

ARC – OVR EPV AND MOLECULAR BUILDINGS EXTERNAL RENOVATION TECHNICAL SPECIFICATION

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PART ONE

1.1 GENERAL CONDITIONS

A professional service provider in construction industry is required in ARC – OVR for the external renovation (Roof and Wall) EPV and Molecular buildings.

1.2 SITE INSPECTIONS

The service provider shall inspect and examine the sites and its surroundings and satisfy himself/herself before submitting his/her quotation as to the nature of the building complex so far as is practicable, the form and nature of the site, the quantities and nature of the work, the means of access to the site and in general shall himself/herself obtain all necessary information as to the risks, contingencies and other circumstances which may influence or affect his/her work.

It remains the service provider's responsibility to arrange for labour, transport, off loading, storage and safe keeping of the material, workshop provisioning, scaffolding, equipment and tools required for the execution of the work in general. No claims arising (money wise or time) from a lack of knowledge in this regard will be considered.

The service provider shall be deemed to have satisfied himself/herself before submitting the quotation as to the correctness and sufficiency of his/her quotation for the works, rates and prices he/she has stated in the quotation shall cover all his/her obligations under the work to be done for the proper completion of the work/project.

1.3 GUARANTEES

The service provider shall guarantee the installation, workmanship and materials being used under this building project for a period of six (6) months and for the mechanical equipment, installations and workmanship for twelve months. The guarantee will commence on the date of receipt of the total and complete installation.

1.4 OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 AS AMENDED

The refurbishment and installation of the work must be in accordance with the conditions as set out in the Occupational Health and Safety Act, 1993 (Act 85 of 1993) as amended.

1.5 USE OF WATER AND ELECTRICITY

A. WATER

The service provider should note that one of the following sub clauses shall apply to this project:

(a) On serviced sites, the service provider may use water free of charge, subject to the following:

- (1) All the necessary temporary plumbing, connections, etc. shall be done by the service provider at his/her own expense and removed on completion. The site shall be left in the same condition as it was when originally handed over to him/her.
- (2) Before submitting his quotation, the service provider shall acquaint himself/herself with the extent and availability of the water supply on the site. If the existing supply is found insufficient, the service provider will at his/her own expense supplement any shortage.
- (3) Water supplied free of charge to the service provider, shall only be used for execution of the work and under no circumstances for any other of the work for any other purpose. Strict precautions shall be maintained at all times to prevent any waste.
- (4) The Institute shall at all times be given preference with regard to the water supply and the service provider shall be held responsible for the unimpeded supply to existing buildings.
- (5) No monetary claim and/or claim in respect of the prolongation of time shall be conceded if the water supply does not at all times meet the service provider's requirements.

B. LIGHT AND POWER

Service provider must note that one or more of the following sub clauses shall apply to the project:

(a) On serviced sites, the service provider may use the electricity free of charge, subject to the following:

- (1) All the essential connections, supply and installation of

connection and safety apparatus, wiring, etc. shall be done by the service provider at his/her own expense and removed on completion. The site shall be left in the same condition as it was when originally handed over to him/her.

- (2) The above-mentioned temporary work shall be performed by a qualified electrician according to the requirements and to the total satisfaction of the Institute. The service provider shall at all times comply with all statutory requirements, safety measures, etc. that may apply to the distribution and consumption of electricity, as well as the requirements and obligations that may apply to the Institute and shall exempt the Institute from any claims that may arise from the consumption of electricity from existing supplies.
- (3) Before submitting his quotation, the service provider shall acquaint himself with the extent and availability of the electricity supply to/on the site. If the existing supply is found insufficient, any shortage shall be supplemented by the service provider at his own expense.
- (4) Electricity supplied free of charge to the service provider, shall only be used for execution of the work and under no circumstances for any other of the work for any other purpose. Strict precautions shall be maintained at all times to prevent any waste.
- (5) The Institute shall at all times be given preference with regard to the electricity supply and the service provider shall be held responsible for the unimpeded supply to existing buildings.
- (6) No monetary claim and/or claim in respect of the prolongation of time shall be conceded if the electricity supply does not at all times meet the service provider's requirements.

1.6 UNAUTHORISED PERSONS

The service provider shall at all times keep un-authorized persons strictly away from work. Under no circumstances may any person be allowed to sleep or keep any possessions (material) on the building site during the project period or thereafter unless prior arrangement is made.

1.7 DISTURBANCE

The service provider shall perform all work with as little noise and mess as possible and with the minimum disturbance for adjacent and existing buildings and their occupants. He/she shall keep the site, structure, etc. sufficiently wet at his/her own expense during the operations to prevent dust to the existing buildings, all to the satisfaction of the Institute.

The service provider shall take all the precautions to protect adjacent buildings from damage and he/she alone shall be held liable for any damage to persons or property because of insufficient precautions.

The service provider shall take the necessary steps to ensure that the workers do not walk around in existing buildings unless necessary for the activities.

The service provider shall comply with the requirements of any laws or regulations relating to the use of explosives and air-pressure drills.

NOTE:

After the issuing of the order, it shall be the service provider's duty to arrange for an inspection of the buildings, etc. and the adjacent sites in the presence of the Institute 's representative to identify any defects such as cracks, etc. in buildings, rainwater canals, kerb stones, etc. that may possibly be damaged during execution of this project.

Such defects shall be recorded to refute any allegations that they have been caused by the building operations under this project. If such defects are in fact present, the service provider shall record them and submit, this in writing to the representative before work commences.

If the service provider fails to inform the representative in writing, it shall be assumed that there are no such defects.

1.8 SITE MEETINGS AND PROCEDURES

The Institute shall reserve the right to convene a site meeting at any time required. The service provider and site manager shall promptly attend all site meetings and shall also ensure that all interested persons under his/her jurisdiction, etc. are notified timely of site meetings.

1.9 PROGRESS SCHEDULE

A provisional project plan is required as part of the bid that clearly indicates major deliverables and their associated dates. Within one (1) week after the site has been handed over, the service provider shall submit the

representative with a full detailed project plan in which all aspects of the works have been taken into consideration. Strict adherence to the provisions of this plan shall be required and the service provider shall report any deviations and/or future deviations to the Project Manager and submit a new programme indicating the variations.

If the service provider wishes to deviate from the contract period specified, he/she shall obtain the written permission of the Institute and a penalty clause of 5% of the total value of the contract will be initiated for each additional week.

1.10 ALTERATIONS AND OLD MATERIAL

With the demolition and removal of existing work, the utmost care shall be taken to avoid any structural and/or other damage to the remaining parts of the buildings or equipment. The contractor shall repair any damage that may occur during the undertaking of the work at his/her own expense, to the full satisfaction of the Institute.

Old materials of the alterations or demolition's, except if specifically described to be re-used or to remain the property of the Institute, may not be used in the new construction, except with the specific written permission of the representative, with the concomitant adjustment of prices. The rest of the old material shall remain the property of the Institute and the service provider shall store it on the site. The Institute representative will point out the storage place to the contractor.

1.11 TEMPORARY USE OF MATERIAL

No material of whatever nature delivered to the site for the project shall be temporarily used for scaffolding or any other purpose. Likewise, no material in the building that is only intended for temporary use shall be used.

1.12 RUBBLE

The service provider shall make provision for the clearing of rubble from the work and, on completion, the cleaning of all machine rooms and the scrubbing of all floors and paving and shall leave the site in a clean and perfect condition for immediate use and occupation. Care should be taken not to use any cleaning agents or material that could damage the surfaces being cleaned.

1.13 IMPLEMENTS, ETC.

The service provider shall supply, maintain and remove on completion or if so

requested all implements, scaffolding, tools, labour, etc. that may be required for the proper and timely execution of the work.

On completion of the project, the service provider shall remove at his/her own expense all construction implements belonging to him/her or his/her subcontractor, and leave the building site and adjacent grounds in a clean and orderly condition.

1.14 LOSS

The contractor shall be liable for any loss through theft, damage, etc. of materials for the project as well as the contents of the buildings from the time the site is handed over. Therefore the service provider shall take the necessary precautions for protection against such losses.

1.15 PROTECTION OF BUILDINGS

The service provider shall make provision for the protection of the work against bad weather and frost, as well as for temporary screens, canvas, dust sheets, gutters, outlet pipes, drainage ditches, storm water canals, etc. and for the baling out or pumping of water where necessary to keep all parts of the building free of water.

He/she shall also make provision for the temporary protection of all completed work that may possibly be damaged by the construction work or by other contractors or the weather, to the satisfaction of the representative.

Especially in the existing buildings, service provider shall take sufficient precautions, **to the satisfaction of the Institute** representative/agent, to **prevent damage to the existing apparatus**, buildings and other installations during the project period.

The service provider shall be held solely responsible for any damage to the work because of insufficient precautions.

1.16 INJURY TO PERSONS

The service provider will be responsible for injuries to persons and indemnify the Institute against any liability, loss, claim or law-suit of any nature in accordance with the **Common Law or Acts of the Republic**, on an account of an injury, death of anybody, due to the acts of the person undertaking the service except where the injury arises on account of actions undertaken by personnel of the Institute.


1.17 QUALITY OF PAINT



Paints used must be at least of the industrial standard as prescribed by the relevant SANS-specifications and must be approved by the representative while empty containers must be disposed according to the Safety legislation. Institute (ARC-OVI) corporate colours must be used by the service provider as described in the technical specification.

PART TWO

2.1 TECHNICAL SPECIFICATION

NO	DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL COST
2.1.1	ROOF AND WALL	N.B. contractors must verify measurements before submitting bid proposals		
2.1.1.1	Remove all loose paint			
2.1.1.2	Clean roof with wire brush on 230mm grinder  ting water			
2.1.1.3	wash the roof plus overlaps (both sides) with high pressure water			
2.1.1.4	Seal all screws and over laps & allow the ARC representative to inspect before continuation. •Repair all loose water proofing. Waterproof roof and valleys with sealer – all screws, seams, overlaps, etc. •ARC to inspect and approves cleaning and sealing of roof before commencing of paint process. •Repair with high strength polyester membrane similar or equal to a.b.e water proofing system. •Apply 2 coats LIQUID WATERPROOFING COMPOUND			

	<ul style="list-style-type: none"> •Install/apply strictly according to manufacturer specification/instructions •Super laycryl (paint) must have a 10 year quality guarantee. Similar or equal to a.b.e. super laycryl •All membrane must have a 10 year quality guarantee 			
2.1.1.5	Seal all outlets (Valleys & Ridges) through roof and check for leaks.			
2.1.1.6	Apply anti-rust agent			
2.1.1.7	Repaint all of above with 2 coats of similar and equivalent to Dulux or Plascon roof paint – same colour as existing buildings. Paint must have a 12-year product guarantee			
2.1.1.8	The service provider to paint a small block and allow the ARC representative to give approval to go ahead.			
2.1.1.9	<p>If the service provider to use a spray when painting the roof to ensure smooth painting of the entire roof.</p> <p>Replace all rotten purlins and wooden louvres that is missing.</p> <p>Replace all rotten wooden structures on veranda.</p> <p>Paint first with wood primer and 2 x final coats with oil based enamel, similar and equivalent to Plascon or Dulux – same colour as existing buildings.</p>			
2.1.2	GUTTERS and DOWNPIPES			
2.1.2.1	Clean all gutters and remove all loose paint			
2.1.2.2	Fix or replace where damaged			
2.1.2.3	Wash with high pressure water			
2.1.2.4	Apply the anti-rust agent			

2.1.2.5	Paint gutters with first and second coat of roof paint inside and outside			
2.1.3	FIBRE CORRIGATED SHEETS			
2.1.3.1	Remove all fibre plates on the Northern side and replace with corrugated iron sheets provided by the ARC – OVR			
2.1.3.2	Remove and replace all corrugated iron sheets that are rusted with holes in them. The sheets will be provided by the ARC-OVR			
2.1.4	SPROCKETS			
2.1.4.1	If sprocket is painted; remove all loose paint			
2.1.4.2	All wood must be sanded down to removes lose paint and flaking paint.			
2.1.4.3	Supply and paint universal undercoat			
2.1.4.4	Repaint with 2 coats of oil based enamel, similar and equivalent to Plascon or Dulux – same colour as existing buildings.			
2.1.5	WINDOWS			
2.1.5.1	Remove and replace all loose putty. Where new putty is used it must be allowed to set and dry to the correct firmness before painting.			
	Replace all cracked or broken window panes			
2.1.5.2	Remove all loose paint and sanded to smooth surface on both sides of the windows and window frames			
2.1.5.3	Supply and paint universal undercoat			
2.1.5.4	Supply and paint 1 st and 2 nd coats. Repaint with 2 coats of oil based enamel, similar and equivalent to Plascon or Dulux – same colour as existing buildings			

2.1.5.5	All windows must open and close smoothly after painting			
2.1.5.6	Windows must be cleaned and cleared from all the paint drops			
2.1.6	DOORS AND FRAMES			
2.1.6.1	Remove all loose paint			
2.1.6.2	Sanded to smooth surface and clean before painting on both sides.			
2.1.6.3	Supply and paint universal undercoat			
2.1.6.4	Supply and paint 2 coats. Repaint with 2 coats of oil based enamel, similar and equivalent to Plascon or Dulux – same colour as existing buildings			
2.1.6.5	All doors must operate smoothly. (open and close proper and smoothly)			
2.1.7	WALLS			
2.1.7.1	Strip and brush all loose paint and scaling completely from the existing walls, then wash all walls with high pressure water			
2.1.7.2	Repair all damaged walls outside with plaster filler. Fill all cracks with exterior crack filler Then sand it smooth and clean.			
2.1.7.3	Remove all loose plaster, re-plaster, and paint with bonding liquid. Re-plaster with strong cement mixture (Floor to corrugated zinc plates) Wall must have a smooth finish Cement 42,5 N, complies with SANS 50197 1 bag of cement to 200 litres of damp sand The use of a Bonding liquid (Similar or equal to a.b.e. Plasta Kee) compulsory to bind the new plaster to the existing walls. (http://www.abe.co.za/2012/07/30/new-bonding-liquid-from-a-b-e-construction-chemicals/)			

2.1.7.4	Supply and paint 2 coats of the existing or similar (PLASCON Wall & All or similar)			
2.1.8	SITE			
2.1.8.1	Clean site from all rubble and dust			
2.1.8.2	Hand over to the Facilities Manager			
SUB - TOTAL				
CONTIGENCY = 10%				
VAT (IF REGISTERED = 15%)				
GRAND TOTAL				

2.3 SPECIAL CONDITIONS

- There will be a **compulsory site inspection / meeting**. Failure to attend this meeting or inspection will lead to the bidder to be automatically disqualified.
- Four weeks renovation period has been allocated for the FULL completion of this project (or as stipulated during site visit). This INCLUDES the snag list corrections and final sign off of the project.
- Non-submission of a provisional project plan would be deemed as non-compliance and the bid might be removed from the process. The project plan must indicate a time line with deliverables.
- CIDB Construction Certificate from Grade one (01) required.
- The awarding of this bid is subject to sound related profile of the bidder. To this end the bidder is to provide at least three (3) contactable (e-mail or phone/fax) references of clients (complete with physical address where similar work was done) for work done in the last 12 months and a company profile.
- The Institute is providing the essential services; the work must be executed in such a manner that it will not have negative impact on service delivery.

- Any damages to the Institute's equipment due to the negligence of the service provider will be repaired or replaced by the service provider at his/her own costs. The successful bidder must provide Safety File to the OHS officer.
- All the work done and the material used must comply with the requirement of Occupational Health and Safety Act, National building regulation, South African National Standard and any other relevant legislation.
- The service provider to ensure that all the work is completed within time schedule from the date the service provider received the order.