

Annex 1.1 - Description of Works; Lot 1

Ag. Anastasios Church is located in Peristerona/Alaniçi, Cyprus.

The height of its Bell tower is 11.8 meters from the base and 5.9 meters from the roof of the church, where the bell tower becomes a cantilever member

The bell tower has approximately 1.65 x 1.65 meters square plan. Above the roof the bell tower is composed of two parts, solid base, and first level. The cross and the bell is missing.

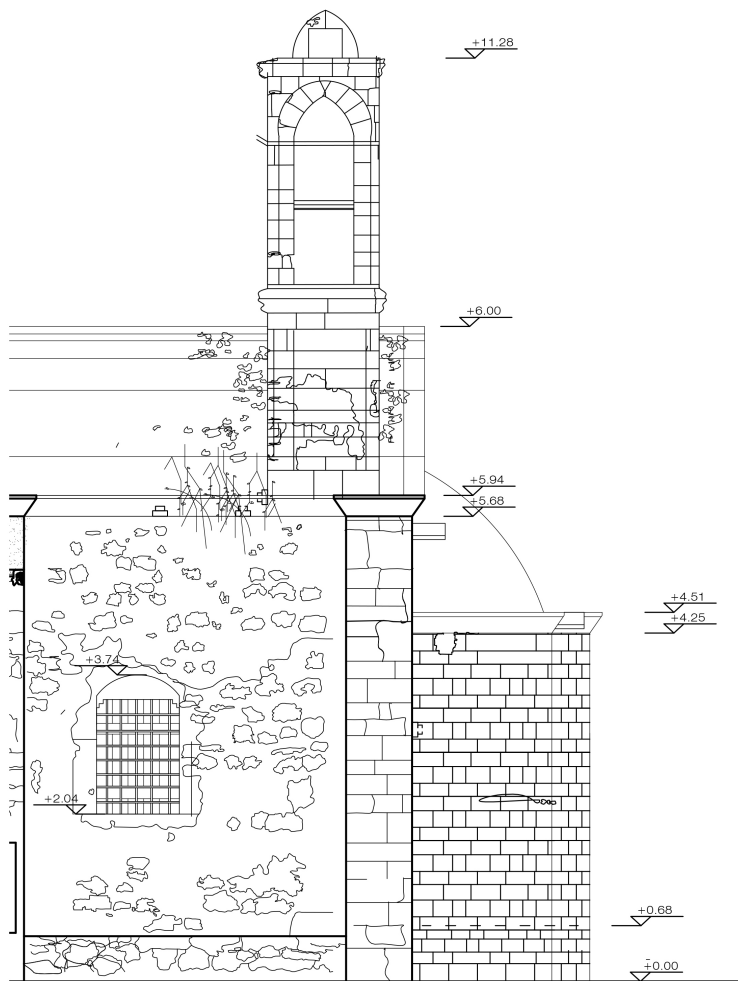
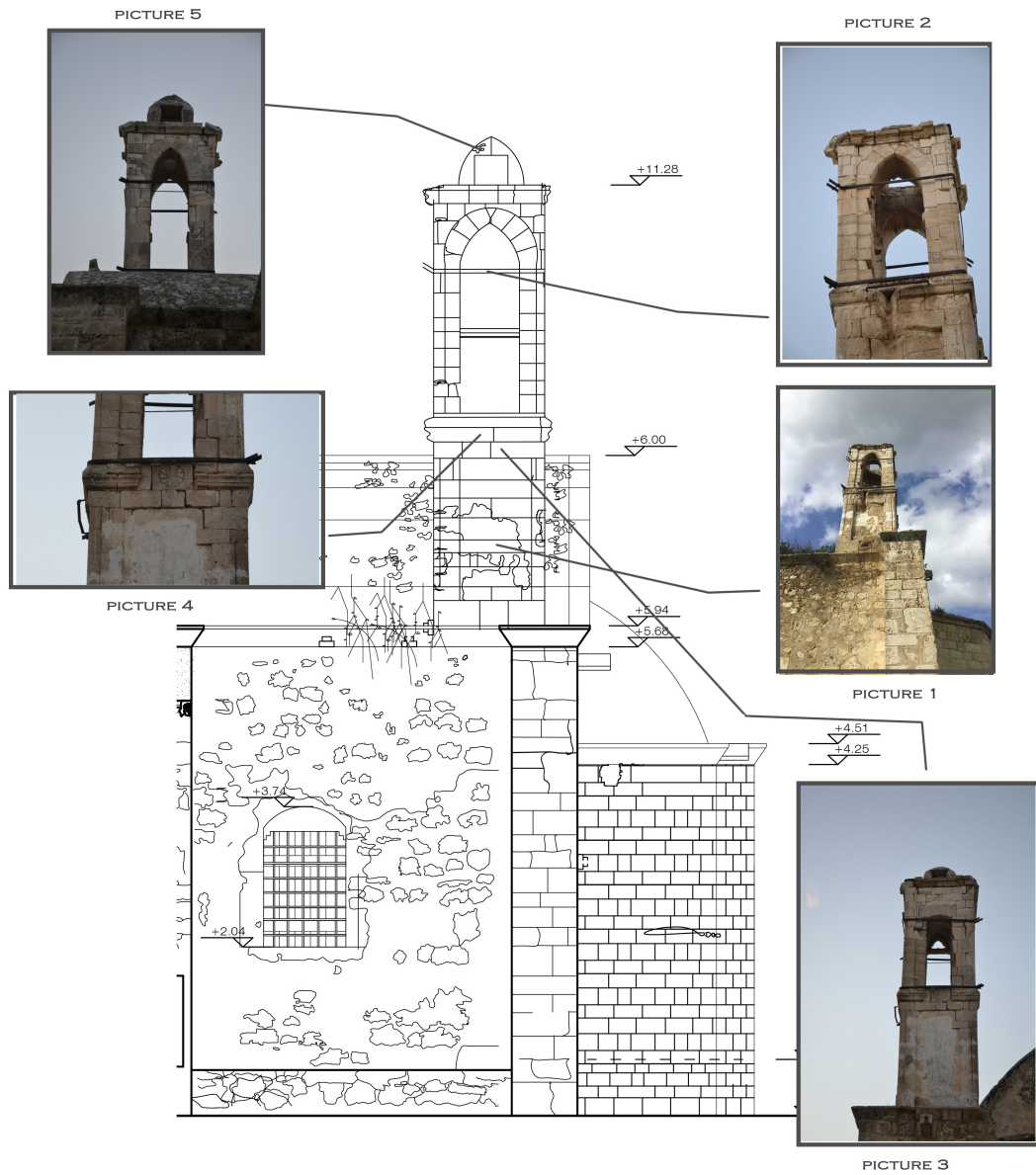


Figure 1 South Elevation

The construction materials are local cut limestone, ornamented limestone, wooden beams, corroded structural surrounding ties can be seen and horizontal iron beams for bell.



	Extensive stone loss is seen especially in the upper part of the first level Past strengthening measures, surrounding iron elements are corroded and turned to be insufficient. Out of plane movement (leaning towards north) is observed in the bell tower.
	Leaning starts at the end of the first level and beginning of the second level, where first iron surrounding member is located There are ornamented stones at the first cornice level. Stone detachments are seen especially in the upper cornice level under the dome along with stone material loss. Binding material loss is observed in all surfaces of the bell tower. Stone dislocations due to past movements are seen especially in the upper level.

Support materials and treatment:

Wood specifications and treatment:

Pine timber according to EN350 all pine wood used in the project must be kiln dried at 10% $\pm$ 2% Moisture content. All wooden members have to be treated with colored protective coating, Silvanol 726 or equivalent.

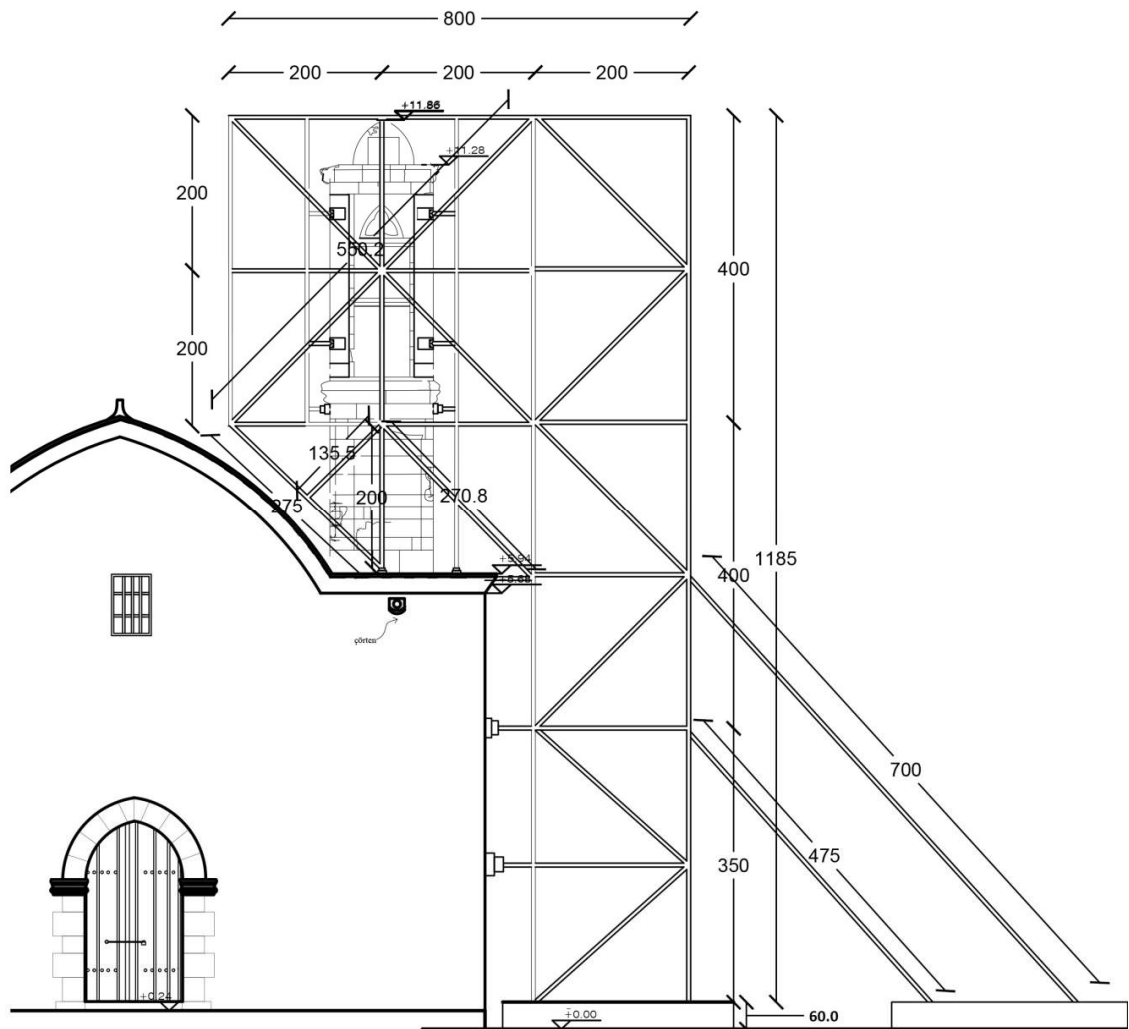
Anticorrosion coating:

All the iron members including bars bolts screws must be protected with water resistant , anti – corrosive primer such as (sika Armatec 100 master seal 300) or equivalent.

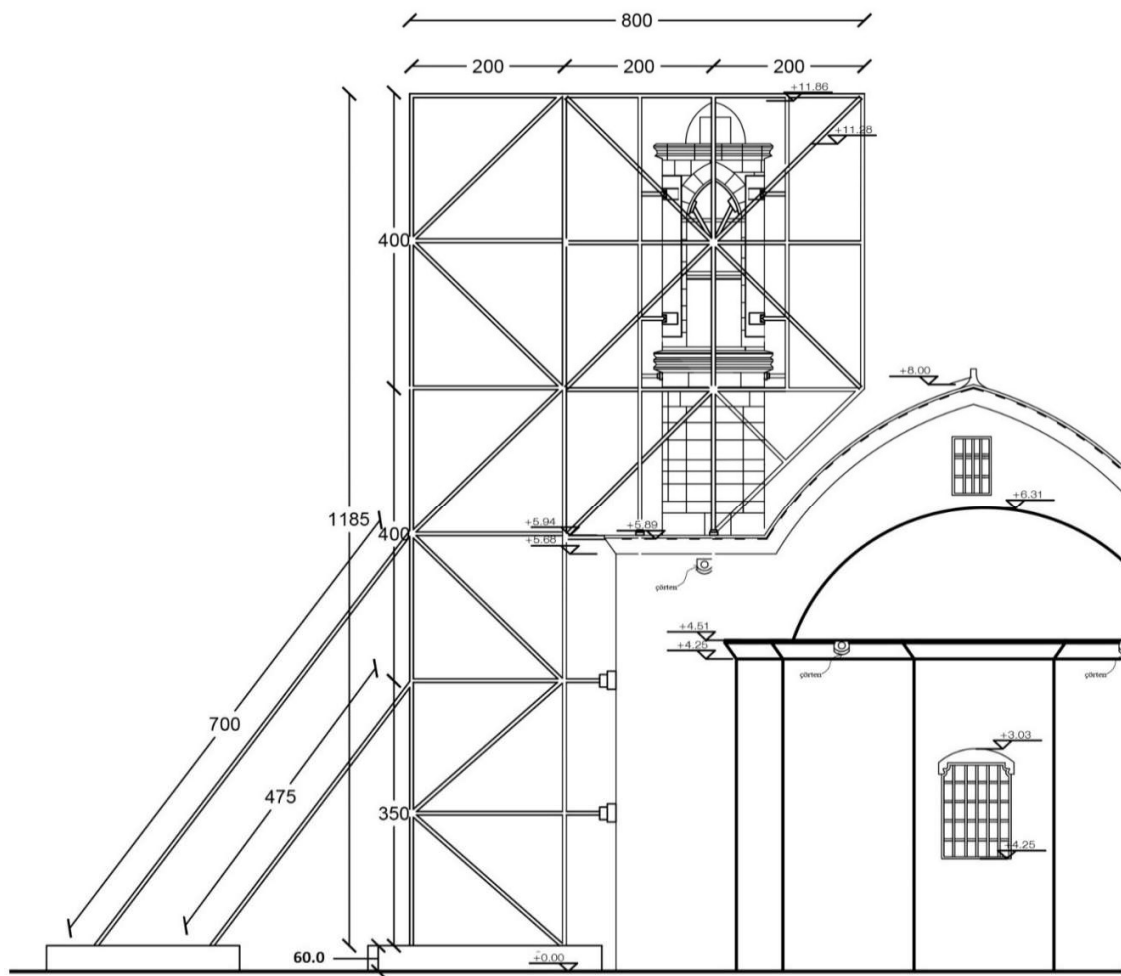
Description of Works:

No:	Work Item	Description
1	Site mobilization and demobilisation	Mobilization consists of preparatory work and operations necessary for site setup, equipment, supplies, health & safety and incidentals at the site. Liability insurance up to Euro 50,000 for the duration of the project and to cover all persons on site. Site cleaning and demobilization after completion of the works.
2	Permanent Support and Scaffold setup and its material treatment	Ring lock scaffold system will be used as indicated in the drawings. For the diagonal supports coupler system complying with standard EN74-1 A have to be used. All scaffold set up and materials used have to comply with EN 12811. Connection details of the supports and scaffolds are also provided. Use Pine timber according to EN350. All pine wood used in the project must be kiln dried at 10% ± 2% Moisture content. All wooden members have to be treated with colored protective coating, Silvanol LS 726 or equivalent. Protect all the iron members including support bars bolts screws must be with water resistant, anti – corrosive primer such as (sika Armatec 100 master seal 300) or equivalent. All iron support and scaffold members must comply with EN 12811. - Materials submission will be required for the scaffold elements - Materials submission will be required for anti-corrosive primers - Method statement is required for the scaffolding
3	Reinforced concrete footings	Two separate rectangular reinforced concrete foundations with dimensions 2.6x4.5m and 3.1x4.5m respectively will be required to counteract the props. The footings will be cast on the site with ready mix concrete. Curing of the concrete footings will be carried out; watering every day for 14 days. Reinforcement will be with a Yield Strength of Steel (fpy): 420N/mm² Design mix for concrete C30 shall be provided to UNDP. The footings will be laid on the existing ground; if ground adjustments are needed coarse sand beds will be used and polyethylene sheets will be used as interface between the ground and the footing. Props are to be connected to the concrete footings as per detail 5. - Contractor will submit a method statement before proceeding

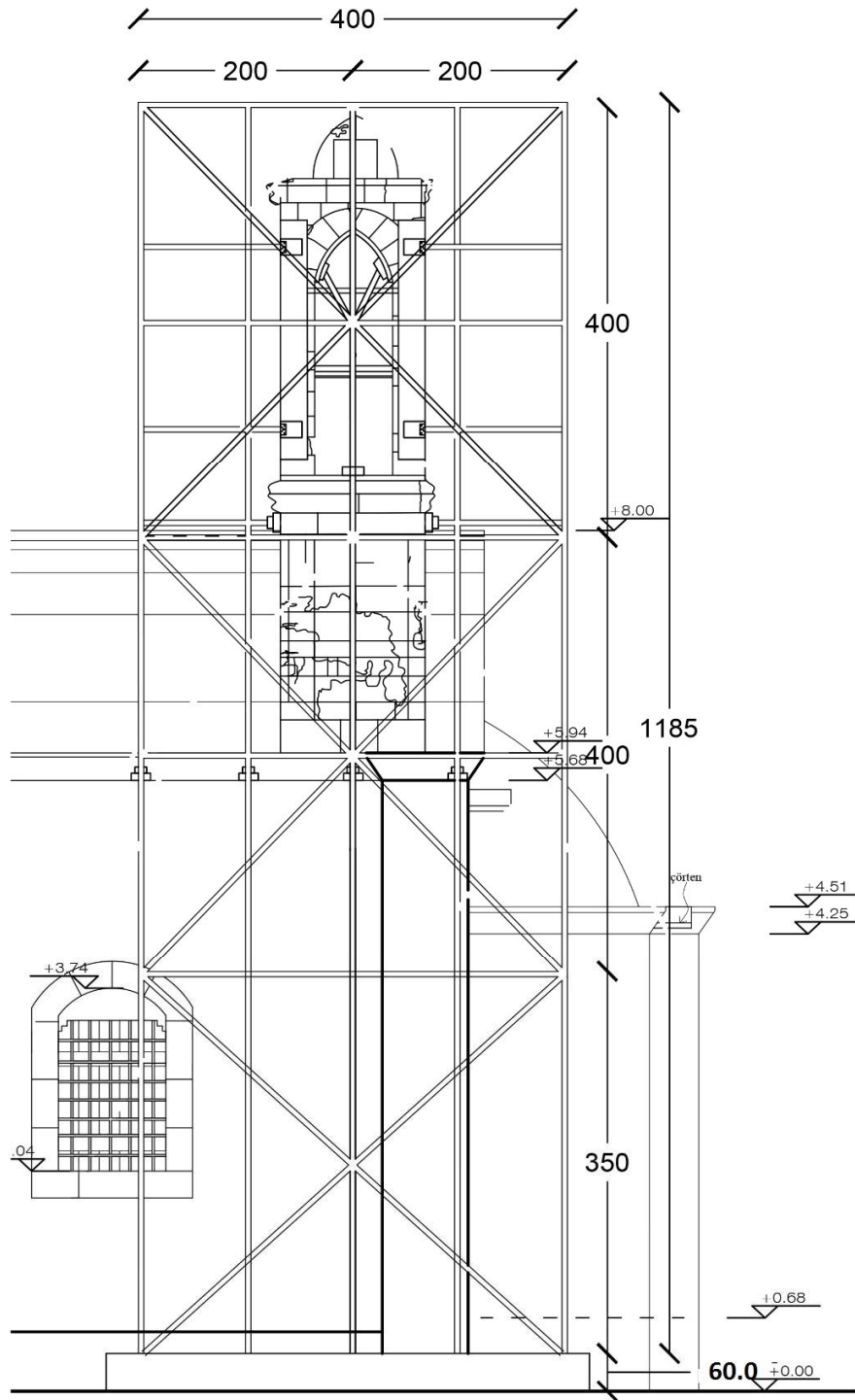
Drawings



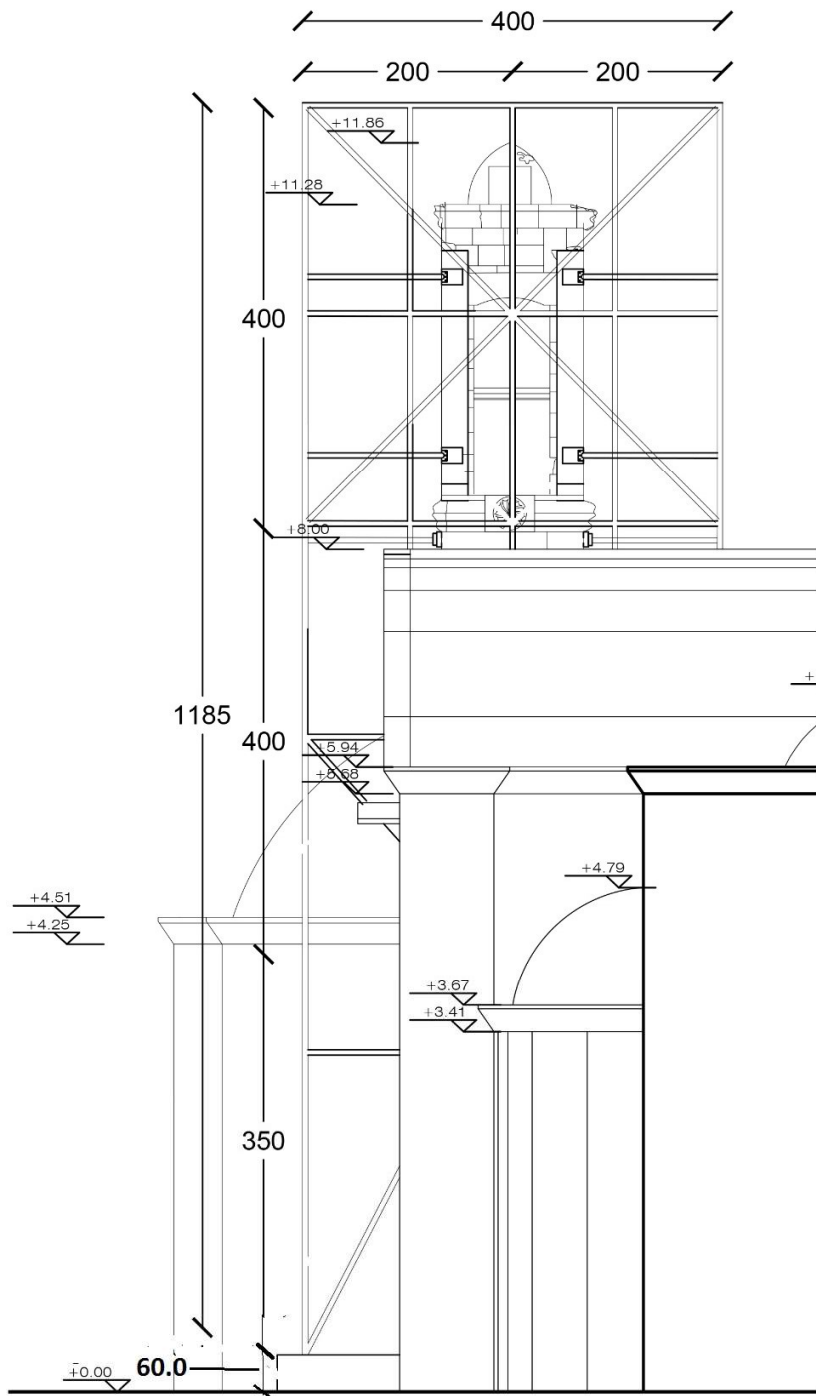
West Elevation



East Elevation



South Elevation



North Elevation

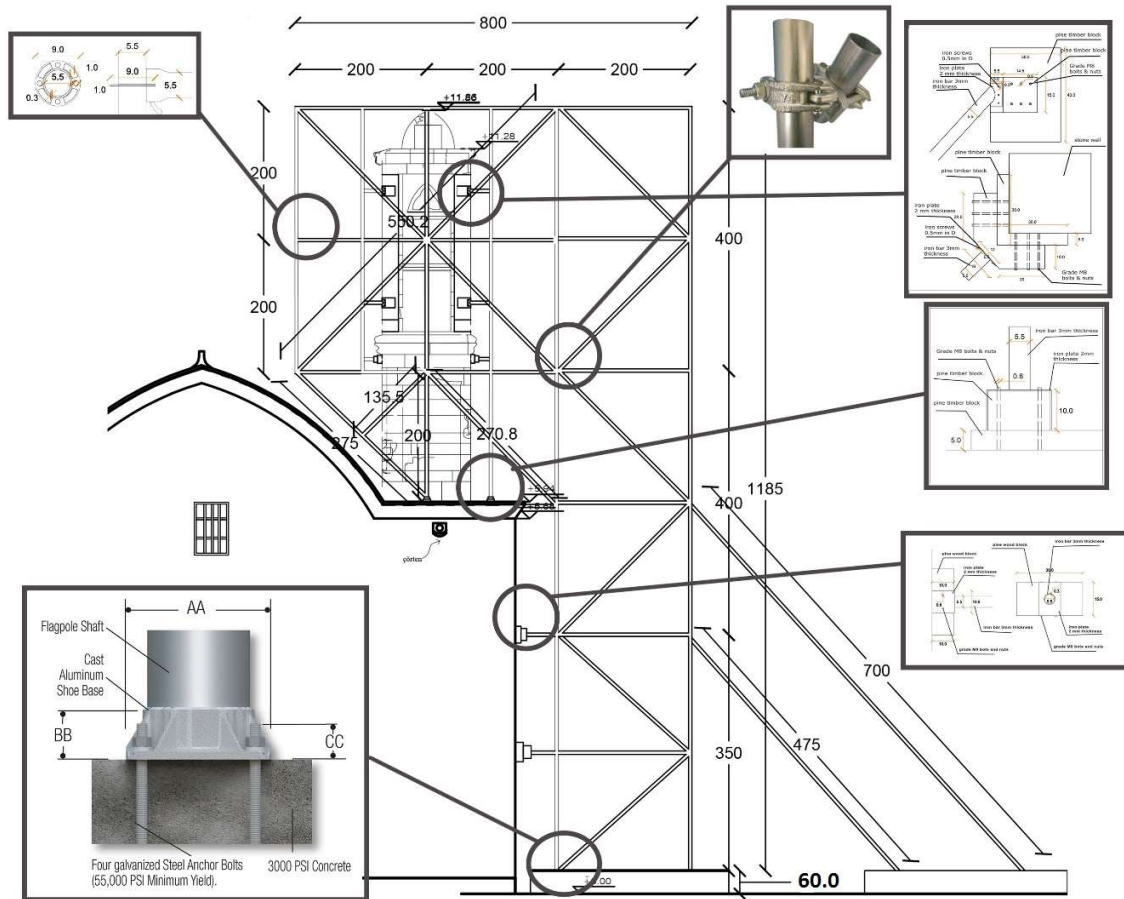
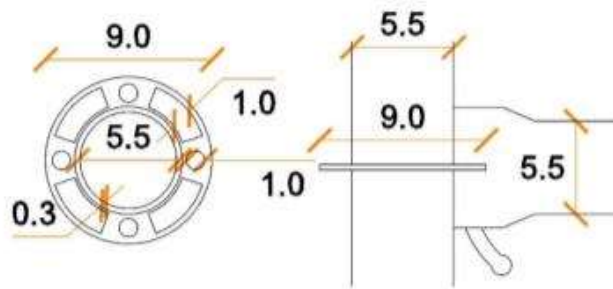


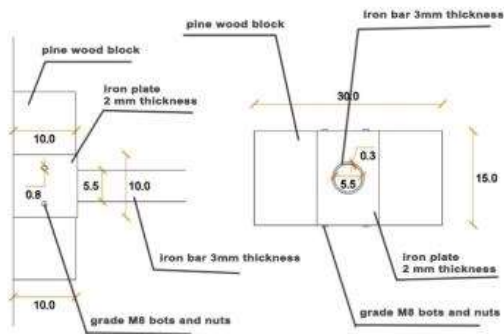
Figure 7 Scaffold connection and base details



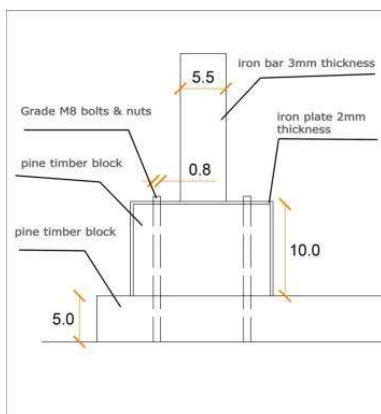
Detail 1 Ring Lock scaffolding



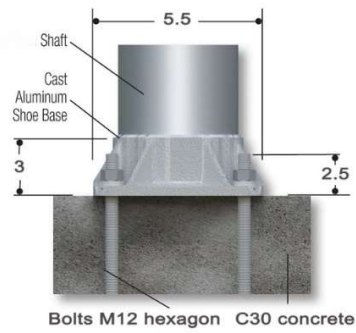
Detail 2 coupler for diagonal connections (EN-74 Class A)



Detail 3 horizontal support points



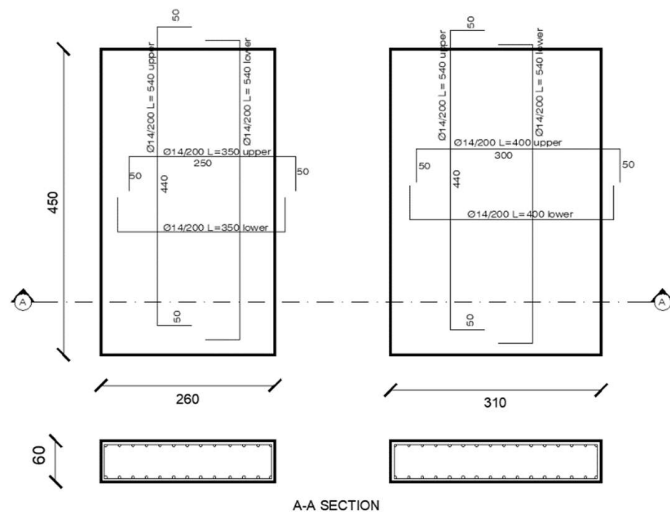
Detail 4 footing connection of the vertical support



Detail 5 footing connection of the support

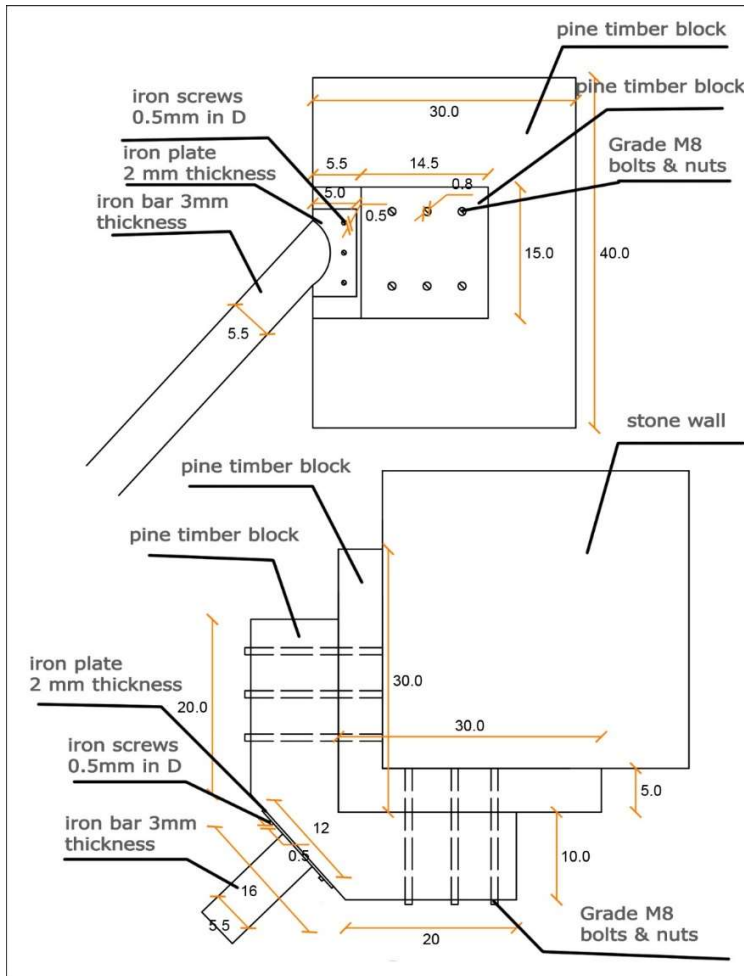
Footing

Reinforcement plan can be seen below.



Foundation Materials

Material	Quantity	Unit
Concrete (C30)	15.4	m3
Rebar (Ø14 – S420)	795	kg



Detail 6 the corner support detail

Photo Album











