4-A.8 Breakdown of Upgrading of existing Bridge works

Item	Description	Unit	Quantity	Unit Price (EUR)	Price (EUR)
A.8.1	**Project Preparation**				
A.8.1.1	Architectural Tests/Restoration-Conservation Projects	per bridge	48		
A.8.2	**ARCHITECTURAL CONSERVATION / RESTORATION WORKS**				
A.8.2.1	**SCAFFOLDING**	m²	44,153		
A.8.2.2	**REMOVALS**				
A.8.2.2.1	*Removal of Ballast*	m³	3,236		
A.8.2.2.2	*Removal of Earth fill*	m³	16,116		
A.8.2.2.3	*Removal of Existing Handrails*	kg	6,036		
A.8.2.2.4	*Removal of foreign material*	m³	353		
A.8.2.3	**CLEANING**				
A.8.2.3.1	*General Mild Cleaning of Stone Surfaces*	m²	29,216		
A.8.2.3.2	*Removal of sulphation layers/ stains & crusts*	m²	27,960		
A.8.2.3.3	*Removal of Salts/ Desalination*	m²	14,716		
A.8.2.3.4	*Removal of Vegetation/ organic growth*	m²	973		
A.8.2.3.5	*Removal of cementitious grouts, joints etc*	m²	27,951		
A.8.2.4	**MASONRY REPAIRS**				
A.8.2.4.1	*Replacement of Defective Stones*	m³	104		
A.8.2.4.2	*Rebuilding Sections of Stone masonry*	m³	1,044		
A.8.2.4.3	*Partial Stone Repairs*	m²	418		
A.8.2.5	**RE-POINTING MASONRY JOINTS**	m²	28,325		
A.8.2.6	**NEW WATERPROOFING/ INSULATION**	m²	9,777		
A.8.2.7	**NEW INFILL**	m³	16,115		
A.8.2.8	**NEW HANDRAILS**	kg	15,510		
A.8.2.9	**NEW MAINTENANCE WALKWAYS**	kg	32,020		
A.8.2.10	**NEW ACCESS PATHS**	m	448		
A.8.3	**STRUCTURAL UPGRADING AND STRENGTHENING OF OLD BRIDGES WORKS**				
A.8.3.1	**Verify load - bearing capacity of bridge and foundation**	per bridge	48		
A.8.3.2	**Project for increasing load - bearing capacity of bridge superstructure (if required)**	per bridge	48		
A.8.3.3	**Project for increasing load - bearing capacity of bridge substructure and foundation (if required)**	per bridge	48		
A.8.3.4	**Repair overside arch with mortar + thin insulation**	m²	6,500		
A.8.3.5	**Relieving slab ("new bridge inside the old"), concrete A35**	m³	2,700		
A.8.3.6	**Relieving slab ("new bridge inside the old"), reinforcement**	t	400		
A.8.3.7	**Insulation + protection layer on top of relieving slab**	m²	3,900		
A.8.3.8	**Excavation for strengthening/widening of foundation**	m³	18,000		
A.8.3.9	**Widening of foundation with RC - beam along foundation sides, concrete**	m³	2,700		
A.8.3.10	**Widening of foundation with RC - beam along foundation sides, reinforcement**	t	400		
A.8.3.11	**Riverbed and/or slope protection with mass concrete + big stones**	m³	3,000		
A.8.3.12	**Rivertraining ("remove soil and shape riverbed")**	m³	25,000		
A.8.3.13	**Insulation + protection layer on top of concrete slab bridge ("Ferbeton").**	m²	300		
A.8.3.14	**Concrete repair, depth 0-75 mm, at underside and overside of concrete slab bridge ("Ferbeton")**	m²	250		
A.8.3.15	**Micro - piles placed stepwise under existing foundation.**	m	1,200		
A.8.3.16	**Strengthening/renewal of concrete slab bridges ("Ferbeton")**	m	65		
A.8.3.17	**Strengthening/renewal of steel bridges**	m	175		
				TOTAL A.8	

Date

Name

Signature _____

Duly authorised to sign for and on behalf of