

STATEMENT OF WORK
Rec. Area expansion (SOUTH side)
PROPERTY OBO-10000
New Compound Embassy
U.S. EMBASSY KHARTOUM, SUDAN

1. Description of Services:

The US Embassy, Khartoum has a requirement to expand the south side of the recreational area in the New Embassy Compound (NEC), Khartoum. The expansion shall be constructed as per drawings, scope of work, specifications and General contract conditions. This project requires an experienced contractor to execute the job.

The Contractor shall provide all labor, material, tools, equipment, supervision and other related items required to complete the project as per scope of work, specifications and attached drawings.

Contractors are advised to visit the site, verify the existing site conditions and measurements to develop their proposal.

2. Scope of work

1- The contractor shall expand the recreational in the south direction. The contractor shall install interlocking tiles to cover Area "A" in attached diagram. The contractor shall furnish and install around 33 square meters of interlocking tiles to pave the south west corner of the rec. area as shown in diagram. The tiles shall be of NIBCO, or similar quality approved by the COR, with thickness not less than 6 cm. The tiles shall be laid on a mixed layer of dry sand and cement not more than 5 cm to the ratio of 5:1. The grouting shall be of dry cement. The interlocking tiles level shall be around 10 cm above adjacent grass level.

2- For sub-grade preparation for the tiles area, all soft and yielding material shall be removed and replaced with modified soil.

The contractor shall be responsible to remove all the gravel and dig at least 15 cm to reach the required suitable soil. The mechanically compacted modified soil shall be added in layers (each layer 15 cm at most) to form a firm, even surface in reasonably close conformity with the grade. The slope of the new tiles shall follow the existing interlocking tiles slope.

3- The contractor shall dismantle and relocate the swimming pool fences –Southside sections- (4.5 meters) in the south direction. The additional parts shall be provided by the USG, but dismantled and installed by the contractor. The contractor shall keep and maintain all the large trees.

4- The contractor shall pour reinforced concrete footings 40 X 40 X 70 cm for the fence footings between the curbstones, as shown in the attached diagrams. All the plates, bolts and anchors shall be installed in the footings matching the orientation and method of installation of the existing fence.

5- The contractor shall connect the isolated footings with a tying beam 30 cm X 30 cm, with 4 steel bars, 12 mm in diameter and the stirrups shall be 8 mm in thickness @ 20 cm. The

contractor will connect the new beam to the concrete footings. The finished level of the footing shall match the F.F.L. of the beam.

6- At the outer boundary of the interlocking tiles area and the green area and as boundary between the two areas, around 66 meter length, the contractor shall place curbstones on a base of concrete mix. The curbstones shall be of NIBCO, or similar quality as approved by the COR, with size 45X 25 X 12.5 cm. The grouting will be of mortar cement. The concrete mix shall be of gravel, sand and cement to the ratio of 4:2:1

7- In area "B", around 205 square meters, the contractor shall dig at least to a depth of 30 cm and replace the soil with appropriate clay soil to be used as grass sod area. The soil shall be free of all the harmful substances. The grass sods shall be Tiff green' Hybrid Grass or sand-Peat grass, with minimum height 75 mm, roots min. 75 mm long, the minimum spread shall be 100 mm to match the grass in adjacent area. The contractor shall be responsible to relocate all the green trees and flowers as directed by the COR. The contractor shall prepare 80 cm width from the fence, to be used to plant tall hedge plants which shall be at least 1.25 meters apart from each other.

8- The contractor shall demolish the existing tying beam (around 12 meters) in the south east direction to allow the spread of the green area as one unit in one level.

8- In area "C", the contractor shall clean the top soil and prepare the sub grade. The contractor shall dig at least to 30 cm deep and replace the soil with appropriate clay soil to be used as green area soil. The soil shall be free of all the harmful substances.

9- The contractor shall plant the flower beds adjacent to the western side of swimming pool deck fence. The length in the western side shall be 25 meters and the width of the bed shall be 1.3 m. The contractor shall be responsible to plant Area "C" with the plants removed from Area "B", listed in Table # 1 or equally approved.

10- All landscaped areas shall be permanently prepared and maintained in a neat and orderly manner and all plants shall be maintained in a healthy, living condition. Dead plants, weeds, and non-plant materials must be removed and replaced as necessary.

11- The contractor shall install the sprinkler system to irrigate all the new added green areas and connect them to the existing main pressurized system in the surrounding area under the supervision of the maintenance team. The contractor shall use 1 inch pipes as the supply line for all the green area. The sprinkler heads and its fittings shall be furnished by the USG.

12- The contractor shall install steel flat bar boundary line, 3 mm thick, 10 cm in width at least, as a west side for area " C". The fabrication and installation of the boundary line shall match the existing boundaries.

12- The contractor shall be responsible to raise the level of all existing manhole covers to match the new level.

13- The contractor shall remove and re-install one weatherproof electrical outlet, and one weatherproof 2 feet double bulb lighting fixture. All the weatherproof electrical and lighting fixtures shall be connected to the existing pipes using rigid galvanized $\frac{3}{4}$ conduits, fitting and fixtures. All the outlets and the lighting fixtures shall be approved by the COR prior installation.

Table # 1**List of the types of NEC preferred/existing plants**

| Tall Hedge Plants | Type- Latin Name | Min. Cal. | Min. height | Min. spread | Minimum requirements |
|--------------------------|------------------------------|---------------------|-------------------------------|--------------------|-------------------------------------|
| | Blue flowering green Duranta | 600 mm | 400 mm | 300 mm | At least one 1.5 meter apart |
| | variegated Duranta | 600 mm | 400 mm | 300 mm | |
| | | | | | |
| Low Shrubs | | | | | |
| | Compact Red Ixora | 300 mm | 300 mm | 250 mm | |
| | Compact Yellow Ixora | 300 mm | 300 mm | 250 mm | |
| | Compact Multicolored lantana | 200 mm | 200 mm | 150 mm | |
| | Compact pink Oleander | 300 mm | 300 mm | 250 mm | |
| | Plumbago | 300 mm | 300 mm | 250 mm | |
| | Sarah rose | Grade 1 300 mm | 300 mm | 250 mm | |
| | Mercedes rose | Grade 1 - 300 mm | 300 mm | 250 mm | |
| | | | | | |
| Ground Covers | | | | | |
| | White Madagascar Periwinkle | 100 mm | Min. 5 branches 75 mm long | 2 liter Pot | |
| | | | | | |
| Perennials | | | | | |
| | Blue African Lily | | 300 cm | 2 liter Pot | |
| | White African Lily | | 300 cm | 2 liter Pot | |
| | Asparagus Fern | | 300 cm | 2 liter Pot | |
| | Stella D'Oro Daylily | | double fan | 2 liter Pot | |

3. GENERAL CONDITIONS OF CONTRACT

1. General

-This is a firm fixed price turnkey job for the entire work and amount quoted shall include all work described in attached drawing, scope of work and general condition of contract. The lump sum price quoted shall be fixed and nothing extra will be entertained on any account. Contractor's staff is subject to such restriction for entry and exit as are required by the Embassy's security requirement. Contractor's staff will be subject to security cleared as required by the Embassy.

-Contractor shall restore all surfaces disturbed by construction to match with existing finish. Any deviation from the original contract/scope of work shall be informed to COR before work begins. No additional work or changes will be carried out without a contract modification. All material shall be new, checked and approved by COR prior to installation and proper test certificate of the materials to be submitted.

2. Responsibilities of Contractor

-Contractor shall be responsible for procuring, supplying, transporting, and providing all labor, materials, tools and plant and equipment etc., required for completion of the work in all respects and as per the scope of the work.

-All expenses towards mobilization at site and demobilization including bringing in equipment, workforce and materials, dismantling the equipment, clearing the site etc. shall be deemed to be included in the rates quoted by the contractor against various items of schedule of rates and no separate payment on such expenses shall be entertained.

-Contractor shall employ and provide one full time engineer to supervise the project and has experienced of carrying out such type of work.

-Contractor shall not proceed with next activity until previous activity will be checked and approved by COR. Contractor shall mentioned all inspection dates in the schedule chart Contractor should keep the site clean and accessible to Embassy employee all time.

-The contractor shall submit a detailed schedule showing each activity along its duration, predecessors, and successors. A computerized schedule is preferred; however a bar chart may be acceptable.

-Duration of work for the project shall not exceed **30 working days**. Work will be conducted within a very tight schedule which must be adhering to. Any changes will be arranged NOT LESS than 4 days ahead of schedule.

-10 days after contract award, the contractor shall submit for approval, a further detailed schedule in which no activity shall be longer than 30 working days. This detailed schedule shall also include all coordination required with the in-house staff and the normal work sequence of activities. This schedule shall be discussed and approved by the COR prior to work commencement.

-The schedules shall be closely monitored and updated on a weekly basis to determine if the work progress is on or behind schedule. In case of behind schedule progress, the contractor shall identify areas of problem and take the necessary actions to improve and maintain progress within the approved schedule.

3. Specifications

Work under this contract shall be carried out strictly in accordance with specifications attached and will meet US and Local codes.

4. Execution of work

-The Contractors are advised to review the attached set of drawings, material specifications and scope of work. The Contractor should visit and walk through the site to familiarize themselves with the site conditions to understand the exact quantum of work.

-On award of the work, Contractor shall submit a bar chart within 3 days for approval of the Contracting Officer Representative (COR). All dates and time schedule agreed upon should be strictly adhered. Contractor shall notify the COR well in advance regarding the problems, if contractor is expecting/facing during the execution of the project.

-The contractor shall prepare and send week's ahead activity plan via e-mail.

-For dismantling/blocking or making connection to any existing services or any shut-down, contractor shall inform the CO at least three working days in advance and proceed with the work only after the permission from the CO.

5. Drawings

Drawings shall be followed as closely as actual construction allows. Any deviations require the Contracting Officer's prior approval.

6. Materials

All materials used on this work shall be new and conforming to the contract specifications as per US and Local codes.

Materials shall conform to the latest US Standards specifications as amended to date and carry certification mark. Contractor shall submit material samples and catalog for approval.

All materials used on the project shall be approved by the Contracting Officer Representative (COR) before use.

Any changes/ substitute on material shall need to be approved by CO before proceed.

7. Storage of materials

- All materials shall be stored in a proper manner protected from natural elements so as to avoid contamination and deterioration.
- All reinforcement bars shall be stored in such a way to prevent deterioration, corrosion, scale formation and rusting. Every bar shall be checked or inspected before assembling on the work. Defective, brittle or bent bars shall be discarded

8. Site clearance and cleanup

- The Contractor shall clear away all debris and excesses materials accumulated at the site and dispose it away from the Embassy premises and maintain a neat site conditions.
- On completion of project, Contractor shall remove all surplus materials and leave the site in a broom clean condition.

9. Workmanship

- Workers working on the site shall be skilled in their job and have experience in same type of job.

10. Working Hours

- Working hours shall be 8:30 A.M. to 4:30 P.M. Sunday to Thursday. No work shall be done on Fridays, Saturdays and holidays without the prior approval of the Contracting Officer.

11. Security Clearance

- The Contractor shall inform and provide in writing transportation details (vehicle registration number, drivers name and date of delivery) to the COR at least 24 hours in advance for material deliveries.
- Contractor shall give his workers name at least 3 days in advance to get the security clearance. All the workers shall have the photo ID or photo ID with the company name.

12. Safety

- Contractor is responsible and shall continue management and implementation of a safety and health program throughout construction.
- The Contracting Officer and the Post Occupational Safety and Health Officer [OSHA] reserve the right to suspend work when and where Contractor's safety and health program is considered to be operating in an inadequate or non-complying manner.
- Contractor shall provide all Personal Protective Equipment for the workers as per the requirement of the site. Work will be stopped in case the proper protection equipment is not found with the workers and the lapse of time shall be at the Contractor's expense.
- Contractor will not leave the work site in an unsafe condition or any other condition that might cause injury to personnel, damage to existing work, plants or equipment.

- Contractor will use all safety gadgets e.g. hard hats, cotton gloves and goggles as required on site to avoid the accident.
- Any equipment or work considered dangerous shall be immediately discontinued

13. Warranty

The contractor shall guarantee that all work performed will be free from all defects in workmanship and materials and that all installation will provide the capacities and characteristics specified. The contract further guarantees that if, during a period of three years from the date of the certificate of completion and acceptance of the work, any such defects will be repaired by the contractor at his expenses.