MAINTENANCE & REPAIR STATEMENT of WORK

Frankfurt, Germany

Building Exterior & Fire Door Replacement

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U.S. CONSULATE GERNERAL FRANKFURT, GERMANY
FACILITY MANAGEMENT

PART ONE – GENERAL

C.1.1 SUMMARY:

A. The U.S. Consulate General Frankfurt requires replacement of 6 (six) existing metal exterior fire doors (T90/RC2) located at Carl Schurz Siedlung. The Contractor shall provide all necessary labor, materials, supervision, and equipment to complete the project. Work includes, but is not limited to:

1. Removal / disposal of existing doors and frames
2. Procurement of replacement doors and frames
3. Modification of walls for new door frame
4. Installation of door concrete lintel
5. Installation of frames, doors and door hardware
6. Plaster / paint work around new door frame

C.1.2 SUBMITTALS:

A. Contractor's crew individual identification information for visitor access requests.
B. Submit list of all subcontractors with evidence of subcontractor's insurance coverage.
C. Project schedule showing work phasing and proposed daily progress.
D. Material manufacturers and accessory product data sheets in accordance with part two.
E. Shop Drawings and calculations.
F. Warranty: The Contractor shall provide a written 2 years workmanship warranty after date of substantial completion to cover all elements of work to be free of defects. Manufacturer's standard material/equipment warranties are to be provided for all new items.

C.1.3 CONTRACT ADMINISTRTION

A. The Contractor shall not perform any work outside this Statement of Work unless authorized in writing by the Contracting Officer (CO).
B. The CO will issue a Notice to Proceed (NTP).
C. The Contracting Officer's Representative (COR) will oversee daily execution and ensure compliance.
D. Any proposed changes must be submitted in writing and approved before work proceeds.
E. The Contractor shall identify a Project Site Manager who shall be responsible for the overall management of the project and shall represent the Contractor on the site during construction. The Project Site Manager is required to be German and English-speaking and shall be approved by the COR.

C.1.4 QUALITY CONTROL:

A. The Contractor shall be responsible for the professional quality, technical accuracy, and the coordination of all construction and other services furnished under this contract. The Contractor shall, without additional compensation, correct or revise any errors or deficiencies in its construction and other services.
B. The Work shall be governed by the U.S. Consulate General Frankfurt, Germany. All work is to be in compliance with International Codes and standards, which includes the most recent published edition of the OBO Building code, National Fire Prevention Association (NFPA), International Fire Code (IFC), International Building Code (IBC) , International Mechanical Code (IMC), International Plumbing Code (IPC), National Electrical Installation Standards (NEiS), National Electrical Safety Code (NESC), Standard for Electrical Safety in the Workplace (NFPA-70E) and National Electric Code (NFPA-70) as amended by OBO, also are applicable. Should there be a discrepancy

between the US Government Specifications and the applicable Building Code, the more stringent of the two shall govern.

C.1.5 STORAGE OF MATERIALS:

A. The Contractor is responsible for safe and secure storage of materials.

B. On-site staging must be coordinated with the COR.

C. Temporary utilities must be connected and disconnected in coordination with Facility Management.

C.1.6 PROJECT SAFTEY:

A. Contractor is responsible for safety and shall comply with US Consulate General requirements, US Army Corp of Engineers (USACE) Safety Manual (EM 385-1-1), U.S. OSHA Regulations and all local labor laws, regulations, customs and practices pertaining to labor, safety and similar matters. Contractor shall prepare a Project Safety Plan to cover total project safety to be reviewed and approved by the Contracting Officer Representative (COR), and U.S. Consulate Post Occupational Safety and Health Officer (POSHO).

B. Contractor shall furnish Personal Protective Equipment (PPE) for each employee as required for the specific job type and in accordance with (IAW) relevant OSHA regulations.

C. All external personnel assigned to a project are required to participate in a mandatory online safety briefing conducted by the POSHO Safety Office. This safety training must be completed prior to the project start date and the commencement of any work activities.

1. Personnel joining the team after the project has commenced must also complete this training before undertaking any tasks.
2. Work conducted without prior safety training is strictly prohibited and will be immediately suspended upon discovery.
3. The safety briefing may be found at the following link; https://forms.office.com/g/shZ4sLh5Kn

A. Electrical Safety: All electrical work must always be conducted in a "de-energized" state whenever possible and secured using the Lockout/Tagout (LOTO) system/procedure. Energized work must be handled with special precautions as outlined below.

1. Locks and tags must be applied to the equipment's energy isolation points or control panels. The tags must prominently display a warning message, along with the company name and the technician's name. LOTO devices may only be removed by the individual who applied them.
2. Energized Work can only be performed if the supervisor requests an Energized Work Permit (EWP) at the Post Occupational Safety and Health Officer (POSHO) at least 24 hours prior to the scheduled start of work. The COR must assist the contractor in obtaining the necessary documents.

B. Hot Work: A hot work permit must be requested from the contractor at least 24 hours prior to the start of the work. The COR must assist the contractor in obtaining the necessary documents.

C. Confined Space: To enter confined spaces, the contractor must complete the required approval documents Post Approved Confined Spaces (PACS) entry permit at least 48 hours before entry and must be approved by the POSHO. The COR must assist the contractor in obtaining the necessary documents.

D. Fall Prevention: For fall heights, suitable protective measures must be taken to minimize the risk of accidents.

1. Elimination (Physically remove the hazard)
2. Substitution (Replace the hazard)

3. Engineering Controls (Isolate people from Hazard)
4. Administrative Controls (Change the way people work)
5. PPE (Protect the worker with Personal Protective Equipment)

E. Temporary Ladders, Chutes, Scaffolds, Hoists and Cranes:
1. Furnish and maintain temporary ramps, scaffolds, hoists, or chutes as required for proper execution of Work.
2. Restrict debris removal to Consulate -approved area of building site.
3. Restrict location of equipment to areas as approved by the COR.
4. Such apparatus, equipment, and construction shall meet requirements of applicable federal, state, and local safety and labor laws.
5. Ladders are required to be non-conductive fiberglass construction with a load capacity (duty rating) of no less than 250 pounds (113kg).
6. Scaffolding:
   a. Initial Inspection: After the scaffolding is completed, it must be inspected by a qualified person to verify proper assembly and safe functionality. This inspection ensures compliance with all safety requirements and standards.
   b. Marking and Documentation: After the final inspection, the scaffolding must be clearly marked in a visible location (preferably at the access point). The label must include at least the following information:
      i. Whether the scaffolding is authorized for use or not
      ii. The name and signature of the authorized person who performed the inspection
      iii. The address and phone number of the scaffolding contractor
      iv. The type of scaffolding, load class, and width class
      v. Any usage restrictions
      vi. Warning notices
      vii. The date of inspection
   c. Scaffold users are required to conduct a daily visual inspection and, if necessary, a functional check by a qualified person before use. This inspection is to identify any obvious defects and ensure safe functionality based on the specific intended use. The inspection must be documented.

C.1.10 PROJECT SECURITY:

A. Personnel Clearances:
1. A Visit Authorization Request (VAR) will be required for all contractor personnel prior to entry. Contractors shall forward the following information to the COR: full name, date and place of birth, Government Identification Card, name of employer, position/discipline.

A. Vehicle Clearances: Submit authorization requests, to include dates, vehicle type, license number, and driver name, for each motorized vehicular implement used on-site.

C. Access to Site: Contractor shall have limited access to or be admitted into the compound outside the areas designated for the project except with permission by the Consulate.

D. Procurement/Storage: Materials shall be procured by NON-SECURE or local means and stored NON-SECURE. All materials may be inspected prior to use on the project.

PART TWO - PRODUCTS

C.2.1 GENERAL

A. The Contractor shall provide all necessary labor, material, equipment, and components necessary to ensure the installation of complete and operable systems. No materials or labor will be supplied or furnished by the Consulate.

B. All materials and equipment incorporated into the project shall be new unless noted otherwise. The Contractor shall transport and safeguard all materials and equipment required for construction.

C.2.2 CONCRETE LINTEL

A. Concrete: 4,000psi minimum compressive strength at 28 days.
   1. Portland Cement: ASTM C150 Type I or II.
   2. Fly Ash: ASTM C618, Class C or F including supplementary requirements relating to reactive aggregates and alkali's.
   3. Coarse Aggregate: ASTM C33.
      a. Size 67 or Size 467 may be used for footings and walls over 300 mm (12 inches) thick.
      b. Maximum size of coarse aggregates not more than one fifth of narrowest dimension between sides of forms, one third of depth of slabs, nor three fourth of minimum clear spacing between reinforcing bars.
   4. Lightweight Aggregates for Structural Concrete: ASTM C330, Table 1. Maximum size of aggregate not larger than one fifth of narrowest dimension between forms, nor three fourth of minimum clear distance between reinforcing bars.

B. Mixing Water: Fresh, clean, and potable.

C. Reinforcing Steel: ASTM A615, or ASTM A996, deformed, grade as shown.

D. Reinforcing Bars to be Welded: ASTM A706.
   1. Galvanized Reinforcing Bars: ASTM A767.
   2. Cold Drawn Steel Wire: ASTM A82.

E. Supports, Spacers, and Chairs: Types which will hold reinforcement in position shown in accordance with requirements of ACI 318 except as specified.

F. Adhesive Anchors: Injectable two-component hybrid adhesive mortar for use in grouted and ungrouted concrete masonry block walls, solid and hollow brick walls and unreinforced multi-wythe brick walls by ICC-ES. Hilti HIT-HY 270 or approved equal.

G. Structural Steel: Hot rolled steel bars, plates, and shapes must be new steel conforming to ASTM A6. Fabricate and install steel in accordance with AISC 303 and AISC 360.

C.2.3 FIRE DOORS

A. Door: Metal door T90/RC2 such as:
   1. TECKENTURP EI290-C5-S, fire-resistant door assembly as an external door with CE marking (according to EN 16034 / 14351-1). Single-leaf door unit.
   2. Construction dimensions 1000 x 2000 mm. Dimensions might vary by +/- 10-15%.
   3. Hinge type DIN right/left.
   4. Door leaf 62 mm thick with thin rebate, rebated on 3 sides. Corner frame 1.5 mm thick with 3-sided seal, without floor recess.
   5. Door leaf and frame galvanized and primed, grey-white similar to RAL 9002.

B. Contractor is to confirm the DIN direction of the door (DIN L/R) and the exact dimensions on site.

C. Doors must open outward to serve as panic exits.
D. Hinges must be placed on the side that is opposite to the external stairs

C.2.4 HARDWARE

A. Doors are to have an adjustable resistance, self-closing mechanism
B. Lock / latching hardware to contain a self-locking bolt and built-in panic release mechanism such as:
   1. B-2116 Mortise lock with anti-panic function
      a. Object door self-locking panic mortise lock
      b. Distance: 72 mm
      c. Handle square: 9 mm
      d. Forend: stainless steel matt 20 x 2 mm, automatically self-locking
      e. With change
      f. Latch bolt made of steel
      g. Latch bolt exclusion: 20 mm
      h. Standard: DIN 182, DIN EN 1125, DIN EN 179
C. Door hardware/fittings such as:
   1. FS-E138/353KH
   2. Lever handle length:141,00 mm
   3. -Colour/finish: Matt
   4. Area of application: Category of use 4
   5. Product Material: Stainless steel
   6. Bearing: Lever handle pivot-fitted, with return spring, maintenance-free friction bearing, quick-fit connection with ball locking mechanism
   7. Standard: Tested in accordance with DIN EN 1906:2012
   8. Classification in accordance with DIN EN 1906:4|7|–|D1|1|5|0|A

PART THREE – EXECUTION

C.3.1 CONSTRUCTION REQUIREMENTS

A. No construction shall begin until approvals of the Pre-Construction Submittals are accepted by the COR.
B. The Contractor will be provided with a storage and staging area as determined by the COR. The Contractor shall be responsible for restoring the area to its original condition at the completion of the work. The Contractor shall be responsible for repair of any damage incurred to buildings or pavement as a result of storage activities. The Contractor is responsible for obtaining any additional off compound storage areas as required.
C. The Contractor shall always keep the work area free from accumulation of waste materials. Upon completion, the Contractor shall remove any temporary facilities and leave the project site in a clean and orderly condition acceptable to the COR.
D. The Contractor shall perform the work at the site during the U. S. Consulate's normal workday hours, (0800-16:00 Monday – Friday excluding holidays) unless alternate work hours are agreed upon with the COR.
E. Protections and Damage Plan: The Contractor shall be responsible to protect all U.S. Government property to include: all furniture, furnishings, and interior and exterior architectural finishes from damage. Any damage caused by the Contractor to architectural interior and exterior finishes will be returned to original condition by the Contractor at Contractor expense. In addition to the architectural finishes, the Contractor shall protect all non-included mechanical and electrical equipment and controls from damage throughout the duration of work. Prior to commencing the work, the Contractor

along with Consulate representatives shall survey the site that will be impacted by the project work and document existing conditions. It shall be the Contractor's responsibility to document in writing all pre-existing damaged surfaces prior to the start of the project work and to provide a copy of the documentation to the COR prior to project start.

C.3.2 DEMOLITION

A. Execute demolition in careful and orderly manner with least possible disturbance or damage to adjoining surfaces and structure.

B. Avoid excessive vibrations in demolition procedures that would be transmitted through existing structure and finish materials.

C. Masonry Demolition:

1. Remove structure from the top down. Install temporary shoring and bracing of structure as required.
2. Carefully remove by hand, masonry which are damaged or deteriorated to perform work. Cut out full units from joint to joint in manner to permit replacement with full size units.
3. Support and protect masonry to remain that surrounds removal area.
4. Remove mortar, loose particles, and soil from salvaged masonry units by cleaning with brushes and water. Store salvaged masonry units for reuse.
5. Clean remaining masonry units at edges of removal areas by removing mortar, dust, and loose debris in preparation for rebuilding.

C.3.3 CONCRETE

A. Formwork: Design in accordance with ACI 347 is the responsibility of the Contractor.

B. Reinforcement: Details of concrete reinforcement in accordance with ACI 318 unless otherwise shown.

1. Placing: Place reinforcement conforming to CRSI DA4, unless otherwise shown.
   a. Place reinforcing bars accurately and tie securely at intersections and splices with 1.6 mm (16 gauge) black annealed wire.
   b. Secure reinforcing bars against displacement during the placing of concrete by spacers, chairs, or other similar supports.
   c. Type, number, and spacing of supports conform to ACI 318. Where concrete slabs are placed on ground, use concrete blocks or other non corrodible material of proper height, for support of reinforcement. Use of brick or stone supports will not be permitted.
2. Spacing: Minimum clear distances between parallel bars, except in columns and multiple layers of bars in beams shall be equal to nominal diameter of bars. Minimum clear spacing is 25 mm (1 inch) or 1 1/3 times maximum size of coarse aggregate.
3. Splicing: Splices of reinforcement made only as required or shown or specified. Accomplish splicing as follows:
   a. Lap splices: Do not use lap splices for bars larger than Number 36 (Number 11). Minimum lengths of lap as shown.
   b. Welded splices: Splicing by butt welding of reinforcement permitted providing the weld develops in tension at least 125 percent of the yield strength (fy) for the bars. Welding conform to the requirements of AWS D1.4. Welded reinforcing steel conform to the chemical analysis requirements of AWS D1.4.
   c. Mechanical Splices: Develop in tension and compression at least 125 percent of the yield strength (fy) of the bars. Stresses of transition splices between two reinforcing bar sizes based on area of smaller bar. Use

approved exothermic, tapered threaded coupling, or swaged and threaded sleeve. Exposed threads and swaging in the field not permitted.

4. Bending: Bend bars cold, unless otherwise approved. Do not field bend bars partially embedded in concrete.
5. Cleaning: Metal reinforcement, at time concrete is placed, shall be free from loose flaky crust, mud, oil, or similar coatings that will reduce bond.

C. Concrete Placement:

1. Do not place concrete when weather conditions prevent proper placement and consolidation, or when concrete has attained its initial set, or has contained its water or cement content more than 1 1/2 hours.
2. Deposit concrete in forms as near as practicable in its final position. Prevent splashing of forms or reinforcement with concrete in advance of placing concrete.
3. Continuously place concrete until an entire unit between construction joints is placed. Rate and method of placing concrete shall be such that no concrete between construction joints will be deposited upon or against partly set concrete, after its initial set has taken place, or after 45 minutes of elapsed time during concrete placement.

D. Curing: Keep concrete covered with membrane or other curing material and continuously wet for at least 7 days after placing, except wet curing period for high-early-strength concrete shall be not less than 3 days. Keep wood forms continuously wet to prevent moisture loss until forms are removed.

C.3.2 DOORS

A. Install door units and hardware in accordance with manufacturer's specifications and recommendations for installation of units, hardware, operators and other components of work. Set doors plumb, level, true, and in alignment; without warp or rack of frames or sash.

B. Repair walls and adjacent surfaces with material and finish to match existing.

PART FOUR - SCHEDULE

C.4.1 PERIOD OF PERFORMANCE: Calendar days

A. The work shall be executed in a diligent manner in accordance with a negotiated firm fixed price and performance period as outlined below.

1.	Solicitation & Award of Contract:	
	a. Award	Zero Day
2.	Pre-Construction Submittals:	
	a. Insurance, Schedule, & Product Data:	10 days after Award
	b. Government Review:	5 days
3.	Material Procurement:	
	a. Material Order/Shipping	30 days
4.	Mobilization & Construction:	
	a. Crew Information	5 days in advance
	b. Scope of Work	30 days on-site
TOTAL PERIOD of PERFORMACE:		**75 days**

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