#### **EXTERNAL WORKS - PARTICULAR TECHNICAL SPECIFICATIONS**

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## 2.3 Description of Interventions - Particular specifications

# 2.3.1. Preliminary works - Protection

### A. Planning, arrangements and security matters of the work-site:

The construction of a 2 metre high fence made out of metal sheets is recommended that will surround and define the work-site area. Because of the extent of the area this can be arranged in segments following the work execution which has to be in parts so as to have at all times access to the Church and Agiasma. Also, a depositing area for equipment and building materials must be arranged in several locations according to the work progress.

The storage of materials, the depositing of debris together with the rest of the works, shall not take place outside the area of the work-site.

Signs will be placed at the entrances and where needed giving instructions for the safety of the workers and all of those visiting the site.

Debris and useless material will be gathered in bags or in a special container - Skips and will be taken away during the procedure of the works.

# 2.3.2. Demolitions

#### A. Demolition of vendors shelters:

These structures at the south side of the South Court it is expected to be undertaken by the owners.

## B. Demolition of wooden shelters (great plateau):

The contractor is responsible to demolish all structures in the area. The shelters are wooden structures based on reinforced concrete base. The demolition (dismantling) of the wooden shelters must be done with care because (some of them) can be reused. The reusable material must be stored at a designated space in the monastery which will be pointed out by the Engineer.

#### C. Round-about materials:

The existing curb-edge of the round-about will be totally removed. It consists of prefabricated cement edge blocks (kerbs) and concrete foundation. The kerbs must be kept stacked on palettes and stored at the space to be shown by the Engineer.

Leveling and grading of the area shall be made.

### **D.** Preservation of existing well:

### E. Concrete steps:

The existing concrete steps at the right and left of the patron's memorial will be removed. Careful removal must be made not damage the rock surfaces extensively.

## F. Concrete steps:

The existing concrete steps at the SE corner of the 1919 building leading to the north side of the church and the new ramp will totally be removed. Careful removal must be made not damage the rock surfaces extensively.

#### G. Pavement materials:

The existing pavement of all areas affected by the project shall be attended. It is either asphalt or cement. Careful removal of the surficial materials must be made to reveal the natural rock surfaces.

# H. Excavations and installation of drainage system:

In several areas drainage channels will be done as indicated on the drawings. It is estimated that the channel will be within the natural rock's zone, which must be carefully cut and only as much as it is necessary for the channel's (pipe) positioning.

### I. Excavations for plants

Digging must also be done for planting in several locations.

## 2.3.3. Paving materials:

After cleaning (asphalt, cement etc.) rock or soil is expected to be revealed and the existing levels will be cleared. The new pavements will be constructed according to the shape of the rock. Cutting of rock in order to place new pavement must be the minimum possible which means that some areas will remain unpaved and the rock will be visible. This principle must be considered everywhere but mainly in the south court. Not all areas shown on drawings as paved (either granite or cement) will be done so. For estimation and cost calculation purposes though all areas must be considered as paved. The areas to be unpaved will be decided during the execution of the work by the supervisors.

# A. Limassol stone pavements and steps:

Precut Limassol stone slaps will be used in certain areas as shown on the drawings. Stones should be chiseled, that is, they must have rough not slippery surface (sand blasted or hand chiseled). At no circumstances machine cut surfaces will be applied. Samples of the material to be used should be

submitted for approval. Same colour stones should be used for all areas with this material. All stone pavings must be surrounded (enclosed) with stone edges (curbs) so as no loose edge should remain. Stone edges must be placed on cement base and their width may very (see drawings). Pavement stones should be cut with precision so as wide joints to be avoided. All new steps (south court, NW corner steps etc) should be of solid Limassol stone (dwg ENV06 Detail 1).

### **B.** Concrete pavements:

Concrete pavements with exposed aggregates will be constructed mainly in the great plateau and elsewhere as indicated on the drawings. It is proposed to use granastone plus or else equivalent. Above the reinforced concrete substructure the finishing material will be placed which is composed of aggregates, cement and sand, polymer additives and fiber mesh reinforcement of total thickness of 3 - 4 cm. When the mixture is almost set the aggregates are exposed with brushing and cleaned. Construction joints of SS or aluminum profile must be inserted every 15 m2 and expansion joints must be done every 100 m2. Joints must be done as per drawings and must be related with granite bands which divide the surface (see drawing ENV03 D7). The colour of the aggregates to be used should be the same in all areas and will be decided after samples construction. All areas to be done this way must have a reinforced cement border (edge) of 40 cm width as indicated on the drawings (aggregates will not be exposed).

# 2.3.4. Draining system:

As indicated on drawings a draining system must be constructed to collect and direct rain water to the sea. It is estimated that the channel will be within the natural rock's zone, which must be carefully cut and only as much as it is necessary for the channel's and pipe positioning. During excavation it is important to take in consideration the proper slope for the water flow. The drainpipes should preferably be of prefabricated concrete tubes of 30 cm diameter and channels of reinforced concrete as per relevant detail drawings. All channels will be covered with water traps made of prefabricated granite elements. Along the pipes, manholes every 15 m must be constructed for access purposes. Manholes should be of reinforced concrete 40x40 cm clear area and must be covered with a single removable granite slab.

# **2.3.5.** Fencing:

Along the perimeter of the great plateau (south and west sides) fencing will be constructed. As shown on drawings it consists of a fair-face concrete base and a metal railing. At intervals of 5-5.5 meters, stone pillars of solid Limassol stone will be constructed. The construction must follow the ground slope thus the concrete base may vary in height but the upper part of it has to be stepped not with slope.

The fencing of the West Court will be constructed as per drawings (D13) (two faces of Limassol stone, internal space with rubble stone, capping on top, above metal railing and stone pillars).

Along the north side of the complex (from toilets building to the east) a more simple fencing (D19) will be constructed to prevent animals entering the side.

### 2.3.6. Metal items:

Metal gates will be constructed in several locations as per drawings (total 8). Metal railings will be constructed on low walls (great plateau, west court and patrons memorial) and railings for disabled will be constructed along the two ramps (south and north). All metal items must be painted with a

high quality paints suitable for marine and coastal environment to give maximum corrosion protection. DULUX Aguagalv which contains zinc metal or other equivalent must be used. The paint must be applied according to manufacturer's instructions.

### **2.3.7.** Fountain:

It must be cleaned of modern paints and lime-wash by means of water under pressure. Roots and plants must cleaned and biocide to be applied. Loose or broken stones to be removed and/or repaired or replaced (cornice and elsewhere). Internally to be cleaned by means of water under pressure and new over-floating system to be installed. Cracks and loose roof cement mortars to be repaired and new insulation to be applied. All perforated metal sheets for ventilation to be replaced with similar ones and fixed properly. Drainage system to be checked. If necessary a new drainage to be constructed and can be connected to the new main drainage system. New bronze faucets to be provided and installed.

### 2.3.8. Phiale (Fountain-west court):

A Phiale (fountain) will be constructed in the middle of the west court. It will be constructed with marble (in two pieces, base and basin) as per drawings. It must have a drainage system connected to the main one.

#### 2.3.9. The Patrons Memorial:

All metal items (rail, posts etc.) will be removed and the area will be cleaned. The stone base will be cleaned and new stone facing will be constructed. New fencing will be constructed (rail, stone pillars) and properly be fixed on perimetric wall capping stones. The stone base of the bust must be cleaned and where needed stones to be repaired. The bust of the patron will be placed back in position.

### 2.3.10. Electrical Installation:

As per drawings (architectural and electrical) lighting points will be installed in the area which will be either simple post type, wall mounded or recessed in to wall. Special attention must be given to the wiring which must be done during the post/column/wall structure so as to be hidden.

### 2.3.11. Plants:

Planting must be done on several places (mainly in west court and few in south court). Plants will be chosen at later stage. The contractor is responsible for digging, soil supplying and planting the trees/plants. The work to be done for 20 spots. Digging for trees must be at least 60 cm in depth and diameter and for low vegetation at least 30 cm depth. Suitable soil must be provided for planting. Several outlets must be provided along with irrigation system (plastic pipes 2.5 cm) which must be hidden in floor structures.