.04	Extirpation or crushing of stump with mechanical means, including the gathering and disposal of the resulting material. MEASUREMENTS:							
			1,00				1,00		
		SUM n.					1,00	43,00	43,00
8	NP.RE.02	Removal of bushes from the forest area with medium gradient more than 50% invaded by brambles, shrubbery and weeds saving the possible tree and shrubbery natural restoration excluding the disposal tax, on areas with high density of weeds with a height superior to 1 m and that cover the land for more than 90% without removing the resulting materials, with evacuation interventions including high stem plants removal without disposing of the resulting material and elimination intervention of the material resulted by chipping in loco of the wood material. MEASUREMENTS:							
		Trimming the new service building area and the access road surrounding areas	500,00				500,00		
		SUM m2					500,00	1,50	750,00
		SUBTOTAL J. ENTRANCE PATH							**911,00**
		K. ENTRANCE ARCH AND DEFENSIVE WALLS							
1	431.05.001.002	WEEDING AND ERADICATION of vegetation from vertical and horizontal, internal or external walls, excluding masonry gap filling, assessed for the whole surface of the walls in subject: manually with pressure water, paint removers and small tools, final brushing and cleaning. MEASUREMENTS:							
		Entrance Arch External Face (10% of total surface)	1,64				1,64		
		Entrance Arch Internal Face (10% of total surface)	1,64				1,64		
		Defensive Wall External Face (10% of total surface)	48,20				48,20		
		Defensive Wall Internal Face (10% of total surface)	24,10				24,10		
		SUM m2					75,58	17,40	1 315,09
3	NP.RE.09	First cleaning at the bottom part of the walls, removing the bushes and the trees present immediately next to them and that can in some way hinder the mounting of bridges, the superficial turf for depths up to 30 cm, including sorting, the provision of the recovery material on the site for further use, load, transport and unload of the land with authorized public discharge, and any other tax for necessary means and labor to hand over the work performed perfectly up to standard. MEASUREMENTS:							
			270,00				270,00		
		SUM m2					270,00	2,49	672,30

14	NP.RE.10	Complete restoration of the external wall parameters that will be performed with: - consolidations of cleared parts, deteriorated and friable with the preventive elimination of the external elements strongly degraded and disintegrated, subsequent cleaning of the surfaces by washing with deionized waters; - spray application of the biocide product, followed by the manual removal of biomass residuals possibly present; - water cleaning of the wall parameter in rock drafts, including the preventive disposal, by hand, of the hard incrustations, with appropriate pressure water cleaner; - scarification of the inconsistent enticement joints, substitution of the discontinuous elements with new wall elements in compatible material ashlars, from the demolitions and/or new ones, their collocation with prepackaged hydraulic lime mortar type o MAPE ANTIQUE STRUTTURALE NHL and natural pozzolan of various smoothness and energy; the aggregates must have technical, granulometric and color characteristics similar to the ones of the original mortars; - grouting of the junctions and filling little cavities with the use of similar mortar including the sewing and sealing of any type of lesions, the disassembly of incompatible parts of cement mortars, metal or any other highly degraded material (that is not part of the wall) and positioned in remote ages of all parts and/or additions that are incoherent or incompatible with the characteristics of the artefact; - possible reconstruction of missing parts with compatible materials or mortars, if necessary using the do-undo technique (scuci-cuci); - final protection trough the application, even in more shots, of appropriate water based product, type ANTIPLUVIOL W MAPEI, including the taxes for the further control of the absorption and elimination of the product surplus from the treated surface. To be measured empty for full, excluding all door frames for openings, according to the vertical projection of surfaces. Including the taxes for the protection of the surrounding surfaces and every other tax and skill, also deriving from prescriptions of D..L: in installation, necessary to hand over the work performed perfectly up to standard. MEASUREMENTS:							
		Entrance Arch External Face	16,40			16,40			
		Entrance Arch Internal Face	16,40			16,40			
		Defensive Wall External Face	474,20			474,20			
		Defensive Wall Internal Face	233,20			233,20			
		SUM m2				740,20	127,20	94 153,44	
15	NP.RE.12	Performance of a grout pediment on the heads of the masonry parameters to be performed with: - the restoration of the structural continuity of the superior moved portions, by controlled elimination of all masses that compose the last block stream, cleaning the connections, where there is a significant deposits of materials more or less coherent, and final reconstruction of the masonry repositioning the eliminated blocks, integrated with new elements only where strictly necessary; we will take care to give to the mortar laying an inclination and a profile appropriate for favoring the flow of rainwater. According to the D.L., also in relation to the state of conservation of the material and the conditions for performing the artefact, the mortar covers can cover completely the surface to be preserved or, otherwise, limit to the portions that, because of morphologic features, are more likely to have accumulations and stagnation of water and inappropriate material of different types. The operation will be performed using pre-cast grout made of a specific totally hydraulic binder without free mortar [Ca(OH)2], water soluble salts and any form of clinker type MAPEANTIQUE STRUTTURALE NHL, with compression resistance and elastic compatible module with the nature of the masonry parameter. The application will be made after preventively wetting the surface and, if thickness makes it necessary, in more successive layings. Includes the final protection with the application also in more layers of the appropriate water repellant water base product, type ANTIPLUVIOL W MAPEI, including the taxes for the further control of absorption and elimination of product surplus from the treated surface. To be measured according to the horizontal projection of the parameter heads. Including all taxes for the protection of the surrounding surfaces and any other tax and skill, also deriving form D.L prescriptions during constructions, necessary to hand over the work performed perfectly up to standard. MEASUREMENTS:							
			135,00			135,00			
		SUM m				135,00	85,76	11 577,60	
16	250.01.001.001	ASSISTANCE FOR BANNISTER MOUNTING for balconies, enclosures etc made of full iron or profiles and/or box girder: weight up to 25 kg/sqm mounted on concrete roof or walls. MEASUREMENTS:							
			50,00		1,10	55,00			
		SUM m2				55,00	20,80	1 144,00	

17	250.03.002.001	SIMPLE DESIGN RAILING made of full iron with commercial sections, round or quarry tile and using partially box grinders with rectangular or round section: weight up to 20 kg/sqm. MEASUREMENTS: Ringhiera a disegno semplice 20 kg/m2 di lunghezza 50 m		50,00	1,10	20,00	1 100,00		
		SUM kg					1 100,00	5,80	6 380,00
18	236.01.002.002	Synthetic anti-rust, red or gray, for carpentry and iron fixtures, one application. MEASUREMENTS:		50,00		1,10	55,00		
		SUM m2					55,00	6,13	337,15
19	236.04.001.004	PAINTING IRON OR IRON ALLOYS WORKS, internal and external, with one protection application to be calculated separately, after sand papering, with two applications of enamel color. on handrails or grates, corten effect. MEASUREMENTS:		50,00		1,10	55,00		
		SUM m2					55,00	19,60	1 078,00
20	NP.RE.13	Supply and INSTALLATION of iron gate with simple design, according to the project, established by two opening shutters, including support and closing accessories and the painting and any other tax necessary to deliver the finished title perfectly up to standard. We include the support accessories and closing accessories, painting. the masonry assistance upon installation and the plant accessory works. MEASUREMENTS: Entrance Arch Metal Gate	1,00				1,00		
		SUM n.					1,00	6 550,00	6 550,00
		SUBTOTAL K. ENTRANCE AND DEFENSIVE							**123 207,58**
		L. LANDSCAPED AREA							
171	NP.RE.02	Removal of bushes from the forest area with medium gradient more than 50% invaded by brambles, shrubbery and weeds saving the possible tree and shrubbery natural restoration excluding the disposal tax, on areas with high density of weeds with a height superior to 1 m and that cover the land for more than 90% without removing the resulting materials, with evacuation interventions including high stem plants removal without disposing of the resulting material and elimination intervention of the material resulted by chipping in loco of the wood material. MEASUREMENTS:	794,00				794,00		
		SUM m2					794,00	1,50	1 191,00
172	NP.RE.58	Earth movements to remodel the field including the excavation, possible formation of embankments with ground contribution also from quarries, the approaching of the materials, the layer compacting of the materials used until reaching the pre-existent land quotes and the prescribed compaction: with arid material coming from pits. MEASUREMENTS:	200,00				200,00		
		SUM mc					200,00	16,11	3 222,00
173	305.01.001.001	LOAD, TRANSPORT AND UNLOAD of materials resulting from public landfills up to a maximum distance of 20 km for material measured in accumulation pad summarily adjusted before the load: by hand with truck with capacity up to mc 3,50. MEASUREMENTS:	50,00				50,00		
		SUM m3					50,00	44,80	2 240,00
174	260.1.1.1	TOP SOIL REMOVAL, including the removal of herbaceous plants and shrubs and their roots, tree stumps excluded tall trees, including the removal of waste materials to landfills or public areas indicated by the Architect or Civil Engineer in charge up to a distance of 20 km: For depth up to 30 cm. MEASUREMENTS:	800,00				800,00		
		SUM m2					800,00	2,67	2 136,00
175	347.01.002.003	Roadbed thickness of 10-15 cm, with material drawn graders, including rolling with a vibrating roller compactor: made ??with crushed limestone quarry, size 4 / 7 cm. MEASUREMENTS:							

			148,09				148,09		
		SUM m3					148,09	43,10	6 382,68
176	NP.RE.56	Supply and lay of inert material for road works, with a thickness of 10 cm, made of gravel granulometria10/15 cm. MEASUREMENTS:							
			79,15				79,15		
		SUM m3					79,15	43,00	3 403,45
177	NP.RE.57	Assistance of the archeologist to the excavation operations including the possible preparation of the excavation documents. Excluding the possible classification of the material coming from excavation. MEASUREMENTS:							
			24,00				24,00		
		SUM h					24,00	42,00	1 008,00
178	NP.RE.59	Supply and INSTALLATION of a bench for the external fitted area, according to the drawing, made of wood strips and galvanized steel structure. MEASUREMENTS:							
			23,50				23,50		
		SUM m					23,50	97,44	2 289,84
		SUBTOTAL L. LANDSCAPED AREA							**21 872,97**
		M. SERVICE BUILDING							
179	221.01.001.002	CIVIL PLASTER FOR INTERNAL SURFACES formed by a first layer of roughcast, by a second level layer with rule and plasterer's trowel between arranged guiding, finished with superior layer of fine mortar: with rough mortar, including glazing. MEASUREMENTS:							
			100,80				100,80		
		SUM m2					100,80	22,17	2 234,74
180	218.02.004.001	SUB-BASE for rigid pavements (stoneware or similar) performed with cement mortar R 32,5 300 kg worked, regular, smoothed with a fine plasterer's trowel: thickness 4 cm. MEASUREMENTS:							
			19,30				19,30		
		SUM m2					19,30	17,10	330,03
181	232.01.002.002	INSTALLATION OF STONEWARE TILES cm 7.5x15 - 10x20: with adhesive chews. MEASUREMENTS:							
			19,30				19,30		
		SUM m2					19,30	13,80	266,34
182	041.001.011.004	FINE PORCELAIN STONEWARE TILES, antifreeze, neutral one color: 20x20 cm. MEASUREMENTS: Pavements	19,30				19,30		
		SUM m2					19,30	17,71	341,80
187	234.01.001.001	INSTALLATION OF CERAMIC COATING one color or simple design, for heights up to m 2,00: tiles 10x10 - 15x15 - 20x20 with mortar bed. MEASUREMENTS:							
			69,40				69,40		
		SUM m2					69,40	24,70	1 714,18
188	043.07.004.001	RED PASTE TILES, single-fired, dim. 20x20 cm: unitary light color. MEASUREMENTS:							
			69,40				69,40		
		SUM m2					69,40	7,60	527,44
189	235.01.001.002	COLORS performed exclusively by brush, except for different indications, including the final cleanup of the environments, including external bridges or cell suspended platforms, but including service bridges with maximum h 2 m and/or standards scaffolding, also external, movable or not, plus height works up to 4,5 m from the ground surface, except for different indications: WATER BASED FIXATIVE applied one time on walls or ceiling - acrylic. MEASUREMENTS: Internal Painting	31,40				31,40		
		SUM m2					31,40	1,89	59,35

190	235.02.001.005	COLORS performed exclusively by brush, except for different indications, including the final cleanup of the environments, including external bridges or cell suspended platforms, but including service bridges with maximum h 2 m and/or standards scaffolding, also external, movable or not, plus height works up to 4,5 m from the ground surface, except for different indications: water-repellent painting, light colors, three brush applications.							
		MEASUREMENTS:							
		Internal Painting	31,40				31,40		
		SUM m2					31,40	5,52	173,33
191	221.01.002.001	CIVIL PLASTER FOR EXTERNAL SURFACES formed by a first layer of roughcast, by a second level layer with rule and plasterer's trowel between arranged guiding, finished with superior layer of fine mortar: with rough mortar, including glazing.							
		MEASUREMENTS:							
			54,18				54,18		
		SUM m2					54,18	22,87	1 239,10
192	235.02.002.003	EXTERNAL COLORS: with water-repellant external painting, on simple surfaces, two applications, excluding the fixative application.							
		MEASUREMENTS:							
			60,00				60,00		
		SUM m2					60,00	6,24	374,40
193	251.01.001.004	INSTALLATION OF WOODEN COUNTER FRAME, with opening up to m 1,20: on brick drilled masonry with thickness cm 16 a cm 30.							
		MEASUREMENTS:							
		Inner doors	4,00				4,00		
		SUM n.					4,00	30,80	123,20
194	251.02.001.002	FIR COUNTER FRAME, with appropriate galvanized sheet brackets, for walls.							
		MEASUREMENTS:							
		Inner doors	3,00				3,00		
		SUM m					3,00	4,29	12,87
195	251.02.008.001	INTERNAL DOOR with fir frame, honeycombed hollow cored wood, with veneered plywood, polyester or catalyzed polish, with hardware and lock, handles made of materials and valuable works, with one shutter, thickness mm 45, (minimum invoicing measure sqm 2,00): with tanganyka walnut veneering.							
		MEASUREMENTS:							
			3,52				3,52		
		SUM m2					3,52	238,00	837,76
196	251.03.001.001	IRON FRAMES for doors and windows with fixed elements, also for transom windows, with possible sheet panels including: handles, accessories, application of anti-rust: in tubular galvanized profiles up to 10 kg/sqm.							
		MEASUREMENTS:							
		Windows	4,20				4,20		
		SUM m2					4,20	75,00	315,00
197	236.04.001.001	PAINTING IRON OR IRON ALLOYS WORKS, internal and external, with one protection application to be calculated separately, by sand papering, with two applications of enamel color. On fixtures and doors, windows and shutters, corten effect.							
		MEASUREMENTS:							
			4,20				4,20		
		SUM m2					4,20	17,50	73,50
198	053.04.001.006	DOUBLE-GLAZING, minimum invoicing sqm 0,50: thickness 4/12/4 mm.							
		MEASUREMENTS:							
			4,20				4,20		
		SUM m2					4,20	33,10	139,02
199	254.01.008.006	MOUNTING INSULATING GLASS with the use of synthetic and silicon sealing: double glazing sp. 4/12/4 mm.							
		MEASUREMENTS:							
			4,20				4,20		
		SUM m2					4,20	22,50	94,50
200	NP.RE.35	Supply POLISHED SHEETS on the level and on the visible things, with lightly blunt edges, excluding special works: local white rock thickness 3 cm or superior. For thresholds, sills, slabs and panels for doors and windows.							

		MEASUREMENTS:							
		Thresholds	0,63				0,63		
		Windowsills	0,84				0,84		
		SUM m2					1,47	100,00	147,00
201	331.02.001.001	INSTALLATION OF THRESHOLDS, SILLS, SLABS for doors and windows: for one thickness up to cm 4. Supply excluded.							
		MEASUREMENTS:							
		Thresholds	0,63				0,63		
		Windowsills	0,84				0,84		
		Roof upper part	4,15				4,15		
		SUM m2					5,62	102,00	573,24
202	248.01.002.001	DRAIN PIPE WITH ROUND TUBE excluding special pieces: ROUND TUBE excluding special prices: copper, sp. 8/10, d. 100.							
		MEASUREMENTS:							
			3,50				3,50		
		SUM m					3,50	26,60	93,10
203	NP.RE.19	Supply and INSTALLATION of galvanized steel pipe unions (Mexican) for collars with diameter cm.8, including the preparation of the installation plant and every tax and skill to hand over the work performed up to standard.							
		MEASUREMENTS:							
			1,00				1,00		
		SUM n.					1,00	26,00	26,00
204	328.01.002.002	Double WATERPROOFING sheathing made with reinforced plastomer polymer with unthreaded tissue with continuous polyester thread: thickness mm 4.							
		MEASUREMENTS:							
			30,00				30,00		
		SUM m2					30,00	27,80	834,00
205	NP.RE.07	Installation of Green Curtain, as detailed in drawings, excluding foundations.							
		MEASUREMENTS:							
		Green Courtain	1,00				1,00		
		SUM Lumpsum					1,00	2 832,00	2 832,00
		SUBTOTAL M. SERVICE BUILDING							**13 361,90**
		SUMMARY							
		SUBTOTAL A. PRELIMINARIES							5 100,00
		SUBTOTAL B. CONSTRUCTION SITE							3 250,00
		SUBTOTAL C. DAYWORKS							6 931,72
		SUBTOTAL D. SOUVENIR SHOP							19 380,40
		SUBTOTAL E. SENTRY POST A							13 307,50
		SUBTOTAL F. SENTRY BOX							4 128,98
		SUBTOTAL G. BARRACKS							89 393,49
		SUBTOTAL H. FORT WITH TOWERS							140 433,73
		SUBTOTAL I. SENTRY POST B							22 327,37
		SUBTOTAL J. ENTRANCE PATH							911,00
		SUBTOTAL K. ENTRANCE AND DEFENSIVE WALLS							123 207,58
		SUBTOTAL L. LANDSCAPED AREA							21 872,97
		SUBTOTAL M. SERVICE BUILDING							13 361,90
		TOTAL							**463 606,64**

A2. BARRACK FURNITURE

N°	PRICE CODE	ITEM		DIMENSIONS			Total	AMOUNT	
			quantity	**lenght**	**width**	**height**	Quantity.	**Unit**	**SUM**
1		Purchase of multi-purpose chairs for the conference room in the barrack (to be chosen by the architect/engineer in charge of work monotoring and management)							
		Barrack	18,00				18,00	40,00	720,00
2		Purchase of desk (to be chosen by the architect/engineer in charge of work monotoring and management)							
		Barrack	2,00				2,00	70,00	140,00
3		Purchase of office chairs (to be chosen by the architect/engineer in charge of work monotoring and management)							
		Barrack	3,00				3,00	60,00	180,00
4		VIDEO BEAM purchase							
		Barrack	1,00				1,00	50,00	50,00
5		Purchase of folding chairs (to be chosen by the architect/engineer in charge of work monotoring and management)							
			30,00				30,00	10,00	300,00
		TOTAL							**1 390,00**

B. STRUCTURAL CONSTRUCTION WORKS

N°	PRICE CODE	ITEM	DIMENSION				Total	AMOUNT	
			quantity	lenght	width	heigth / weight	Quantity.	unit	TOTAL
		A. FOUNDATIONS							
2	207.1.2.1	Cement conglomerate casting rck 15 for the performance of the foundation and ventilation space lean concrete..							
		MEASUREMENTS:							
		Sentry Post A, souvenir Shop	3,00				3,00		
		SUM m3					3,00	122,41	367,23
3	311.5.1.7	Supply and mounting of domes type MODULE Geoplast h. 28 cm polypropylene entirely recycled and recyclable. Installation of EXTENSIONS MODULE and FORMWORK type "MODULE" that allows a total closure of the hole, preventing in this manner that the concrete penetrates inside the ventilation space and favoring the performance of the perimeter curbs and foundation beams during the casting. Supply and mounting of the division framework (electric welded grid) necessary to resist to the practice stress. Filling casting with above concrete cap, Resistance class Rck' = 250 Kg./cm2 and consistency class S4, with variable thickness installed with or without the help of pumps.							
		MEASUREMENTS:							
		Sentry Post A, Souvenir Shop	20,00				20,00		
		SUM m2					20,00	44,26	885,20
4	207.4.2.1	Steel with improved adherence shaped in the site type fe b 44 k controlled (100 kg/mc).							
		MEASUREMENTS:							
		Sentry Post A, Souvenir Shop, Barracks, Fort	850,00				850,00		
		SUM kg					850,00	1,51	1 283,50
29	203.1.1.1	Open section excavation for leveling depth about 35 cm performed with mechanical means on the field with medium consistency, with stacking up to the distance of m 50 from the front of the excavation in the site.							
		MEASUREMENTS:							
		Service Building	9,50				9,50		
		SUM m3					9,50	3,91	37,15
30	207.1.2.1	Cement conglomerate casting rck 15 for the performance of the foundation and ventilation space lean concrete..							
		MEASUREMENTS:							
		Service Building	1,01				1,01		
		SUM m3					1,01	122,41	123,63
33	311.5.1.7	Supply and mounting of domes type MODULE Geoplast h. 28 cm polypropylene entirely recycled and recyclable. Installation of EXTENSIONS MODULE and FORMWORK type "MODULE" that allows a total closure of the hole, preventing in this manner that the concrete penetrates inside the ventilation space and favoring the performance of the perimeter curbs and foundation beams during the casting. Supply and mounting of the division framework (electric welded grid) necessary to resist to the practice stress. Filling casting with above concrete cap, Resistance class Rck' = 250 Kg./cm2 and consistency class S4, with variable thickness installed with or without the help of pumps.							
		MEASUREMENTS:							
		Service Building	14,52				14,52		
		SUM m2					14,52	44,26	642,66
34	207.4.2.1	Steel with improved adherence shaped in the site type fe b 44 k controlled (100 kg/mc).							
		MEASUREMENTS:							
		Service Building	250,00				250,00		
		SUM kg					250,00	1,51	377,50
35	207.1.6.2	Cement conglomerate casting rck 250 for performing foundations.							
		MEASUREMENTS:							
		Service Building	6,44				6,44		
		SUM m3					6,44	178,34	1 148,51
36	207.3.1.2	Wood formworks with sawn edge including pillars and removal for base casting.							
		MEASUREMENTS:							
		Service Building	33,00				33,00		
		SUM m2					33,00	24,03	792,99
13	207.4.2.2	Steel with improved adherence shaped in the site type fe b 44 k controlled (80 kg/mc).							

		MEASUREMENTS:						
		Sentry Post A, Souvenir Shop, Barracks, Fort	89,60			89,60		
		SUM kg				89,60	1,51	135,30
		SUBTOTAL A. FOUNDATIONS						**5 793,67**
		B. ROOFS						
6	316.4.1.1	Supply and mounting of fir beams or similar including recovery performance of masonry positioning, blocking in their positioning, trieste use for any length.						
		MEASUREMENTS:						
		Barracks-Timber Ridge Beams	2,15			2,15		
		SUM m3				2,15	919,35	1 976,60
7	316.4.2.1	Supply and mounting of wooden rafters with live edge for horizontal ceiling structures including the structures of the previous entry.						
		MEASUREMENTS:						
		Barracks-Joists	2,20			2,20		
		SUM m3				2,20	1 303,33	2 867,33
8	316.4.5.1	Supply and mounting of double fir decking with mixed tables to build ceilings, including: supply, cut to size, swarf, planning, trimming and nails with the necessary measures for fixing; excluding possible conservative treatments.						
		MEASUREMENTS:						
		South Tower	8,00			8,00		
		SUM m2				8,00	41,46	331,68
9	207.2.7.1	Cement conglomerate casting rck 300 for performing reinforced cast for the slab.						
		MEASUREMENTS:						
		South Tower	0,60			0,60		
		SUM m3				0,60	186,30	111,78
10	207.4.2.1	Steel with improved adherence shaped in the site type fe b 44 k controlled (100 kg/mc).						
		MEASUREMENTS:						
		South Tower	70,00			70,00		
		SUM kg				70,00	1,51	105,70
11	NP.ST.01	Performance of plane perimeter curbs with reinforced concrete cast. For covering.						
		MEASUREMENTS:						
		South Tower	2,00			2,00		
		Barracks	23,00			23,00		
		SUM m3				25,00	186,30	4 657,50
12	207.4.2.1	Steel with improved adherence shaped in the site type fe b 44 k controlled (100 kg/mc).						
		MEASUREMENTS:						
		Fort curb	355,00			355,00		
		Barracks curb	407,00			407,00		
		SUM kg				762,00	1,51	1 150,62
14	207.5.3.1	Filling of the circular covering with lightened concrete with natural pumice stone.						
		MEASUREMENTS:						
		South Tower	2,00			2,00		
		SUM m3				2,00	140,96	281,92
15	308.1.4.2	Metal tapping performed with resin fixing.						
		MEASUREMENTS:						
		Barracks	130,00			130,00		
		Fort	40,00			40,00		
		SUM n.				170,00	5,00	850,00
16	207.3.1.4	Wood formworks with sawn edge including pillars and removal for string course casting.						
		MEASUREMENTS:						
		Barracks	25,00			25,00		
		SUM m2				25,00	36,54	913,50
40	NP.ST.02	Supply and mounting of PROTECTIONS AGAINST FALLING FROM COVERINGS. Including project and completion of all procedures.						
		MEASUREMENTS:						
		Barracks	1,00			1,00		

		SUM LS					1,00	3 500,00	3 500,00
		SUBTOTAL B. ROOFS							**16 746,63**
		C. CONCRETE ROOFS							
18	207.4.2.1	Steel with improved adherence shaped in the site type fe b 44 k controlled (100 kg/mc). MEASUREMENTS: Souvenir Shop	400,00				400,00		
		SUM kg					400,00	1,51	604,00
19	207.1.7.1	Cement conglomerate casting rck 300 for performing covering string course beams. MEASUREMENTS: Souvenir Shop	1,00				1,00		
		SUM m3					1,00	186,30	186,30
20	207.3.1.4	Wood formworks with sawn edge including pillars and removal for string course casting. MEASUREMENTS: Souvenir Shop	6,00				6,00		
		SUM m2					6,00	36,54	219,24
21	316.1.1.1	Supply and mounting of fir beams or similar including recovery performance of masonry positioning, blocking in their positioning, trieste use for any length. MEASUREMENTS: Souvenir Shop	13,00				13,00		
		SUM m2					13,00	48,20	626,60
37	207.4.2.1	Steel with improved adherence shaped in the site type fe b 44 k controlled (100 kg/mc). MEASUREMENTS: Service Building	250,00				250,00		
		SUM kg					250,00	1,51	377,50
38	207.1.7.1	Cement conglomerate casting rck 300 for performing covering string course beams. MEASUREMENTS: Service Building	2,85				2,85		
		SUM m3					2,85	186,30	530,96
39	207.3.1.4	Wood formworks with sawn edge including pillars and removal for string course casting. MEASUREMENTS: Service Building	16,00				16,00		
		SUM m2					16,00	36,54	584,64
41	316.1.1.1	Supply and mounting of fir beams or similar including recovery performance of masonry positioning, blocking in their positioning, trieste use for any length. MEASUREMENTS: Service Building	27,00				27,00		
		SUM m2					27,00	48,20	1 301,40
43		Ceiling cast on site MEASUREMENTS: Service Building	19,30				19,30		
		SUM m2					19,30	10,00	193,00
		SUBTOTAL C. CONCRETE ROOFS							**4 623,64**
		D. VAULT STRENGTHENING							
22	403.1.1.3	Emptying for the existent land with small manual means, pressing out the accumulation pitch in a 50 m range. MEASUREMENTS: Fort	39,94				39,94		
		SUM m3					39,94	98,50	3 934,09
24	308.2.7.1	Rock vault consolidation by inserting metal tapping, loose grid installation, structural concrete paving for analogy structure sentry post A and Fort Vault. MEASUREMENTS: Fort and Sentry Box	47,00				47,00		

		SUM m2					47,00	70,55	3 315,85
23	308.1.4.2	Metal tapping performed with resin fixing. MEASUREMENTS: Fort and Sentry Box	110,00				110,00		
		SUM n.					110,00	10,85	1 193,50
25	207.5.3.1	Filling of the circular covering with lightened concrete with natural pumice stone. MEASUREMENTS: Fort and Sentry Box	25,00				25,00		
		SUM m3					25,00	140,96	3 524,00
		SUBTOTAL D. VAULT STRENGTHENING							**11 967,44**
		E. MASONRY							
26	313.6.6.2	Performance of half full supporting bricks type antiseismic type porothon or similar thickness 20 cm, reinforced like structural drawing, walled with cement mortar. MEASUREMENTS: Souvenir Shop	40,00				40,00		
		SUM m2					40,00	89,01	3 560,40
27	313.1.2.2	Masonry performance for the collapse restoration in rock segments recovered on the spot or integrated with rocks of equal dimensions and colors. Manual square or with small mechanical means on the spot and masonry through lime mortar type bio-building or similar. Variable thicknesses from 50 cm to about 100 cm. MEASUREMENTS:	10,00				10,00		
		SUM m3					10,00	640,60	6 406,00
42	313.6.6.1	Performance of half full supporting bricks type antiseismic type porothon or similar thickness 30 cm, reinforced like structural drawing, walled with cement mortar. MEASUREMENTS: Service Building	65,00				65,00		
		SUM m2					65,00	99,52	6 468,80
44	213.3.1.1	Masonry with light drilled bricks, (25x12x33 cm) sp. 25 performed with rough mortar. MEASUREMENTS: Service Building	16,20				16,20		
		SUM m2					16,20	49,00	793,80
28	313.1.2.2	Masonry performance for the collapse restoration in rock segments recovered on the spot or integrated with rocks of equal dimensions and colors. Manual square or with small mechanical means on the spot and masonry through lime mortar type bio-building or similar. Variable thicknesses from 50 cm to about 100 cm. MEASUREMENTS: Defensive Walls Retaining Walls	20,00 102,00				20,00 102,00		
		SUM m3					122,00	12,00	1 464,00
31	313.1.2.2	Supply and laying of concrete to create the base of the retaining walls, thickness of 150 to 250 cm. Concrete RCK 300. The price includes all necessary formwork and scaffolding. MEASUREMENTS: Retaining Walls	177,50				177,50		
		SUM m3					177,50	165,00	29 287,50
45	313.1.2.2	Gravity retaining walls with dry stone blocks. Height 150-200 cm, 50 cm thick. The price includes all the necessary scaffolding. MEASUREMENTS: Retaining Walls	102,00				102,00		
		SUM m2					102,00	16,00	1 632,00
1	207.1.2.1	Cement conglomerate casting rck 15 for the performance of the foundation and ventilation space lean concrete.. MEASUREMENTS: Retaining Walls tickness 5-7 cm	6,00				6,00		
		SUM m3					6,00	122,41	734,46

17		Slab thickness of 5 cm, with gravel in the ratio of 1:3, including welding metal mesh.							
		MEASUREMENTS:							
		Service Building and Souvenir Shop	27,04				27,04		
		SUM m3					27,04	5,00	135,20
		SUBTOTAL E. MASONRY							**50 482,16**
		SUMMARY							
		SUBTOTAL A. FOUNDATIONS							5 793,67
		SUBTOTAL B. ROOFS							16 746,63
		SUBTOTAL C. CONCRETE ROOFS							4 623,64
		SUBTOTAL D. VAULT STRENGTHENING							11 967,44
		SUBTOTAL E. MASONRY							50 482,16
		TOTAL							**89 613,54**

C. HYDRAULIC AND SEWER PLANTS

N°	PRICE CODE	ITEM	DIMENSION				Total	AMOUNT	
			quantity	lenght	width	heigth / weight	Quantity.	unit	TOTAL
		I. CONSTRUCTION WORKS							
1		Mechanical and manual channel digging for laying plumbing and sewage system. MEASUREMENTS: SUM m³					450,00	10,00	4 500,00
2		Installation of sand under and around the installation MEASUREMENTS: SUM m³					152,00	30,00	4 560,00
3		Channel gravel backfill tailings material-with due compaction MEASUREMENTS: SUM m³					478,00	5,00	2 390,00
4		Loading and removal of excess material from excavation at the landfill MEASUREMENTS: SUM m³					160,00	10,00	1 600,00
5		Development kit sewer manholes on “fekalnoj” MEASUREMENTS: SUM No.					13,00	450,00	5 850,00
6		Supply and installation of cast iron manhole covers on sewers. MEASUREMENTS: - heavy SUM No.					4,00	210,00	840,00
		- medium SUM No.					9,00	130,00	1 170,00
7		Punch holes in the walls for at. sewage MEASUREMENTS: SUM No.					10,00	50,00	500,00
8		Breaking the surface of asphalt on the road Virpazar - Ostros for laying sewer pipes. The price includes re-paving and repairing. The prices is comprehensive of everything per m^2 MEASUREMENTS: SUM m^2					250,00	30,00	7 500,00
		TOTAL I. CONSTRUCTION WORKS							**28 910,00**
		II ASSEMBLING WORKS							
		II.A. plumbing							
1		Supply and installation of HDPE water pipes for NP 10 bar. Pipes connect the helical welding. DN 63mm SUM m.					410,00	6,00	2 460,00
2		Supply and installation of HDPE DN 32 (1 ") for the sprinkler system around the building. DN 32mm SUM m.					10,00	4,00	40,00
3		Supply and installation of water meters DN 40 mm with two shutter in front of and behind the water meter and other fittings for installation. SUM No.					1,00	150,00	150,00
4		Supply and installation of plumbing fittings and valves for hydro stations and nodes in the network.							
		- EV DN80 with integral shutter. SUM No.					4,00	90,00	360,00
		- Fire hydrant DN80 SUM No.					2,00	650,00	1 300,00
		- Fire hydrant DN80 overhead SUM No.					2,00	1 050,00	2 100,00
		- Garden hydrants DN 32 (1 ") SUM No.					1,00	130,00	130,00
		- Tee DN 50/50 SUM No.					6,00	60,00	360,00
		- L90 DN 50 SUM No.					2,00	40,00	80,00
		- DN63 HDPE sleeve with flying ed. SUM No.					12,00	25,00	300,00
5		Making connections to existing public pipeline with all fittings. SUM No.					1,00	250,00	250,00
6		Development of internal water supply distribution and sanitary equipment							

		- Procurement, transport and assembly of multilayer Belgian "HENKE" pipes in Pe-Xc/A1/PE-Xc ISO type connectors with plastic and press predizolacijom d = 6 mm. (3 +3 mm).						
		Ø 32/20						
		SUM m.				5,00	15,00	75,00
		Ø 20/16						
		SUM m.				15,00	12,00	180,00
		Ø 16/12						
		SUM m.				20,00	10,00	200,00
		- Valves with nickel cap						
		SUM No.				14,00	10,00	140,00
		- Ek Valves						
		SUM No.				2,00	10,00	20,00
7		Supply of fire hose with nozzle 2". Hoses will be placed in the toilet room, which is intended for this purpose.						
		SUM No.				2,00	220,00	440,00
8		Disinfection and chlorination of water supply network complete.						
		SUM m.				550,00	2,00	1 100,00
		Total II.A. Plumbing						**9 685,00**
		II.B. Hidro-cells						
		II.B.a. earthwork						
1		Marking and Digging hydro-cells.						
		SUM m^3				5,00	10,00	50,00
2		Backfilling around the basic structure of tamping. Calculation per m3 of rammed earth.						
		SUM m^3				2,50	9,50	23,75
		Total II.B.a. earthwork						**73,75**
		II.B.b. concrete works						
1		Production of reinforced concrete slab hydro 30 cm thick concrete MB30 brand. Develop the necessary shuttering. Concreting work through pre-built well-compacted buffer layer. Concrete nurtured and built according to regulations. The price includes the production and installation of formwork and reinforcement.						
		SUM m^3				2,70	120,00	324,00
2		Production of reinforced concrete walls 20cm thick hydro, MB30 concrete stamps. Make a smooth two-sided wall formwork. Concrete build and nurture the regulations. The price includes the production and installation of formwork and reinforcement.						
		SUM m^3				4,60	160,00	736,00
3		Production of reinforced concrete slabs above the hydro 12cm thick, the concrete MB30. Develop the necessary shuttering. Concrete build and nurture the regulations. The price includes the production and installation of formwork and reinforcement.						
		SUM m^3				0,85	200,00	170,00
		Total II.B.b. concrete works						**1 230,00**
		II.B.c. Instalment Works						
1		- Procurement of transportation, installation and commissioning of hydro stations with two pumps with a total capacity 3.0 l / s for H = 60.0 we frakfentnom regulation of one pump. A pump power of 1.5 KW and 3.0 KW total. The price includes control panels						
		SUM No.				1,00	7 800,00	7 800,00
		- Supply and installation of aluminum doors.						
		SUM No.				1,00	150,00	150,00
		Total II.B.c. instalment works						**7 950,00**
		Total II.B. Hydro-cells						**9 253,75**
		<u>II.C Sewerage network.</u>						
1		Supply and installation of PVC sewer pipe for carrying sewage external sewer divorce. Calculation per m pipe mounted.						
		Ø 200 mm						
		SUM m.				215,00	16,00	3 440,00
		Ø 160 mm						
		SUM m.				216,00	12,00	2 592,00
		Ø 125 mm						
		SUM m.				10,00	11,00	110,00
		Ø 110 mm						
		SUM m.				65,00	10,00	650,00
2		Making connections to the existing sewer drains						

		SUM No.					1,00	80,00	80,00
3		Development of internal sewerage divorce by sanitation. - Supply and installation of sewage pipes. Pipes for home installation must be made of polypropylene with all necessary fittings also made of polypropylene, not PVC pipe. Pipes for connection to the street sewer shall be made of PVC pipes for street drains. Ø 110mm							
		SUM m.					8,00	10,00	80,00
		Ø 75mm							
		SUM m.					14,00	8,00	112,00
		Ø50mm							
		SUM m.					8,00	5,00	40,00
		- Drain Ø50							
		SUM No.					2,00	25,00	50,00
		Total II.C. Sewerage network							**7 154,00**
		TOTAL II. ASSEMBLING WORKS							**26 092,75**
		III EQUIPMENT							
1		Supply and installation of the separator for the separation of "soft" liquid .							
		SUM No.					1,00	1 400,00	1 400,00
2		Supply and installation of Geberit concealed cistern							
		SUM No.					3,00	200,00	600,00
3		Supply and installation of sanitary facilities with gallantry							
		WC							
		SUM No.					3,00	150,00	450,00
		- sink							
		SUM No.					3,00	150,00	450,00
		- water heater 50L							
		SUM No.					1,00	160	160,00
		- instantaneous water heater 10L							
		SUM No.					1,00	80,00	80,00
		- sink							
		SUM No.					1,00	160,00	160,00
		Total III: EQUIPMENT							**3 300,00**
		SUMMARY							
		I. CONSTRUCTION WORKS							28 910,00
		II ASSEMBLING WORKS							
		II.A. plumbing						9 685,00	
		II.B. Hidro-cells							
		II.B.a. earthwork					73,75		
		II.B.b. concrete works					1 230,00		
		II.B.c. Instalment Works					7 950,00	9 253,75	
		II.C Sewerage network						7 154,00	26 092,75
		III EQUIPMENT							3 300,00
		TOTAL							**58 302,75**

D. ELECTRIC PLANTS - LOW VOLTAGE

N°	PRICE CODE	ITEM	DIMENSION				Total	AMOUNT	
			quantity	lenght	width	heigth/weight	Quantity.	unit	TOTAL
		This BoQ provides delivery and installation of materials specified by their positions and their fine non-specified material necessary to complete design and installation as specified by positions, testing and putting into proper operation and bringing in correct original condition the works and structures already damaged. All material used must be first-class quality and conform to the standards. The works must be carried out by professional force work and completely under the applicable technical regulations for the same kind of work. The bill of quantities estimates quantities and is designed to give a reasonable indication of the works shown in the drawings, they shall not be taken as true and correct amount of work by a contractor in the fulfillment of its obligations under the Contract. Whatever the amount, all the works specified in the cost estimate are subject to re-measure on site executed and approved by the Engineer, a unit of measure specified in the bill of quantities, and payment will be made at the appropriate unit prices for re-measured quantities.							
		A. INSTALLATION OF SKS SYSTEM							
1		Delivery and installation of flexible PVC pipe layer Ø110mm/6m with all fittings, couplings, elbows and other fittings in the prepared rov.dimenzija0, 8x0, 4m. Work on the trench are not subject to these items because they are already included in calculation of works of electrical high voltage.							
		POSITION:							
		Outdoor space	161,00				161,00		
		TOTAL					161,00	2,20	354,20
2		Delivery and installation of flexible PVC pipe Ø32 mm with all the layer with, couplings, elbows and other fittings. Work on the trench are not subject to these items because they are already included in calculation of works of electrical high voltage.							
		POSITION:							
		Indoor space	460,00				460,00		
		TOTAL					460,00	2,25	1 035,00
3		Delivery and installation in the land of a concrete manhole 400x400 in the already excavated trench.							
		POSITION:							
		Outdoor space	10,00				10,00		
		TOTAL					10,00	110,00	1 100,00
4		Delivery and installation of underground distribution boxes in PVC 200x200 in already excavated trench.							
		POSITION:							
			10,00				10,00		
		TOTAL					10,00	61,44	614,40
5		Telephone jack type RJ45 computer to be mounted on the wall. Including all taxes and accessories to make the work perfectly functional and installed up to standard.							
		POSITION:							
		Polivalent Hall	2,00				2,00		
		TOTAL					2,00	19,20	38,40
6		Delivery and installation of UTP cable 4x2x0, 6mm2 Cat. 6th							
		POSITION:							
			1 160,00				1 160,00		
		TOTAL					1 160,00	1,58	1 832,80
7		Delivery and installation of the freestanding rack 42HU/19 "with all necessary equipment and patch panels.							
		POSITION:							
			1,00				1,00		
		TOTAL					1,00	1 450,00	1 450,00
8		Development of measurement protocols and preparation of technical documentation for all UTP cables placed.							
		POSITION:							
			1,00				1,00		
		TOTAL					1,00	585,35	585,35
		SUBTOTAL A. INSTALLATION OF SKS SYSTEM							**7 010,15**
		B. INSTALLATION OF ALARM SYSTEM							
1		Delivery, installation, programming and networking. Anti similar type microprocessor plant 832m + Matrix, "Pyronix" England, with 8 / 16 +2 zone zone, expandable to 32 zones. Supplied in a protective metal casing with a lock and tamper protection.Delivery, installation, programming and networking. Zone Expander, a similar type of MX-RIX16 (extension alarm control panel with 8 / 16 zones plus two additional stations on the board: global tamper and tamper bell) Rechargeable batteries 2x12V DC, 7.2 Ah with a box for batteries. Delivery, installation and connection to the cable the installation. Module MX-VOICE, send specific messages up to eight.							
		POSITION:							
		Service Room	1,00				1,00		
		TOTAL					1,00	500,00	500,00

2		Infrared detectors similar to the type of Octopus EP, "Pyronix" quad-infrared sensor for the indoor 28m flow rate. It has Automatic Temperature Compensation (ATC), and the ability of digital signal processing: P / N, + SPP, SPP +1. Tamper protection on private housing supply, installation and putting into operation.							
		POSITION:							
		Museum	2,00				2,00		
		Polivalent Hall	2,00				2,00		
		Wine Boutique	2,00				2,00		
		TOTAL					6,00	56,00	336,00
3		Magnetic contact with Perimeter protection, flow rate 0.5 A, which registers the doors and windows. The dimensions are 60x13x13mm contact with the body of thermoplastic material. Price includes all necessary ancillary equipment required for the impeccable work of contacts.							
		POSITION:							
		Souvenir Shop	1,00				1,00		
		Museum	1,00				1,00		
		Polivalent Hall	2,00				2,00		
		Wine Boutique	3,00				3,00		
		Service Room	1,00				1,00		
		TOTAL					8,00	17,43	139,44
4		Alarm Keypad Matrix LCD II (MX-LCD II), with 32 characters, reserved for Panic buttons, fire and ambulance services. Adjustable backlighting on the display and keys and tamper protection on case. Delivery, installation and connection of the cable installation							
		POSITION:							
		Souvenir Shop	1,00				1,00		
		Service Room	1,00				1,00		
		TOTAL					2,00	101,00	202,00
5		Delivery, installation and connection intrusion siren "PYRONIX" TWIN ALLERT 110dB, 12 V, 1.2 Ah battery buffer.							
		POSITION:							
		External Areas	1,00				1,00		
		TOTAL					1,00	40,00	40,00
6		Delivery, installation and connection of the cable anti-burglary FM9HOM1 60/90V 2x0, x2x0 +2 75mm2, 22mm2 for connecting elements of each. The cable is laid in PVC pipes.							
		POSITION:							
			200,00				200,00		
		TOTAL					200,00	2,10	420,00
7		Final testing, user training, issuance of certificates and commissioning of the installation work.							
		POSITION:							
			1,00				1,00		
		TOTAL					1,00	300,00	300,00
		SUBTOTAL B. INSTALLATION OF ALARM SYSTEM							**1 937,44**
		C. INSTALLATION OF FIRE DETECTION							
1		Delivery, installation, networking and programming of addressable conventional fire alarm panel type Notifier AM2000 + BAT-02 or similar characteristics long, with a control panel, battery backup battery, 12 V, 17Ah.							
		POSITION:							
		Service Room	1,00				1,00		
		TOTAL					1,00	1 200,00	1 200,00
2		Delivery, installation and connection of optical fire detector type Notifier nfx-OPT + B501AP.							
		POSITION:							
		Service Room	1,00				1,00		
		Souvenir Shop	2,00				2,00		
		TOTAL					3,00	85,00	255,00
3		LINEAR RADIO WAVES SMOKE DETECTOR. Linear radio relay fire detector, suitable for the detection of fires in open areas, designed as a separate optical drive (RTX) with the reflector on the opposite side of the site. Fire detection zone between 10 and 100 meters Bidirectional transmission using radio frequency double with 7 channels in the range of 868.15 MHz to 869.85 MHz. The maximum frequency 3mW irradiated and 5 dBm receiving sensitivity. Four levels of sensitivity. Two lithium batteries, primary and secondary. Operating temperature from -30 to +50 ° C. Relative humidity up to 95% without condensation. Protection class IP65. Dimensions 270mm x 160mm x 105mm. Notifier type RAD40 or similar.							
		POSITION:							
		Museum	1,00				1,00		
		Polivalent Hall	1,00				1,00		
		Wine Boutique	3,00				3,00		
		TOTAL					5,00	180,00	900,00

4		RADIO RELAY OUTPUT MODULE. Delivery and installation output modules, clean unsupervised contact, by radio. Bidirectional transmission using radio frequency double the 7 channels in the range from 868.15 to 8695 MHz, MHz. The maximum irradiated power is 3 mW, and receiver sensitivity of 5 dBm. Controlled access. It has a status indication modula.Requires external power supply with tension from 10 to 27V. Degree of protection IP65. Operating temperature from -30 ° C to +55 ° C. Relative humidity up to 90% without condensation. Dimensions 90mm x 135mm x 55mm. Notifier type RAD27 or similar.							
		POSITION:							
		Museum	1,00				1,00		
		Polivalent Hall	1,00				1,00		
		Wine Boutique	3,00				3,00		
		TOTAL					5,00	85,00	425,00
5		Optical repeater for detector alarm fire wide, protected from polarity inversions, feeding 5V/25mA, 70mmx35mmx23mm dimensions. Type Notifier INDICATOR or similar.							
		POSITION:							
		Service Room	1,00				1,00		
		Souvenir Shop	1,00				1,00		
		TOTAL					2,00	11,71	23,42
6		Delivery, installation and connection of conventional fire siren, power supply 24 V Batteries 12 V / 1.2 Ah.							
		POSITION:							
		External Areas	1,00				1,00		
		TOTAL					1,00	45,00	45,00
7		Delivery and installation of miniature adresibilnog I / O module with identification circuit, programmed addressable with two rotating switches. Suitable for installation in boxing 503rd Type Notifier CMA11 or similar.							
		POSITION:							
		External Areas	1,00				1,00		
		TOTAL					1,00	76,10	76,10
8		Delivery of cable JH (St) H 2x2x0.8mm in 16mm PVC pipes to connect all elements of the system. Flame-resistant and at least 30 minutes with the EN50200 agreed regulations.							
		POSITION:							
			300,00				300,00		
		TOTAL					300,00	1,76	528,00
9		Installation, programming and commissioning of the system							
		POSITION:							
			1,00				1,00		
		TOTAL					1,00	350,00	350,00
		SUBTOTAL C. INSTALLATION OF FIRE DETECTION							**3 802,52**
		D. INSTALLATION OF SOUND SYSTEM							
1		Delivery, installation and connection of rack 33U 600x600 Legrand or similar. for the placement of audio equipment, equipped with: Delivery, installation and connection of the sound source type BOSCH PLENA DVD / TUNER/MP3 or similar. Delivery, installation and connection system preamplifier BOSCH LBB1925/10. Delivery, installation and connection of an amplifier PLENA LBB1935/20 BOSCH 360/240 W.							
		POSITION:							
			1,00				1,00		
		TOTAL					1,00	3 000,00	3 000,00
2		Delivery, installation and connection built in circular 280mm diameter loudspeaker, steel construction disp.125 °, 70-20kHz SPL max.1 94dBwmt.-106, 20W, 100V, 5 selection power, white, 1.18 Kg. with a ceramic thermal fuse terminals in accordance with fire regulations. BOSCH or similar type.							
		POSITION:							
		Museum	4,00				4,00		
		Polivalent Hall	4,00				4,00		
		Wine Boutique	4,00				4,00		
		TOTAL					12,00	60,00	720,00
3		Delivery and installation in the floor type of socket for sound 2P Mignon, with diffuse 3mm diameter, 13mm distance from the center of the auxiliary circuits and the like, 6A 24V SELV, constructed with modular parts, partly built in the tube with cables to connect to the outlet box in the zone.							
		POSITION:							
		External Areas	3,00				3,00		
		TOTAL					3,00	32,00	96,00
4		Delivery, installation and connection of LBB1941/00 calling station.							
		POSITION:							
		Polivalent Hall	1,00				1,00		
		TOTAL					1,00	190,00	190,00

5		Delivery, installation and connection of speaker cables for Hi-Fi systems 2x2, 5mm2, in accordance with the regulations CEI 20-11 and CEI 20-29. Type TI1 PVC insulation, copper conductors class 5th.							
		POSITION:							
			200,00				200,00		
		TOTAL					200,00	1,60	320,00
		SUBTOTAL D. INSTALLATION OF SOUND SYSTEM							**4 326,00**
		E. INSTALLATION OF TV / SAT SYSTEM							
1		Delivery and installation of central station for TV / SAT signal, made from TV / SAT aluminum antenna on a metal tray with a diameter of 50mm equipment for strengthening and earthing.Sistem includes amplifier, splitter and micro switch. It includes the purchase and installation of a central antenna systems that accept all TV / satellite signals in this area includes: VHF antenna with 12 elements, the antenna for the UHF channels. The system will be equipped with amplifier, mixer and preselection module, channel selective filter dividers, double separator. Installed equipment guarantees entrance signal level of 60 dB.							
		POSITION:							
		Service Room	1,00				1,00		
		TOTAL					1,00	1 750,33	1 750,33
2		Delivery and installation of modules for RTV / SAT 5-2400MHz. The terminals are Legrand production or similar other production.							
		POSITION:							
		Museum	1,00				1,00		
		Polivalent Hall	1,00				1,00		
		Wine Boutique	1,00				1,00		
		TOTAL					3,00	36,00	108,00
3		Delivery and installation of modules for floor mounting RTV / SAT 5-2400 MHz. Production of Legrand connectors or similar from another manufacturer.							
		POSITION:							
			1,00				1,00		
		TOTAL					1,00	36,00	36,00
4		Delivery and installation of coaxial TV cable 1x0.75mm in accordance with CEI 46-1, EN 50117 and IEC 68-2-3.							
		POSITION:							
			200,00				200,00		
		TOTAL					200,00	8,93	1 786,00
		SUBTOTAL E. INSTALLATION OF TV/SAT SYSTEM							**3 680,33**
		SUMMARY:							
		SUBTOTAL A. INSTALLATION OF SKS SYSTEM							7 010,15
		SUBTOTAL B. INSTALLATION OF ALARM SYSTEM							1 937,44
		SUBTOTAL C. INSTALLATION OF FIRE DETECTION							3 802,52
		SUBTOTAL D. INSTALLATION OF SOUND SYSTEM							4 326,00
		SUBTOTAL E. INSTALLATION OF TV/SAT SYSTEM							3 680,33
		TOTAL							**20 756,44**

E. ELECTRIC PLANTS - HIGH VOLTAGE

N°	PRICE CODE	ITEM	DIMENSION				Total	AMOUNT	
			quantity	lenght	width	heigth/weight	Quantiy.	unit	TOTAL
1		This bill of quantities provides delivery and installation of materials as specified and small non-specified materials required for production and installation as specified by positions, testing and putting into proper operation and bringing in the original state the already derived equipment and systems. All material used must be first-class quality and conform to the standards. The works must be carried out by professional work force, and completely under the applicable technical regulations for the same kind of work. The bill of quantities estimates quantity and is designed to provide a reasonable indication of the works shown in the drawings, it should not be interpreted as a true and correct amount of work by a contractor in fullfilling its obligations under the Contract. Regardless of the amount, all the works specified in the bill of quantities are subject to re-measure on site by the Engineer who executed and approved, units of measure specified in the bill of quantities and payment will be made at the appropriate unit prices for re-measured quantities.							
		Marking of alignment and digging of the trench dimensions 0.8 x 0, 47 for laying tubing Ø110, Ø63 and ground (attached to the dimension of the	186,00					12,00	2 232,00
		Supply and spreading of sand in cable and trench. Two layers of sand are spread, of the thickness of 10 cm, before and after laying cables and pipes The sand is laid over the trench width. M³	46,00					14,00	644,00
		Supply, delivery and installation of warning tape made of soft polyvinyl chloride, which is set at 20 cm from the ground. Met.	495,00					0,20	99,00
		Backfilling of cable trench excavation. Backfilling is done in layers of twenty centimeters. Removal of larger materials with sharp edges during back-filling n.ade	130,00					4,50	585,00
		Planning excess of excavation (excavation for foundations due to the excess of excavation pologanja sand into the trench). Planiranje viska iskopa (iskopi za temelje i visak iskopa usljed pologanja pijeska u rov). M3	10,00					3,50	35,00
2		FLEXIBLE DOUBLE LAYER CABLE DUCT DIAMETER 110 mm. Supply and lay in of flexible tubes diameter 110mm, double PVC layer with coils, heavy type, shaped with two coextruded tubular elements, the external one corrugated to grant major resistance to the crush and the internal one smooth to ease the cable scroll; according to the Regulations UNI 7447/75 and CEI 23-46, with final glass junctions, including all taxes for wall mounting, junctions, curves, made with prefabricated accessories.							
		External Areas	161,00				161,00		
		SUM m					161,00	10,71	1 724,31
3		FLEXIBLE DOUBLE LAYER CABLE DUCT DIAM. 63 mm. Supply and lay in of flexible tubes diameter 63mm, double PVC layer with coils, heavy type, shaped with two tubular coextruded elements, the external one corrugated to achieve more resistance to crushing and the internal one smooth to ease the cable scroll; according to the regulations UNI 7447/75 and CEI 23-46, with final glass junctions, including every tax for the wall mounting, junctions, curves, made with prefabricated accessories. [Rif. Cod. 4500.13]							
		External Areas	600,00				600,00		
		SUM m					600,00	6,17	3 702,00
4		Tubes diameter 32mm auto-extinguishing PVC insulating protection with corrugated surface, heavy series (P), according to the Regulations CEI 23-14 (V 1971) - File 297 and UNEL 3 37121-70 equipped with Quality Mark, grey color 7035, crushing resistance more than 750 N, no guiding thread, without the derivation box and buried in mounting, performed by third parties, to be considered separately, that must be of the indicated dimensions and able to include the tubes to be mounted without readjustment, and including the signature of traces and the pin of the tubes, everything to hand over the completed and performed title up to standard.							
		Indoor space	310,00				310,00		
		SUM m					310,00	2,25	697,50
5		Tubes diameter 25mm auto-extinguishing PVC insulating protection with corrugated surface, heavy series (P), according to the Regulations CEI 23-14 (V 1971) - File 297 and UNEL 37121-70 equipped with Quality Mark, grey color 7035, crushing resistance more than 750 N, no guiding thread, without the derivation box and buried in mounting, performed by third parties, to be considered separately, that must be of the indicated dimensions and able to include the tubes to be mounted without readjustment, and including the signature of traces and the pin of the tubes, everything to hand over the completed and performed title up to standard							
		Indoor space	190,00				190,00		
		SUM m					190,00	1,92	364,80
6		Concrete 400X400 mm WELL Supply and lay in of underground derivation well, internal dimensions 400x400mm made of CLS, with CLS sole cover. fitted to be sole manhole of concrete, for laying in arranged excavation.. Including every tax to make the work complete in every part.							
		External Areas	10,00				10,00		
		SUM n.					10,00	110,00	1 100,00

7		PVC WELL 200X200 mm. Supply and lay in of underground derivation well, internal dimensions 200x200mm made from PVC, with sole PVC manhole cover, fitted for laying in arranged excavation. Including any taxes to make the work complete in every part.							
		External Areas	37,00				37,00		
		SUM n.					37,00	61,44	2 273,28
8		PVC WELL 200X200 mm. Supply and lay in of underground derivation well, internal dimensions 200x200mm made from PVC, with sole PVC manhole cover, fitted for laying in arranged excavation. Including any taxes to make the work complete in every part.							
			10,00				10,00		
		SUM n.					10,00	61,44	614,40
9		SUPPLY PANEL QEN. Supply and lay in of PVC external electric panel, protection degree IP65, containing perfectly mounted and wired the equipments for the command and protection f the light and f.m plants and for the command and protection of the users serving the anti-fire plant as can be seen on the project boards. Including all taxes and accessories to make the completed and performed title perfectly up to standard.							
		Service Room	1,00				1,00		
		SUM n.					1,00	950,00	950,00
10		GENERAL PANEL QGE. Supply and lay in of panel performed with a sole section (NORMAL section) in of PVC build in carpentry. Protection degree IP4X external and IP20 internal. equipped with supports for fixing boxed switches, equipped with DIN profiles for the snap mounting of modular machines, terminal, transparent closure doors with key lock, fixing accessories and galvanized and passivated steel internal frames, including the equipments mounted, cables and perfectly functional, specified in the related graphical project plan. With: - Identification plates for the equipments and circuits - Identifications for the cables for cabling and entrance exit - Distribution terminals - Entrance exit and auxiliary terminals - Copper earth bar - Copper distribution crossings - Electric scheme with compartment for the scheme - Identification plate of the constructor - Certification according to N. CEI 17.13 - Other characteristics according to the technical specifications . Mounting and cabling accessories especially provided by the constructor of the machines and by the carpentry, as support base, adaptors, wall fixing brackets, connection cables, channels, terminals, screws, equipotential connections; also included flanges, special pieces for the connection of the panel to the cable system used and generally everything necessary for the correct performance of works and the perfect functioning of equipments.							
		Museum	1,00				1,00		
		SUM n.					1,00	1 100,00	1 100,00
12		MULTIPURPOSE PANEL QSP. Supply and lay in of panel performed with a sole section (NORMAL section) in of PVC build in carpentry. Protection degree IP4X external and IP20 internal. equipped with supports for fixing boxed switches, equipped with DIN profiles for the snap mounting of modular machines, terminal, transparent closure doors with key lock, fixing accessories and galvanized and passivated steel internal frames, including the equipments mounted, cables and perfectly functional, specified in the related graphical project plan. With: - Identification plates for the equipments and circuits - Identifications for the cables for cabling and entrance exit - Distribution terminals - Entrance exit and auxiliary terminals - Copper earth bar - Copper distribution crossings - Electric scheme with compartment for the scheme - Identification plate of the constructor - Certification according to N. CEI 17.13 - Other characteristics according to the technical specifications . Mounting and cabling accessories especially provided by the constructor of the machines and by the carpentry, as support base, adaptors, wall fixing brackets, connection cables, channels, terminals, screws, equipotential connections; also included flanges, special pieces for the connection of the panel to the cable system used and generally everything necessary for the correct performance of works and the perfect functioning of equipments.							
		Polivalent Hall	1,00				1,00		
		SUM n.					1,00	800,00	800,00
13		BOUTIQUE PANEL QWB. Supply and lay in of panel performed with a sole section (NORMAL section) in of PVC build in carpentry. Protection degree IP4X external and IP20 internal. equipped with supports for fixing boxed switches, equipped with DIN profiles for the snap mounting of modular machines, terminal, transparent closure doors with key lock, fixing accessories and galvanized and passivated steel internal frames, including the equipments mounted, cables and perfectly functional, specified in the related graphical project plan. With: - Identification plates for the equipments and circuits - Identifications for the cables for cabling and entrance exit - Distribution terminals - Entrance exit and auxiliary terminals - Copper earth bar - Copper distribution crossings - Electric scheme with compartment for the scheme - Identification plate of the constructor - Certification according to N. CEI 17.13 - Other characteristics according to the technical specifications . Mounting and cabling accessories especially provided by the constructor of the machines and by the carpentry, as support base, adaptors, wall fixing brackets, connection cables, channels, terminals, screws, equipotential connections; also included flanges, special pieces for the connection of the panel to the cable system used and generally everything necessary for the correct performance of works and the perfect functioning of equipments.							
		Wine Boutique	1,00				1,00		

			SUM n.					1,00	1 200,00	1 200,00

14		SOUVENIR SHOP PANEL QSS. Supply and lay in of panel performed with a sole section (NORMAL section) in of PVC build in carpentry. Protection degree IP4X external and IP20 internal. equipped with supports for fixing boxed switches, equipped with DIN profiles for the snap mounting of modular machines, terminal, transparent closure doors with key lock, fixing accessories and galvanized and passivated steel internal frames, including the equipments mounted, cables and perfectly functional, specified in the related graphical project plan. With: - Identification plates for the equipments and circuits - Identifications for the cables for cabling and entrance exit - Distribution terminals - Entrance exit and auxiliary terminals - Copper earth bar - Copper distribution crossings - Electric scheme with compartment for the scheme - Identification plate of the constructor - Certification according to N. CEI 17.13 - Other characteristics according to the technical specifications . Mounting and cabling accessories especially provided by the constructor of the machines and by the carpentry, as support base, adaptors, wall fixing brackets, connection cables, channels, terminals, screws, equipotential connections; also included flanges, special pieces for the connection of the panel to the cable system used and generally everything necessary for the correct performance of works and the perfect functioning of equipments.							
		Souvenir Shop	1,00				1,00		
		SUM n.					1,00	700,00	700,00
15		MECHANIC USERS PANEL QUM. Supply and lay in of panel performed with a sole section (NORMAL section) for wall mounting with metal carpentry and electric galvanized steel sheet thickness 10-15/10 press bent and sealed, painted with epoxide dust after the phosphating treatment. Protection degree IP55 external and IP20 internal. equipped with supports for fixing boxed switches, equipped with DIN profiles for the snap mounting of modular machines, terminal, transparent closure doors with key lock, fixing accessories and galvanized and passivated steel internal frames, including the equipments mounted, cables and perfectly functional, specified in the related graphical project plan. With: - Identification plates for the equipments and circuits - Identifications for the cables for cabling and entrance exit - Distribution terminals - Entrance exit and auxiliary terminals - Copper earth bar - Copper distribution crossings - Electric scheme with compartment for the scheme - Identification plate of the constructor - Certification according to N. CEI 17.13 - Other characteristics according to the technical specifications . Mounting and cabling accessories especially provided by the constructor of the machines and by the carpentry, as support base, adaptors, wall fixing brackets, connection cables, channels, terminals, screws, equipotential connections; also included flanges, special pieces for the connection of the panel to the cable system used and generally everything necessary for the correct performance of works and the perfect functioning of equipments.							
		Service Room	1,00				1,00		
		SUM n.					1,00	1 850,00	1 850,00
16		EXTERNAL AREA PANEL QEX. Modular panel composed of a cabinet made with 1 section (NORMAL section) for mounting on fiberglass pavement. Protection degree IP65 external IP20 internal. equipped with supports for fixing boxed switches, equipped with DIN profiles for the snap mounting of modular machines, terminal, transparent closure doors with key lock, fixing accessories and galvanized and passivated steel internal frames, including the equipments mounted, cables and perfectly functional, specified in the related graphical project plan. With: - Identification plates for the equipments and circuits - Identifications for the cables for cabling and entrance exit - Distribution terminals - Entrance exit and auxiliary terminals - Copper earth bar - Copper distribution crossings - Electric scheme with compartment for the scheme - Identification plate of the constructor - Certification according to N. CEI 17.13 - Other characteristics according to the technical specifications . Mounting and cabling accessories especially provided by the constructor of the machines and by the carpentry, as support base, adaptors, wall fixing brackets, connection cables, channels, terminals, screws, equipotential connections; also included flanges, special pieces for the connection of the panel to the cable system used and generally everything necessary for the correct performance of works and the perfect functioning of equipments.							
		External Areas	1,00				1,00		
		SUM n.					1,00	1 600,00	1 600,00
17		Cable FG7OR five-polar, flexible cord installed in tubes excluded and considered separately) cable section 5x25mmq of annealed red copper, nominal tension 0,6/1kV, test tension 4kV for concrete, mixture insulation based on etilpropilene rubber quality G7, operation temperature 90 degrees C, short circuit temperature 250 degrees C, insulation constant 5000 MOhm/km, minimum traction breakage load traction 8,5 N/mmq, accelerated aging 150 degrees C for 168 h, special PVC Rz quality mixed sheath, according to the regulations CEI 20-35, CEI 20-22 part II, CEI 20-37 part I, CEI 20-11, CEI 20-34 including part of copper cable terminal with mechanical compression pre-insulated or insulated load with heat-shrinking sheath, everything to hand over the completed and performed title up to standard							
		QEN	5,00				5,00		
		SUM m					5,00	10,95	54,75
18		Cable FG7OR five-polar, flexible cord installed in tubes excluded and considered separately) cable section 5x16mmq of annealed red copper, nominal tension 0,6/1kV, test tension 4kV for concrete, mixture insulation based on etilpropilene rubber quality G7, operation temperature 90 degrees C, short circuit temperature 250 degrees C, insulation constant 5000 MOhm/km, minimum traction breakage load traction 8,5 N/mmq, accelerated aging 150 degrees C for 168 h, special PVC Rz quality mixed sheath, according to the regulations CEI 20-35, CEI 20-22 part II, CEI 20-37 part I, CEI 20-11, CEI 20-34 including part of copper cable terminal with mechanical compression pre-insulated or insulated load with heat-shrinking sheath, everything to hand over the completed and performed title up to standard							

			QEN-QUM	6,00				6,00		
			SUM m					6,00	7,39	44,34

19		Cable FG7OR five-polar, flexible cord installed in tubes excluded and considered separately) cable section 5x10mmq of annealed red copper, nominal tension 0,6/1kV, test tension 4kV for concrete, mixture insulation based on etilpropilene rubber quality G7, operation temperature 90 degrees C, short circuit temperature 250 degrees C, insulation constant 5000 MOhm/km, minimum traction breakage load traction 8,5 N/mmq, accelerated aging 150 degrees C for 168 h, special PVC Rz quality mixed sheath, according to the regulations CEI 20-35, CEI 20-22 part II, CEI 20-37 part I, CEI 20-11, CEI 20-34 including part of copper cable terminal with mechanical compression pre-insulated or insulated load with heat-shrinking sheath, everything to hand over the completed and performed title up to standard.							
		QEN-QGE	90,00				90,00		
		QUM-VRV	12,00				12,00		
		SUM m					102,00	5,42	552,84
20		Cable FG7OR five-polar, flexible cord installed in tubes excluded and considered separately) cable section 5x6mmq of annealed red copper, nominal tension 0,6/1kV, test tension 4kV for concrete, mixture insulation based on etilpropilene rubber quality G7, operation temperature 90 degrees C, short circuit temperature 250 degrees C, insulation constant 5000 MOhm/km, minimum traction breakage load traction 8,5 N/mmq, accelerated aging 150 degrees C for 168 h, special PVC Rz quality mixed sheath, according to the regulations CEI 20-35, CEI 20-22 part II, CEI 20-37 part I, CEI 20-11, CEI 20-34 including part of copper cable terminal with mechanical compression pre-insulated or insulated load with heat-shrinking sheath, everything to hand over the completed and performed title up to standard							
		QGE-QSP QGE-QWM	120,00				120,00		
		SUM m					120,00	3,72	446,40
21		Cable FG7OR five-polar, flexible cord installed in tubes excluded and considered separately) cable section 5x4mmq of annealed red copper, nominal tension 0,6/1kV, test tension 4kV for concrete, mixture insulation based on etilpropilene rubber quality G7, operation temperature 90 degrees C, short circuit temperature 250 degrees C, insulation constant 5000 MOhm/km, minimum traction breakage load traction 8,5 N/mmq, accelerated aging 150 degrees C for 168 h, special PVC Rz quality mixed sheath, according to the regulations CEI 20-35, CEI 20-22 part II, CEI 20-37 part I, CEI 20-11, CEI 20-34 including part of copper cable terminal with mechanical compression pre-insulated or insulated load with heat-shrinking sheath, everything to hand over the completed and performed title up to standard							
		QEN-QEX	70,00				70,00		
		QUM	10,00				10,00		
		SUM m					80,00	4,20	336,00
22		Cable FG7OR three-polar, flexible cord installed in tubes excluded and considered separately) cable section 3x6mmq of annealed red copper, nominal tension 0,6/1kV, test tension 4kV for concrete, mixture insulation based on etilpropilene rubber quality G7, operation temperature 90 degrees C, short circuit temperature 250 degrees C, insulation constant 5000 MOhm/km, minimum traction breakage load traction 8,5 N/mmq, accelerated aging 150 degrees C for 168 h, special PVC Rz quality mixed sheath, according to the regulations CEI 20-35, CEI 20-22 part II, CEI 20-37 part I, CEI 20-11, CEI 20-34 including part of copper cable terminal with mechanical compression pre-insulated or insulated load with heat-shrinking sheath, everything to hand over the completed and performed title up to standard.							
		QGE-QSS	30,00				30,00		
		SUM m					30,00	2,44	73,20
23		Cable FG7OR three-polar, flexible cord installed in tubes excluded and considered separately) cable section 3x4mmq of annealed red copper, nominal tension 0,6/1kV, test tension 4kV for concrete, mixture insulation based on etilpropilene rubber quality G7, operation temperature 90 degrees C, short circuit temperature 250 degrees C, insulation constant 5000 MOhm/km, minimum traction breakage load traction 8,5 N/mmq, accelerated aging 150 degrees C for 168 h, special PVC Rz quality mixed sheath, according to the regulations CEI 20-35, CEI 20-22 part II, CEI 20-37 part I, CEI 20-11, CEI 20-34 including part of copper cable terminal with mechanical compression pre-insulated or insulated load with heat-shrinking sheath, everything to hand over the completed and performed title up to standard.							
		QEX	48,00				48,00		
		QGE	18,00				18,00		
		QSP	42,00				42,00		
		QSS	5,00				5,00		
		QUM	15,00				15,00		
		QWB	40,00				40,00		
		SUM m					168,00	2,02	339,36

24		Cable FG7OR three-polar, flexible cord installed in tubes excluded and considered separately) cable section 3x2,5mmq of annealed red copper, nominal tension 0,6/1kV, test tension 4kV for concrete, mixture insulation based on etilpropilene rubber quality G7, operation temperature 90 degrees C, short circuit temperature 250 degrees C, insulation constant 5000 MOhm/km, minimum traction breakage load traction 8,5 N/mmq, accelerated aging 150 degrees C for 168 h, special PVC Rz quality mixed sheath, according to the regulations CEI 20-35, CEI 20-22 part II, CEI 20-37 part I, CEI 20-11, CEI 20-34 including part of copper cable terminal with mechanical compression pre-insulated or insulated load with heat-shrinking sheath, everything to hand over the completed and performed title up to standard.							
		QEX	1 350,00				1 350,00		
		QGE	30,00				30,00		
		QSP	50,00				50,00		
		QSS	20,00				20,00		
		QUM	70,00				70,00		
		QWB	120,00				120,00		
		SUM m					1 640,00	1,70	2 788,00
25		Supply and lay in of built in ceiling aluminum light fixtures, white aluminum reflector. Equipped with 3 LED power P=2,5W each. Degree of protection IP23. Mark Fosnova model Milano Small T or equivalent. Includes power supply and all taxes and accessories to make the completed and performed title perfectly up to standard.							
		Souvenir Shop	8,00				8,00		
		SUM n.					8,00	112,00	896,00
26		BUILT IN SPOT LIGHT MILANO 2900 P=30W. Supply and lay in of built in ceiling aluminum light fixtures, white aluminum reflector. Equipped with 1 LED CREE with power P=30W. Degree of protection IP23. Mark Fosnova model Milano 2900 or equivalent. Includes power supply and all taxes and accessories to make the completed and performed title perfectly up to standard.							
		Souvenir Shop	2,00				2,00		
		SUM n.					2,00	348,00	696,00
27		BUILT IN SPOT LIGHT FLOOR P=70W. Supply and lay in of light fixture of precast aluminum, transparent tempered glass disperser. Endowed with n°1 metal halides lamp with power P=70W. Degree of protection IP67. Mark Disano model Floor asymmetrical 1850 or equivalent. Including all taxes and accessories to make the completed and performed title perfectly up to standard.							
		External Areas	27,00				27,00		
		SUM n.					27,00	288,00	7 776,00
28		DELTA SPOT LIGHT P=70W. Supply and lay in of light fixture of diecast aluminum, asymmetric reflector and crystal disperser, tempered. Endowed with n° 1 metal halides lamp with power P=70W. Mark Fosnova model Delta o or equivalent. Including all taxes and accessories to make the completed title performed perfectly up to standard.							
		Museum	4,00				4,00		
		Polivalent Hall	4,00				4,00		
		Wine Boutique	4,00				4,00		
		SUM n.					12,00	131,00	1 572,00
29		MICRO LISET LED STRIPE P=9W. Supply and lay in of LED stripe fitted for the built in installation of profiles and ceilings with power of P=9W. Degree of protection IP65. Mark Fosnova model Micro Liset or equivalent Includes power supply and all taxes and accessories to make the completed and performed title perfectly up to standard.							
		Tower	8,00				8,00		
		SUM n.					8,00	324,00	2 592,00
30		MICRO LISET LED STRIPE P=13,5W. Supply and lay in of LED stripe fitted for the built in installation of profiles and ceilings with power of P=13,5W. Degree of protection IP65. Mark Fosnova model Micro Liset or equivalent Includes power supply and all taxes and accessories to make the completed and performed title perfectly up to standard.							
		Tower	8,00				8,00		
		SUM n.					8,00	397,00	3 176,00
		lamp holder for code 2202597300	32,00				32,00	9,00	288,00
		IP67 box for led 22/24, 70W code22092033600	9,00				9,00	165,00	1 485,00

31		BUILT IN SPOT LIGHT MICROFLOOR LED P=3,3W. Supply and lay in of light fixture in nylon with stainless steel frame, tempered glass disperser. Equipped with n°1 LED with power P=3,3W. Degree of protection IP67. Mark Disano model Microfloor LED 1634 or equivalent. sealed retaining and all taxes and accessories to make the completed and performed title perfectly up to standard.							
		External Areas	91,00				91,00		
		Fort Terrace	12,00				12,00		
		SUM n.					103,00	105,00	10 815,00
32		BUILT IN SPOT LIGHT MICRO-FLOOR LED P=3,3W-60°. Supply and lay in of light nylon fixture with stainless steel frame, tempered glass disperser. Equipped with n°1 LED with power P=3,3W and light beam with angle equal to 60°. Degree of protection IP67. Mark Disano model Microfloor LED 1634 or equivalent. Includes power supply and waterproof sealed box and all taxes and accessories to make the completed and performed title perfectly up to standard.							
		External Areas	45,00				45,00		
		SUM n.					45,00	105,00	4 725,00
		constant power supply module / min 1-max5/code 99766500	31,00				31,00	75,00	2 325,00
33		MARKER STARLED SPOT LIGHT P=2,5W. Supply and lay in of light fixture in unbreakable nylon, diecast aluminum frame and tempered glass disperser. Equipped with LED with power P=2,5W. Degree of protection IP67. Mark Disano model Starled 1623 or equivalent Includes power supply and all taxes and accessories to make the completed and performed title perfectly up to standard.							
		Stairs in the tower of the fortress	9,00				9,00		
		SUM n.					9,00	92,00	828,00
		power module 220.24 vIP65/min 1-max4/code 99766300	3,00				3,00	60,00	180,00
34		GLOBE SPOT LIGHT P=2x9W. Supply and lay in of light fixture of unbreakable polycarbonate, polished aluminum reflector and polycarbonate disperser. Equipped with n°2 fluorescent compact lamps with power P=9W. Degree of protection IP65. Mark Disano model Globo 1544 or equivalent. Including all taxes and accessories to make the completed and performed title perfectly up to standard.							
		Wc	5,00				5,00		
		SUM n.					5,00	45,00	225,00
35		WATERPROOF SPOT LIGHT P=2x58W. Supply and lay in of light fixture spot light of unbreakable and self-extinguishing polycarbonate, galvanized steel reflector and transparent polycarbonate disperser. Equipped with n°2 linear fluorescent lamps with power P=58W. Degree of protection IP66. Mark Disano model 921 Hydro or equivalent. Including all taxes and accessories to make the completed and performed title perfectly up to standard.							
		Technical Room	1,00				1,00		
		SUM n.					1,00	62,00	62,00
36		EMERGENCY CEILING LAMP 1X24W SA. Supply and lay in of fixed emergency lamp, type "always on" with the indication of the escape-way, with air-tight accumulators with NiCd, rechargeable, equipped with fine discharge device that protects accumulators, as well as self diagnosis device, autonomy 1 hour, recharge period 12 hours, fluorescent tube 1x24W. With the possibility to connect to a possible inhibition circuit Mounted including part of the derivation box, tubes and fire repellant cables. Degree of protection IP 65.Including all taxes and accessories to make the work perfectly functional and installed up to standard.							
		Wc	2,00				2,00		
		Technical Room	1,00				1,00		
		Souvenir Shop	1,00				1,00		
		External Areas	2,00				2,00		
		Museum	4,00				4,00		
		Wine Boutique	4,00				4,00		
		Polivalent Hall	4,00				4,00		
		SUM n.					18,00	95,00	1 710,00
		Delivery and installation of motion sensors in toilets							
		Wc	5,00				5,00		
		SUM n.					5,00	60,00	300,00
38		Added lighting point performed with multiple equipment modular standard series IP55 mounted in external box, performed in full view with cable NO7V-K with: containment box, command parts 16A, support and plate, cable, part of derivation box from the main distribution excluded, derivation terminals from the distribution, heavy corrugated PVC tube diameter 16/20mm, materials quipped with Quality Mark and including also the signature of the traces and the sharpening of tubes and boxes; excluded: marks, backgrounds, renewals, painting, wall works in general; everything to hand over the completed and performed title up to standard.							
		External Areas	163,00				163,00		
		SUM n.					163,00	20,40	3 325,20

39		Added lighting point performed with multiple equipment modular standard series mounted in built in box, chased in with cable NO7V-K with: containment box, command parts 16A, support and plate, cable, part of derivation box from the main distribution excluded, derivation terminals from the distribution, heavy corrugated PVC tube diameter 16/20mm, materials quipped with Quality Mark and including also the signature of the traces and the sharpening of tubes and boxes; excluded: marks, backgrounds, renewals, painting, wall works in general; everything to hand over the completed and performed title up to standard.							
		Wc	7,00				7,00		
		Souvenir Shop	11,00				11,00		
		Fortress Terrace	14,00				14,00		
		Wine Boutique	15,00				15,00		
		Polivalent Hall	8,00				8,00		
		Museum	8,00				8,00		
		SUM n.					63,00	11,14	701,82
40		Added lighting point performed with multiple equipment modular standard series IP55 mounted in built in box, chased in with cable NO7V-K with: containment box, command parts 16A, support and plate, cable, part of derivation box from the main distribution excluded, derivation terminals from the distribution, heavy corrugated PVC tube diameter 16/20mm, materials quipped with Quality Mark and including also the signature of the traces and the sharpening of tubes and boxes; excluded: marks, backgrounds, renewals, painting, wall works in general; everything to hand over the completed and performed title up to standard.							
		External Areas	18,00				18,00		
		SUM n.					18,00	9,17	165,06
41		Interrupted lighting point performed with multiple equipment modular standard series IP40 mounted in external box, performed in full view with cable NO7V-K with: containment box, command parts 16A, support and plate, cable, part of derivation box from the main distribution excluded, derivation terminals from the distribution, heavy corrugated PVC tube diameter 16/20mm, materials quipped with Quality Mark and including also the signature of the traces and the sharpening of tubes and boxes; excluded: marks, backgrounds, renewals, painting, wall works in general; everything to hand over the completed and performed title up to standard.							
		Service Room	1,00				1,00		
		SUM n.					1,00	35,50	35,50
42		Added lighting point performed with multiple equipment modular standard series IP40 mounted in external box, performed in full view with cable NO7V-K with: containment box, command parts 16A, support and plate, cable, part of derivation box from the main distribution excluded, derivation terminals from the distribution, heavy corrugated PVC tube diameter 16/20mm, materials quipped with Quality Mark and including also the signature of the traces and the sharpening of tubes and boxes; excluded: marks, backgrounds, renewals, painting, wall works in general; everything to hand over the completed and performed title up to standard.							
		Service Room	1,00				1,00		
		SUM n.					1,00	18,10	18,10
43		Command point with uni-polar button 10A chased in with multiple modular equipment standard series individually mounted in built in box, with cable N07V-K with containment box, command parts 10A, support and plate, cable, part of derivation box from the main distribution excluded, derivation terminals from the distribution, heavy corrugated PVC tube diameter 16/20mm, materials quipped with Quality Mark and including also the signature of the traces and the sharpening of tubes and boxes; excluded: marks, backgrounds, renewals, painting , back panel, vents, paints, wall works in general; everything to hand over the completed and performed title up to standard.							
		Souvenir Shop	2,00				2,00		
		Museum	8,00				8,00		
		Polivalent Hall	8,00				8,00		
		Wine Boutique	11,00				11,00		
		SUM n.					29,00	24,70	716,30
44		BUILT IN PVC FEEDING POINT 230V. Supply and lay in of built in feeding point made of chased PVC tubes. In the present entry all taxes and accessories to make the completed and performed work perfectly up to standard are included; instead the taxes for the wall works are excluded.							
		Wc	1,00				1,00		
		SUM n.					1,00	26,84	26,84
45		SUPPLY POINT AND FLUSH SECTIONING 230V. Supply and lay in of feeding point and built in sectioning made with corrugated PVC tubes. In the present entry all taxes and accessories necessary to make the completed and performed work perfectly up to standard are included.							
		Wc	3,00				3,00		
		Wine Boutique	1,00				1,00		
		SUM n.					4,00	35,12	140,48

46		SOCKET 2x16A+T. Supply and lay in of socket type CEE 2P+T-16A with interblock switch assembled on bottom modular plate of insulating material with fuse protection. Including part of the tubes, derivation box and fire retardant conductors section 3G4, and every other accessory to make the completed and performed title perfectly up to standard.							
		Service Room	1,00				1,00		
		SUM n.					1,00	67,78	67,78
47		SOCKET 3x16A+T. Supply and lay in of socket type CEE 3P+T-16A interblock switch assembled on bottom modular plate of insulating material with fuse protection. Including part of the tubes, derivation box and fire retardant conductors section 5G4, and every other accessory to make the completed and performed title perfectly up to standard.							
		Service Room	1,00				1,00		
		SUM n.					1,00	74,46	74,46
48		SOCKET POINT 2P+T-10/16A TYPE P30 EXTERNAL IP55 STANDARD SERIES. Supply and lay in of socket point 2P+T-10/16A type P30 in external performs, made with modular components standard series and including IP55 housing, hole covers, machines, external PVC tubes and cable for the connection to the main distribution. Including all taxes and accessories to make the work perfectly functional and installed up to standard.							
		Service Room	1,00				1,00		
		SUM n.					1,00	46,50	46,50
49		SOCKET POINT 2x10/16A TYPE P30 BUILT IN. Supply and lay in of socket point 2x10/16A+T type P30. Made with modular components standard series and including built in boxes, supports, equipments, plates, PVC tubes from corrugated to built in and cables for the connection to the main distribution. Including all taxes and accessories to make the work perfectly functional and installed up to standard.							
		Souvenir Shop	2,00				2,00		
		Museum	8,00				8,00		
		Polivalent Hall	8,00				8,00		
		Wine Boutique	8,00				8,00		
		SUM n.					26,00	31,70	824,20
50		Bivalent socket point 2 x 10/16A + T with multiple equipment modular standard series mounted in built in box chased in with: containment box, equipment, support and plate, cable, part of derivation box from the main distribution excluded, derivation terminals from the distribution, heavy corrugated PVC tube diameter 16/20mm, materials quipped with Quality Mark and including also the signature of the traces and the sharpening of tubes and boxes; excluded: marks, backgrounds, renewals, painting, wall works in general; everything to hand over the completed and performed title up to standard							
		Souvenir Shop	2,00				2,00		
		Museum	8,00				8,00		
		Polivalent Hall	8,00				8,00		
		Wine Boutique	8,00				8,00		
		SUM n.					26,00	39,10	1 016,60
51		HIDDEN TOWER n.2 BIPASS + n.3 P30. Supply and lay in of hidden tower for mounting modular devices standard series. Composed of: - n. 3 bivalent sockets 2P+T-10/16 comb. - n. 2sockets 2P+T-10/16 type P30 Including all taxes and accessories to make the work perfectly functional and installed up to standard.							
		Polivalent Hall	2,00				2,00		
		SUM n.					2,00	137,50	275,00
52		FLOOR-MOUNTING ELECTRICAL RECEPTACLE (TP). Supply and lay in of socket group for installing on floor-mounting electrical receptacle composed of: - n°2 sockets 2P+T 10/16A type P30; - n°2 sockets 2P+T 10/16A type bypass. With plate standard series, support, retaining box and pavement turret, heavy corrugated PVC tubes and cables for the connection to the main back supply line commanded by the light circuit. Including all taxes and accessories to make the completed and performed work perfectly up to standard.							
		External Areas	1,00				1,00		
		SUM n.					1,00	185,00	185,00

53		FLOOR-MOUNTING ELECTRICAL RECEPTACLE (TP1). Supply and lay in of sockets group for installation on floor-mounting electrical receptacle composed of: - n°1 socket 2P+T 10/16A type P30; - n°1 socket 2P+T 10 With standard series plate support, retaining box and floor turret, heavy corrugated PVC tubes and connection cables to the main back supply line controlled by the light circuit. Including all taxes and accessories to make the completed and performed work perfectly up to standard.							
		External Areas	2,00				2,00		
		SUM n.					2,00	175,00	350,00
54		SUPPLY POINT MECHANIC USER 230V. Supply and lay in of feeding point mechanic user 230V made of: - share of derivation box and accessories rigid PVC tubes; - cable type N07V-K, fire retardant, section 1.5-4 mmq.; - installation accessories; including all taxes and accessory for the performance perfectly up to standard.							
		Museum	2,00				2,00		
		Polivalent Hall	4,00				4,00		
		Souvenir shop	1,00				1,00		
		Wine Boutique	4,00				4,00		
		Service Room-ventilator	1,00				1,00		
		SUM n.					12,00	40,06	480,72
55		SUPPLY POINT AND External PVC SECTION 400V. Supply and lay in of feeding point and external sectioning made with rigid PVC tube mounted at sight. In the present entry are included all taxes and accessories to make the completed and performed work perfectly up to standard.							
		Open	2,00				2,00		
		SUM n.					2,00	64,39	128,78
		Delivery and installation of towers TQ, TM, T1 and T2 with standard series modular elements and installation of equipment provided in graphical. attachment / legends / and graphical. attachment,, Tower, all selected by interior designer: -							
		Museum	4,00				4,00		
		Polivalent Hall	4,00				4,00		
		Wine Boutique	4,00				4,00		
		SUM							
							12,00	950,00	11 400,00
56		START UP EMERGENCY BUTTON. Safety box of zinc plated sheet, coating of red polyester, neoprene gaskets, shatterproof glass, degree of protection IP44, signaling spy, with lamp support E 10, with lamp, fixing the box with screw on built in box and/or external, opening contact maintained close from the glass pressure, including accessories for mounting and cabling. Including tubes connections of galvanized steel and multi-polar cable type FG7OR self-extinguishing section 3G1,5 mmq from the box of the driving system.							
		Souvenir Shop	1,00				1,00		
		SUM n.					1,00	156,03	156,03
90		MAIN GROUNDING JUNCTION. Equipotential node composed of pre-bored copper bar length 0.3m including n.2 wall isolating supports for full view installment. Consider included the identification plates of the conductors and fixing systems for cables belonging to that junctions (excluding conductors), as well as all taxes and accessories necessary to make the installed work perfectly up to standard.							
		Museum	1,00				1,00		
		Service Room	1,00				1,00		
		SUM n.					2,00	110,00	220,00
91		Sink made of bare copper rope section 50 mm ², with strands of a diameter greater than 1.8 mm, located within the excavation, already 'prepared to be evaluated separately, including connections and outlets, all to give the title done and finished workmanlike							
			210,00				210,00		
		SUM m					210,00	6,20	1 302,00
92		Picket sink modular plug with copper elements in steel section depth stakes for 'sp. 5 mm length 1.5 m, diameter 20 mm, driven by hand or with ordinary hand tools in land, including connecting to the conductor, already 'prepared for the interconnection between the various elements of the earth, for air-ground, ready in intimate contact with the ground, including road sign applied to the wall, except for: excavation, and recovery wells, all to give the title done and finished arteprezzo rule for each element							
			10,00				10,00		
		SUM n.					10,00	81,00	810,00

93		Supply and installation of air-termination rod construction on the roof, chimneys and so on. for mounting with base cement.Overall Length: 2000 mm. Material: AlMgSi. Diameter: 16 mm. Suitable for socket wedge. Reference standard: CEI EN 50164-2 (CEI 81-15). Brand: DEHN Article: 104200 or equivalent. Including all charges and accessories to make the title over and built to the highest standards of art.							
		Tower A	1,00				1,00		
		Tower B	1,00				1,00		
		Museum	1,00				1,00		
		Wine Boutique	1,00				1,00		
		SUM n.					4,00	55,00	220,00
94		Supply and installation of DEHNhold Holder bracket for attaching capture rods and adduction jumper with eyelet cut open, suitable for fixed installation of conductor. Raw material steel bracket. Bracket for 16mm. Bracket height 20mm. Thread M8 bracket. Brand: DEHN Article: 274116 or equivalent. Including all charges and accessories to make the title over and built to the highest standards of art.							
		Tower A	2,00				2,00		
		Tower B	2,00				2,00		
		Museum	2,00				2,00		
		Wine Boutique	2,00				2,00		
		SUM n.					8,00	23,75	190,00
95		Supply and installation of round conductors according to IEC EN 50164-2 (CEI 81-15), for use in lightning protection and grounding. Conductor cross section: 8 mm. Conductor material: Cu. Conductive material characteristics: F25 half-raw. Brand: DEHN Article: 830038 or equivalent. Including all charges and accessories to make the title over and made ??to perfection.							
		Roof of the Museum, Polivalent Hall and Wines Boutique	150,00				150,00		
		Runs	70,00				70,00		
		SUM m					220,00	25,00	5 500,00
96									
		Supply and installation of DEHNhold Holder bracket for attaching round conductors with open jumper with eyelet cut, suitable for fixed installation of conductor. Raw material steel bracket. Bracket for conductors with Section 8-10mm. Bracket height 20mm. Thread M8 bracket. Brand: DEHN Article: 274110 or equivalent. Including all charges and accessories to make the title over and built to the highest standards of art.							
			230,00				230,00		
		SUM n.					230,00	8,00	1 840,00
		PREPARATION OF AS-BUILT TECHNICAL DOCUMENTATION. Presenting graphic documents for the construction of the plant; on them with extreme exactness and instantaneous intelligibility fro all equipments and works performed. The graphic designs will allow a rapid consultation by the staff established by the Contractor for the maintenance of the plant. For the electric panels the electric patterns of the project will be updated, integrating them with the single wire and functional patterns, with the exact marking of the lines and terminals, of the calibration of the protection machines, etc. Including revision and certification of the pre-existent plant sections will be registered. The company will also edit a use and maintenance manual for the plant.							
97		n. plet	1,00				1,00		
		SUM n.					1,00	3 500,00	3 500,00
		TOTAL							**100 273,55**

F. MECHANICAL PLANTS

N°	PRICE CODE	ITEM	DIMENSION				Total	AMOUNT	
			quantity	lenght	width	heigth/weight	Quantity.	unit	TOTAL
		A. INSTALLATION OF VRF SYSTEM							
1.		Delivery and installation of VRF outdoor unit system, the thermal version of the pimp, with the following characteristics: Manufacturer: Toshiba, or equivalent Type: MMY-MAP2014HT8-E Nominal cooling capacity: 56kW na 35^{0}C Nominal heating capacity: 63kW na 7^{0}C Refrigerant fluid: R410A Cooling-electric power: 14,82kW Heating-electric power: 15.00kW Power: 400V/50Hz Dimensions (HxWxD): 1830 x 1980 x 780 mm							
		Weight: 484 kg, No.					1	14 961,00	14 961,00
2.		Delivery and installation of indoor units parapet without cover VRF systems, with the following characteristics. Manufacturer: Toshiba, or equivalent type: MML-AP00154BH Cooling capacity: 4.5kW Heating capacity: 5.0kW							
		Dimensions (HxWxD): 600 x 1045 x 220 mm, No.					7	1 217,00	8 519,00
3.		Delivery and installation of indoor units parapet without cover VRF systems, with the following characteristics. Manufacturer: Toshiba, or equivalent type: MML-AP00184BH Cooling capacity: 5.6kW heating capacity: 6.3kW							
		Dimensions (HxWxD):600x1045x220mm, No					3	1 232,00	3 696,00
4.		Wall controller RBC-type AMT32E, TOSHIBA or equivalent.					10	86,00	860,00
		No.							
5.		Delivery and installation of copper fittings, Y branches and tees, pipe distribution for CFC-TOSHIBA or equivalent:							
		RBM-BY205E, No.					1	151,00	151,00
		RBM-BY105E, No.					3	95,00	285,00
		RBM-BY55E, No.					6	87,00	522,00
		RBM-BT14, No.					1	251,00	251,00
6.		Delivery and installation of copper piping from external refrigerant to the indoor unit of the following dimensions:							
		1/4" - Ø6.4, m.					39	3,00	117,00
		3/8" - Ø9.5, m.					72	5,30	381,60
		1/2" - Ø12.7, m.					50	6,30	315,00
		5/8" - Ø16, m.					115	8,90	1 023,50
		7/8" - Ø22, m.					20	10,90	218,00
		1 1/8" - Ø28, m.					60	14,10	846,00
7.		For fittings, suspension accessories, welding material, etc., takes 60% of the positions of the pipe.							
		60%					0,6	2 901,10	1 740,66
8.		Delivery and installation of PVC pipes for drainage of the following dimensions:							
		Ø25, m.					100	3,00	300,00
		Ø32, m.					150	4,00	600,00
9.		Delivery and installation of PVC sewer pipe for taking the copper piping in the excavated channel, the following dimensions:							
		Ø160, m.					180	11,30	2 034,00
10.		For fittings, suspension accessories, welding material, etc., the position takes 30% of the PVC pipe.							
		30%					0,3	2 934,00	880,20
11.		Delivery and installation of thermal insulation with a tubular water vapor barrier.							
		1/4" - Ø6, m.					39	0,90	35,10
		3/8" - Ø10, m.					72	0,95	68,40
		1/2" - Ø12, m.					50	1,00	50,00
		5/8" - Ø16, m.					115	1,20	138,00
		7/8" - Ø22, m.					20	1,90	38,00
		1 1/8" - Ø28, m.					60	2,10	126,00
		1 3/8" - Ø35 and isolation of water kondenznog, m.					210	2,50	525,00
12.		Delivery and installation of aluminum sheet for the isolation of the external piping.							
		m²					20	20,50	410,00

13.		Delivery and installation of R-410A Freon complement.							
		kg.					13	23,50	305,50
14.		Electrical works at the customer cabling, delivery and installation of thermostatic and signal cables. These works do not include the laying of power cables.							
		LiY-CiY 2x1,5m2, m.					550	2,90	1 595,00
15.		Delivery and installation of uninsulated flexible hose, of the following dimensions.							
		Ø125, m.					23	5,80	133,40
16.		Delivery and installation of round channel fans, with the following characteristics: Product: Systemair or equivalent Type: K 315 M installed power: 23W, 220V speed: 900o/min working point: 490m3/h-30Pa.							
		The price include the speed regulator and flexible connections.					1	508,00	508,00
		No.							
17.		Delivery and installation of valves, the exhaust air from the toilet, HIDRIA product or equivalent, with the following dimensions.							
		PV-1 fi 125							
		No.					3	16,40	49,20
18.		Delivery and installation of PVC pipe for the suction of air from the toilet.							
		Ø125, m.					4	7,00	28,00
		Ø200, m.					10	14,00	140,00
		SUBTOTAL A. INSTALLATION OF VRF SYSTEM							**41 850,56**
		B. OTHER ASSOCIATED WORKS							
1.		Ground breaking, delivery tools and support tools, storage, internal transport and unloading of vehicles entering, storing and guarding against damage.							
		lump sum					1	1 370,00	1 370,00
2.		Measurement and adjustment of system parameters on the projected value with the development as built surveys, instructions for use and handling of the installation.							
		lump sum					1	920,00	920,00
		SUBTOTAL B. OTHER ASSOCIATED WORKS							**2 290,00**
		SUMMARY							
		SUBTOTAL A. INSTALLATION OF VRF SYSTEM							41 850,56
		SUBTOTAL B. OTHER ASSOCIATED WORKS							2 290,00
		TOTAL							**44 140,56**

G. FIRE EXTINGUISHER

N°	PRICE CODE	ITEM		DIMENSIONS			Total	AMOUNT	
			quantity	lenght	width	height	Quantity.	Unit	SUM
1		First Manual devices for initial fire extinguishing type S-9, pieces MEASUREMENTS:							
			8,00				8,00		
		SUM m2					8,00	50,00	400,00
		TOTAL							**400,00**

H. ACCESS ROAD

N°	PRICE CODE	ITEM		DIMENSIONS			Total	AMOUNT	
			quantity	lenght	width	height	Quantity.	Unit	SUM
		A. PREPARATORY WORK							
1	1.1.	Geodetic mark of traffic areas, natural and detailed points							
		lump sum							300,00
2	1.2.	Indentation of the existing pavement at the site of connection of the existing pavement and the planned path							
		m'					17,47	5,00	87,35
		SUBTOTAL A. PREPARATORY WORK							**387,35**
		B. SUBSTRUCTURE							
3	2.1.	Excavation in a wide range of excavated material on the route of third and fourth categories, inclusive of excavation and topsoil loading and transport to landfill							
		m3					323,45	4,50	1 455,53
		SUBTOTAL B. SUBSTRUCTURE							**1 455,53**
		C. SUPERSTRUCTURE							
4	3.1.	Production of sand-gravel pad beneath the access road and 1.2m wide stone path around the buildings fortifications. Buffer layer is 15 cm thick, mechanical tamping with proper path to the required density.							
		m3					148,61	12,00	1 783,32
5		Preparation of access roads and paths around the buildings of stone plate thickness of 5 cm in the sand. Stones set in sand layer thickness of 5 cm, properly leveled in agree to the project and record details. Joints filled with sand and cleaning of the surface of the plate. The purchase price inputs laminated stone the substrate of the sand and fill joints.							
		m²					930,46	45,00	41 870,70
6	3.2.	Procurement, supply and installation of concrete curbstone 15/20/80 50 MB of which are built on concrete subjected to 15 MB, filling of joints with cement mortar. The correct radius derived by cutting the curbstone on the appropriate action.							
		a) curb to separate the different surface treatment 15/20							
		m'					16,65	17,00	283,05
		SUBTOTAL C. SUPERSTRUCTURE							**43 937,07**
		D. OTHER WORKS							
	4.1.	Humuziranje slopes, shoulders and thick humus green belt 20cm							
		m2					3,64	3,50	12,74
		SUBTOTAL D. OTHER WORKS							**12,74**
		E. TRAFFIC SIGNALLING EQUIPMENT							
7	5.1.	Supply and installation of traffic signs (not included and set of pillars)							
		a) information signs							
		II-40 (diameter d=60cm)					1,00	60,00	60,00
8	5.1.	Supply and installation of poles, carrier traffic signs							
		No.					1,00	40,00	40,00
		SUBTOTAL E. TRAFFIC SIGNALLING EQUIPMENT							**100,00**
		SUMMARY							
		SUBTOTAL A. PREPARATORY WORK							387,35
		SUBTOTAL B. SUBSTRUCTURE							1 455,53
		SUBTOTAL C. SUPERSTRUCTURE							43 937,07
		SUBTOTAL D. OTHER WORKS							12,74
		SUBTOTAL E. TRAFFIC SIGNALLING EQUIPMENT							100,00
		TOTAL							**45 892,69**