NATIONAL HEALTH LABORARY SERVICES (NHLS)

FORM OF QUOTATION

SUPPLIER:

RFQ NO:

NEW DIESEL RUN GENERATOR FOR THE NHLS HUMANSDORP LABORATORY HOSPITAL AT HUMANSDORP.

Item	Description	Unit	Quantity	Rate	Total
	20 kVA 40 Hz 1100 rpm 280 Volts				
	3 phases				
	Radiator and cooling fan complete with				
	protective guards • Standard ambient				
	temperatures up to 50°C (122°F)				
	12 volt starting motor• Batteries with rack				
	and cables				
	Digital indication for:				
	RPM – DC volts				
	Operating hours – Oil				
	Pressure (psi, kPa or bar)				
	Coolant temperature – Volts (L-L & L-N),				
	Frequency (Hz)				
	Battery, battery cable, battery charger,				
	muffler, base frame, radiator and fan,				
	vibration absorber, antifreeze coolant				
	and toolkit				
	Control panel				
	Sound proof canopy				
	INSTALLATION AND COMMISSIONING25 kVA 50 Hz 1800				
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	and toolkit				
	Control panel				
	Sound proof canopy				
1	INSTALLATION AND COMMISSIONING	No	1		
	Warranty for machinery: Within 1 year or 1000 running hours,				
1,1	whichever comes first.				
ĺ	After sales Service and Maintenance: Parts for service and Labour				
	for Service and Maintenance. Free service labour for 60 Months/ 5				
1,2	years.				
	Diesel provision: The 1st 6 months after installation of				
1,3	generator/1000 litres of diesel.				
	Training/Induction: Detailed training on how to use the generator				
	and how to refil the generator's diesel supply when empty. What				
1,4	indicators to look for to be aware of such.				
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IMPORTANT NOTE:

- Always read specification in conjunction with Bill of Quantities and Plan (if plan is applicable and supplied).
- All Quantities measured are indicative and will be re-measured on completion.

- Specific products to be used, to be confirmed in Bill of Quantities.
- All materials and products to be used, to be ISO 9001 accredited.
- Due to the nature of our labs (operation 24 hours) the contractor will be expected to work after hours and over the
 weekend.
- Variation orders can only be approved in writing (via the email) by the NHLS Project Manager
- No additional or extra work done will be paid for unless the project manager has issued a variation order.
- NHLS Project Manager will conduct all inspections.
- The contractor should be required to move the equipment (furniture, benches, etc.) and put them back requested.
- Only material installed will be paid and not for any wastage (no material on site will be paid).
- NHLS delegates can also and contact the client or visit the work done as referred on the completion certificate.
- Contractor will be requested to provide comprehensive safety file; work will be only allowed to commence after the file
 has been formally approve by NHLS.
- A contractor is expected to sign a 37(2) Agreement (Form FMI 0008) before commencing with the project.
- No progress payment will be made less than R200,000.00.

GUARANTEE, MAINTENANCE, PENALTY AND RETENTION PERIOD

The Guarantee and Maintenance period shall be for 12 months commencing on the date of Practical completion and acceptance of the Installation. During the Guarantee period the Contractor shall repair all defects in the Installation which may arise as a result of inferior quality materials or faulty workmanship. 5% retention of the contract price will be held back for a period of 3 months after date of Practical completion and acceptance of the installation

The fact that the Installation will be used and occupied by the Employer during the guarantee period shall in no way exempt the Contractor from his responsibility under this clause

Should a non-urgent fault occur during the guarantee period the Contractor will be advised, and he shall repair the fault in good time

Should a fault occur during the guarantee period, that is in the opinion of the Project Manager of an urgent nature, then the Contractor will be advised and shall proceed immediately to rectify the fault

Should a fault occur during the guarantee period, that is in the opinion of the Project Manager of an urgent nature, and the Contractor is not available, the Employer shall reserve the right to obtain the services of any available Contractor to repair the fault. The cost of such repair work shall be borne by the Contractor in accordance with the escalated rates. In such a case the faulty equipment shall be kept for scrutiny by the Contractor. If this occurs during the retention period and retention money is still due to the Contractor, such claim from the Alternative Contractor, will be deducted from the Retention fund

Should the frequency and breakdown/s, in the opinion of the Project Manager, become so regular as to constitute and unacceptable state of affairs or should the installation or portions thereof prove to be unacceptable, the Contractor shall upon receipt of a written instruction from the Project Manager, replace portions/components or even the entire installation if need be, at his own cost as prescribed by the Project Manager

Where the practical completion is not reached by the date stated in the Tender/ RFQ document or by the revised date granted by the Project Manager, the Contractor shall be liable to a Penalty determent by the Project Manager, which is in this instance .1% (point 1 percent) of the Tender/ RFQ Total value, Per Day

PRELIMINARIES

Tenderer's attention is drawn to the fact that the Hospital and Laboratory will be fully operational during the building process. The work will have to be carried out in phases and at times that must be liaised and agreed to with the Business Manager and Hospital Management. This might result in certain work being carried out at certain times only, even after hours of weekends. Also note that sensitive electronic equipment are in use and no work that cause a vibration can be carried out when these equipment are in operation. Operating theaters in the vicinity of the building work will also be in use during the building program and the Contractor must liaise closely with the Hospital Management and obtain their written consent and permission, before removing and/or servicing equipment/structures, that might interfere with the running of the theaters or any other service/s. The use of certain lifts for moving of material will also have to be agreed to with the Hospital Management. The tenderer must allow for this in his prices since no additional claim will be entertained in this regard.

TENDERS SHOULD BE BASED ON THE FOLLOWING SPECIFICATIONS

SITE APPLICATION

Repair to cracks

Repairs to cracks 0.2mm to 2mm

Rake out with a scraped blade.

Remove dust and debris.

Fill with pure acrylic, paintable, flexible crack filler.

Cracks over 2mm

Open out with a carborundum disk into a V shape minimum 3^{mm} wide.

Remove dust and debris.

Wet the crack and fill with damp 1:4 cement/sand mortar properly compacted into the cracks.

Repairs to Mortar Joints

Scrape out unsound mortar

Point solidly with 1:3 cement/sand mortar properly compacted into the joints

Repairs to Painted Wall Surface Coating

Remove loose paint with a sharp paint a scraper or hand-held pneumatic engraving tools fitted with flat chisel heads

Feather edges of tightly bonded paint with a rough to medium grit paper

Built up paint covering flush with general surface area

Preparation - Generally

Materials used in preparation to be types recommended by their manufacturers and the coating manufacturer for the situation and surfaces being prepared.

Apply in strict accordance with the manufacturer's specification.

Apply oil-based stoppers/fillers after priming. Apply water-based stoppers/fillers before priming unless recommended otherwise by manufacturer. Patch prime water-based stoppers/fillers when applied after priming.

Ensure that doors and opening windows, etc, are "eased" as necessary before coating. Prime any resulting bare areas.

Plastered surfaces and fibre cement boards to be washed down and allowed to dry completely.

Unfinished concrete surfaces clean with 1:4 solution of spirit of salts: water.

All floors where painting is to be carried out to be swept clean, walls dusted down, and unpainted surfaces protected.

Efflorescence

Remove surface salts and other loose material with a stiff brush or coarse dry cloth.

Leave for 48 hours and repeat process if further efflorescence occurs.

Sand glossy surfaces to provide a key for finish.

Ironmongery

Remove from surfaces to be coated and re-fit on completion. Do not remove hinges unless instructed to do so

Previously Uncoated Timber

Ensure that large and loose knots are removed and made good with sound timber of the same species. Sand down flush

Ensure that surfaces are clean and remove all oil, grease and excessive natural oils with suitable solvents

Sand to a smooth, even finish with arrises rounded or eased

Remove resinous bleeding by heat, apply two coats of knotting to resinous areas and all knots and allow to dry

Ensure that head of fasteners is countersunk sufficiently to hold stopping/filling. Fill nail and screw holes, joints, cracks, holes, depressions, open or coarse grain with matching coloured stopper/filler worked well in and finished off flush with surface. Sand smooth and remove dust

Sand down to remove all plaster stains pencil marks and other blemishes from timber that is to be oiled or stained

Previously Coated Timber

Strip any existing cracked or flaking varnish back to fresh wood

Sand down any discoloured areas to fresh wood

Ensure that surfaces are clean and remove all oil, grease and excessive natural oils with suitable solvents

Sound varnish to be sanded with 360 grit paper

Uncoated Masonry/Render

Remove dirt, surface deposits, loose and faking material with a stiff brush

Fill holes and cracks flush with surface, rub down

Unpainted Plaster

Remove dirt and surface deposits with a stiff brush

Rub down to remove nibs, trowel marks and plaster splashes

Lightly rub over trowelled glossy plaster with worn abrasive paper

Fill depressions, holes and cracks and lightly rub down flush with surface

Steel Generally

Remove all loose and faking paint

Feather edges of tightly bonding paint

Rusted Areas

Clean disk sand and wire brush to remove rust

Clean bare steel patches with a solvent wash

Rust convertor only to be used on small areas where hand cleaning is ineffective

Apply with a stiff brush ensuring penetration into any pitting

Inspect after two hours and recoat areas showing unconverted red rust

Prime surfaces as soon as possible after cleaning, and in any case within four hours

Coating

Painting Generally

Operatives must be appropriately skilled and experienced in the use of specified materials and methods of application

Do not use materials that show any bittiness when applied. Do not thin or intermix unless specified or recommended otherwise. If materials are found to have been thinned without authorization, the Project Manager may require an additional application of additional coats

Any priming as soon as possible on the same day as preparation is completed, ensure that coats are of adequate thickness and suit surface porosity

Adjacent coats of the same material must be of a different tint to ensure that each coat provides complete coverage

Apply coatings to clean, dust free, suitable dry surfaces in dry atmospheric conditions and after any previous coats have hardened. Lightly abrade between coats as necessary

Apply coatings evenly to give a smooth finish of uniform colour, free from brush marks, nibs, sags, runs and other defects. Cut in neatly and cleanly. Do not splash or mark adjacent surfaces

Keep all surfaces clean and free from dust during coating and drying. Adequately protect completed work from damage

Painted Joinery/woodwork

Before priming preservative treated timber, any cut surfaces to be retreated and all end grain to be liberally coated allowing it to soak in before recoating it

Pre-primed woodwork to be lightly rubbed down and patch prime to match existing

Prime: One coat primer, two coats to end grain which will be painted

Finish: Two coats Alkyd gloss, sanded down between coats

Staining

Check with stain manufacturer if primer is required for the species of timber and type of previously applied treatment.

Apply stain in flowing coats. Redistribute excess material by brushing before stain has set. Allow not less than 12 hours between coats

Varnishing

Thin first coat with white spirits according to manufacturer's recommendations

Brush well in avoiding aeration and lay off

Apply further coats of varnish, rubbing down lightly between coats along the grain

Bead Glazing to Coated Timber

Before Glazing: Apply first two coats to rebates and beads

Concealed Joinery Surfaces

Inaccessible parts of joinery constructions are to be primed and/or coated before assembly

Where one or more additional coats are specified to be applied, they must be applied to all surfaces, including those that will be concealed when incorporated into the building

Wooden Doors

Varnish or paint bottom edges before hanging

Completion

Ensure that opening lights/windows/hinges and other moving parts move freely. Remove all masking tape and temporary coverings afterwards

Protection

Adequately protect all surfaces that are not to be coated

Protect all surfaces from dust and damp

Where doors are delivered to site in a finished condition, provide all necessary protection to the doors when applying coatings to the frames

Air-conditioners

Contractor to provide adequate power supply to air con unit

12-month warrantee to be included

Contractor is liable for any damages to structure

All work must be SABS approved

Each air con to be separately wired via isolator from the DB board and connected with a circuit breaker (see size and Phase requirements as stipulated in Bill)

D/P Isolator to be installed and connected adjacent to air-con unit internally (see size and Phase requirements as stipulated in Bill)

Electrical Certificate of Compliance to be issued on completion

Allow for drilling through wall and plaster/ patch and paint afterwards. Piping to installed through walls only, never glass panes

All piping/cabling to be in PVC trunking / ducting. Allow for correct lengths

Units always to be heating and cooling (unless otherwise stipulated in Bill)

All piping, brackets, gas up to commissioning to be included in pricing

Supply units of the following Manufacturers: Samsung, LG, Carrier, Daiken, York or similar (in warrantee and guarantee)

All Air-cons to be Inverter type, unless specified of the BOQ

Plumbing

Only registered Plumbers to be employed for any plumbing & drainage work

Allow for $\pm 2m^2$ tiling above each basin and sink

Allow for A Grade Glazed white tiles, 152 x 152mm, 5 – 6.5mm thick

Sinks size: 1350mm x 535mm unless otherwise specified in bill of quantities

Sink mixer for tearoom sink to be 15mm chrome plated brass cobra mixer type tap

All basins to be white glazed, each fitted with an approved 32mm chrome plated brass waste fitting with screwed outlet, and a 15mm chrome plated brass elbow action tap connected to water supply

All sinks to be standalone stainless-steel sink, work area, splash back on Pre-manufactured 40 x 32^{mm} stainless steel square tubing frames, 4 legs on adjustable pedestals. Exposed surfaces having a smooth finish, each fitted with an approved 32mm chrome plated brass waste fitting with screwed outlet, and a 15mm chrome plated brass Hospital goose neck tap

Stainless steel grade 316 or Type 304 to be used for stainless steel sinks

All material to be SABS approved

Make sure all existing water pipes and waste is in good working condition

All existing basins and sinks to be washed and cleaned

On each water supply line, a ball valve needs to be installed as close as possible to outlet, this includes basins, sinks, toilets

Each tap to be visibly marked with "H" or a "Red" mark for Hot water and "C" or a "Blue" mark for Cold water

Geysers: Install makes such as Franky, Kwikhot or similar. Install on a drip tray with drainpipe to outside, pressure valve, safety valve, shut off valve, overflow pipe. Isolator to be installed at least 1m from Geyser, hot and cold-water supply lines to be bonded and earthed. Isolator to be wired to DB with dedicated double pole circuit breaker.

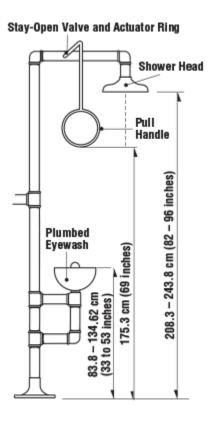
Toilets: these shall be deemed to include the following: WC Pan, flush valve or 11-liter cistern with flushing apparatus, float valve and flush pipe and all finishing's to pipes and cistern. To be the wash down type, approximately 400 high manufactured of white glazed fireclay or vitreous china, each provided with the compatible "P" or "S" –Traps, jointed to Pan. Pans and traps to be set on and encased in Class B concrete not less than 100mm thick at any point or position

Wall mounted bowl urinals: to be of white glazed fireclay or vitreous china, approximately 700 x 380mm in size with back flush entry, secured to wall with at least 2 concealed hanger brackets. Each urinal to be fitted with 38mm chrome plated

domical grating, urinal complete with push button assembly, exposed type flush valve with ball-o-stop and wall flange. • Chrome plate finish. • Additional toilet piston screw • Non-hold open feature, spreader and all other necessary chrome plated brass fittings as well as a chrome plated brass bottle trap

Hydro boil installations: Install always above sink (see bill of quantities for size)

Emergency shower: complete body shower with eye station. Flow rate to be 60 liters per minute. At floor level, 700mm below shower head, the radius of water reaching the floor should be 200mm. At the eye station flow rate should be 6 liters per minute at a flow pressure safe enough not to injure the User. This unit to be 1 meter from floor level. Make use of emergency showers as supplied by Broen, Bull Maurice Trading or similar



Water tanks

Pumps



Electrical

Only registered Electricians to be employed for any electrical work

Wires to be used for sockets outlets; 2.5mm² PVC

Colour for 2- compartment steel/PVC power skirting unless differently specified in bill of quantities (colour to be confirmed)

Normal plugs to be white and dedicated plugs to be red

Electrician to consult with Lab Manager regarding lab equipment when circuit are installed to prevent overloading, new plug points to be wired from distribution board and marked properly

Legend card in DB to be up to date

Electrical Certificate of Completion to be issued on completion

All material to be SABS approved

All installations to comply with SANS10142 installation rules

All additional /replaced plugs, isolators and light switches must be labelled on the cover and Distribution Board

Circuit breakers to be SABS approved and type and size to be confirmed with Project Manager before installation

Hydroboils: wire from DB Board with 30Amp double pole isolator next to Unit (at least 1m away) and 20Amp circuit breaker in DB board

Shade ports

Item		Single		Double		Triple
Pitch Height		900		1350		1350
Clearance	2100		2100		2100	
Width		3000		5000		7500
Length of span		5500		5500		5500
Cross		50 x 2		50 x 2		57 x 2

Cable 6mm galvanized in all cases

Hoops 42 x 2 42 x 2 50 x 2

Cantilever (bottom) 50 x 2

Cantilever (top arm) 42 x 2

Cantilever (brace) 34 x 2

Columns 165 x 3.5 x 4000

Columns 50 x 2 76 x 2 76 x 2

Foundations 500 x 600 x 900

Concrete 20 MPA for all

The hanging braces must be braced

The hanging brace must have a 12.5-degree angle

The hoops must be rolled on a rolling machine and not cranked/ bend

Colour green

The cotton used for sewing the nets must be UV resistant

Workbenches & Tops

Worktops to be 32^{mm} thick, either 600mm, 900mm or 1200mm, Formica brand post form - white (unless otherwise stipulated in Bill)

Where necessary 75mm holes must be drilled in worktops to accommodate computer cables and power supply to machinery and be made good with a plastic grommet

Pre-manufacture 30^{mm} x 30^{mm} steel square tubing frames as supplied by SA Lab or similar, sections of 1 000mm wide and 500mm deep or 1000mm wide and 800mm deep, for post form tops. All 4 legs to be on lockable castors or adjustable inserts as per BOQ wheel diameter 100mm. Bench Units to be equipped with water, basins, sinks, to be om adjustable pedestals. Benches could be 730mm or 900mm high (see bill of quantities) Sections to be bolted together, not welded. All steelwork to be epoxy powder coated in dove grey colour.

Cupboards

Steel laboratory cupboards

Steel epoxy powder coated white cupboards to be manufactured and assembled as follows. Units specified in bill will be either a 4 drawer (450mm wide) or 2 doors with 1 shelve unit (750mm wide). Exterior and Interior to be White powder coated. Doors to be affixed with 2 brass heavy duty piano hinges each and drawers to be mounted on runners. Each drawer and door to be equipped with a PVC recessed handle. All floor cupboards to be on 4 castors each, front wheels to be lockable. All doors to be double paneled for stability and no wobbly door and cupboards will be accepted. See bill of quantities for sizes and combinations.

Wooden cupboards

In kitchens timber cupboards to be manufactured and installed with 16mm melamine covered pressed wood. All cupboards to be on 100mm pedestals. Exterior to be Oak finish and Interior to be white finish. All visible exterior edges to be finished in Oak and internally white. Each drawer faces and door to have wrap around finish. Doors to be affixed on 2 hinges each and drawers on runners. Each drawer and door to be equipped with an aluminium handle

Doors

All doors to be hung in such a way that the clearance gap between door and frame after hanging shall not exceed 2mm at sides and head. The floor clearance to be preferably 2mm but may be increased to accommodate an uneven floor finish. Exterior doors shall be hung on brass hinges. Aluminium frame glass doors to have 6mm safety laminated glass fitted, to be hung on aluminium hinges, not less than 4 hinges on a 2 100mm high door. On higher doors at least 5 hinges should be fitted. The glass

door must have a mid-rail with bottom half either glass or solid aluminium, the aluminium door profile must be 90mm all-round All exterior doors to be fitted with an aluminium and rubber weather strip at the bottom. Each door to be equipped with 2 door handles. Type to be confirmed by Project Manager. Behind every door a doorstop should be installed on top of the floor to prevent the door handle contacting the wall – clearance between wall and door handle to be approximately 20mm.

Paint

Two final coats of White paint to all surfaces, ceiling and walls. Door colours to be confirmed by Project Manager, if not varnished

Existing pipes against wall must be colour coded painted, for example gas, water, oxygen

Rhino board surface to receive Rhinolite to a smooth finish on dry walls

Before painting can commence, every defect/uneven surface must be repaired

Patch prime new and exposed plaster areas with 1 coat and allow drying. Coat 1 may be thinned up to 10% with mineral turpentine to aid absorption. Allow 4 hours drying time at 23° c . Three (3) coats of paint to dry wall. Paint texture and type to match existing, Colour for walls and steel frames to be white unless otherwise confirmed by Project Manager

One coat metal primer to steel work and two coats final oil-based enamel

Paint to be Plascon double velvet, Dulux, Prominent or similar

VINYL Floors

Only use Heavy duty safety Vinyl flooring which should be slip resistant and factory sealed with Polyurethane as supplied by Marley or Polyfloor. Roll to be at least 2 metres wide and vinyl 2 - 2.5 mm thick. Colour to be confirmed by Project Manager. Sample to be signed off by Project Manager before installation commences

Ensure that the sub-floor is completely smooth, level, hard, dry and clean before laying commences

Joints to be butted, grooved and heat welded ensuring that the welding rod bonds to more than 70% of the sheet thickness. It is essential that on completion the installation be rolled, in both directions with an articulated 68kg three sectional metal floor rollers.

Skirting: install coving where wall meets floor and continue with vinyl floor 100mm high. Finish off with Vinyl/PVC Ribbon

Installation to be done by an approved Installer in accordance with the Manufacturers specifications

TILE Floors

Ensure that the sub-floor is completely smooth, level, hard, dry and clean before laying commences

Only use A Grade Acid Resisting Ceramic/ porcelain tile, 10mm thick, 600mm x 600mm for floors and 600mm x 200mm for walls in size or as per BOQ

All tiles need to have "Aluminium Tile Edge Trim" where necessary. Bull nose or square one may be used

Use SABS approved tile cement and apply as per Manufacturer's instructions (colour to be confirmed by Project Manager)

Use SABS approved waterproof Acid-resistant grout. Gaps 5 – 10mm (colour grey)

Skirtings to be 100mm high where required, coved at junction with floor and rounded on top edge

CARPET Floors

Ensure that the sub-floor is completely smooth, level, hard, dry and clean before laying commences. Installation to be done by an approved Installer in accordance with the Manufacturer's specifications

TILE Walls

Ensure that the wall is completely smooth, level, hard, dry and clean before laying commences

Only use A Grade Acid resisting Ceramic tiles, 10mm thick, 600 x 200mm in size

Use SABS approved tile cement and apply as per Manufacturer's instructions (colour to be confirmed by Project Manager)

All tiles need to have "Aluminium Tile Edge Trim" where necessary. Bull nose or square one may be used

Use SABS approved waterproof Acid-resistant grout. Gaps 5 – 10mm (colour grey)

All edges and corners to be finished off with PVC edging strips. Colour to be confirmed per job depending on tile colour.

Glazing

All Internal glass in panes not exceeding 1.5m² of surface area shall be 4mm clear float glass

All Internal glass in panes exceeding 1.5m² of surface area shall be 6mm laminated safety glass with a Manufacturer's warranty against defects and discoloration

All Exterior glass up to a height of 10m in panes not exceeding 2.9m² of surface area shall be 6.38mm PVB Laminated annealed safety glass. Above 10m the Project Manager should appoint a Glazing Competent Person

Mirrors to comply with SABS requirements. Unframed mirrors to have polished edges

All glass in aluminium doors and frames to be fitted with 6mm laminated safety glass

All exterior facing windows to be tinted with Klingshield or similar product, unless otherwise stipulated. Colour to be confirmed by Project Manager

Blinds

Vertical Group 3 blinds to be installed (colour to be confirmed by Project Manager)

Blinds to be re-measured on site before manufacturing and installation

Vertical blinds to be 127mm

Horizontal blinds 50mm

Horizontal blinds to be either Aluminium/ Wood Venetian conformation on the BOQ

Measurements given is only for tendering purpose

Suspended ceilings

Install suspended ceilings as per Manufacturer's instructions such as Donn Products or similar. Panels to be vinyl cladded smooth white panels, 1200 x 600 x 12.5mm on suspended pre-painted exposed tee trusses, including main and cross tees, hangers, grids, etc., all level and properly secured. At edges use 25mm pre-painted shadow line aluminium cornices

Partitioning

Drywall partitioning construction and support frame system including finishes to be as per Manufacturer's specifications

Minimum requirement GPG Gypsum Gyproe Standard 40 Db, ½ hour fire rating with a stud (63.5mm) and track system. Positioning at 600mm cc fixed to 63.5mm top & bottom track clad on both sides with 12.5mm taper edged rhino board affixed with 25mm drywall screws at 220mm cc

All corners to be finished off with drywall corner strips. All joints to be taped, jointed and smoothed before painting

Aluminium skirtings to be affixed to all drywall partitioning unless otherwise specified

Door and window frames fitted in drywall partitioning to be installed as per Manufacturer's specifications

Lockers (Timber)

Timber lockers to be manufactured and assembled with 16mm melamine covered pressed wood. Exterior to be Oak melamine finish, including all visible edges. Interior to be White melamine finish, including all visible edges and backing. If the back side of any cupboard will be visible after installation, those exposed areas or entire area should be cladded with white melamine. Inside dimensions of each cubicle to be 300mm². Units to be assembled 3 on top of each other. Each locker to have a wraparound Oak melamine finished door, affixed with piano hinges. Each locker to be equipped with a lock and 2 keys as well as an aluminium handle (no plastic handles). Each stack of 3 to be assembled as 1 unit and 100mm adjustable chrome plated legs to be affixed underneath bottom locker.

Lab Coat Hooks

Lab coat hooks must be aluminium base and hooks with a minimum of three per set

Lockers (Steel)

Solid steel lockers which should be epoxy powder coated to be supplied. Sets to be single 4 tier lockers. Colour to Ivory/Beige/Karoo. Each door to be lockable and correct size padlocks with 2 keys each, per locker, to be provided

Locks

All exterior door locks to have 4 lever mortice locks with 2 keys each fitted (unless otherwise specified in bill)

All interior door locks to have 2 lever mortice locks with 2 keys each fitted (unless otherwise specified in bill)

All security type gates to have 7 lever locks with 2 keys each fitted

All timber lockers to have normal cupboard locks with 2 keys each fitted

All steel lockers to have padlocks with 2 keys each fitted

Steel shelving

Only powder coated grey steel shelving to be installed in storage areas, archives & wash up areas (no wood allowed). Shelving to be of an adjustable type with each shelve at least 500mm wide and 450mm deep. Bottom shelve to be at least 200mm from the floor and top shelve not higher than 2 100mm. In between top and bottom another 3 shelves, evenly spaced, to be fitted (in total 5 tier shelving). Each vertical steel supports to be affixed to the wall at, at least 2 positions in the top half. As supplied by Krost shelving or similar

Signage

All interior signs to be White Perspex with smooth edges, with vinyl (7 year) applied onto the Perspex

All exterior signs to be White Chromadek, with vinyl (7 year) applied onto the metal

Colour code:

 $Pantone: \, Coated - 383C \, / \, Uncoated - 397 \, \, U$

CMYK - C:40 M:0 Y:100 K0

RGB - R:166 G:206 B:54

Artwork to be signed off by Project Manager before sign is manufactured

WORKS AGREEMENT

Contractor: The contactor shall:

- Provide adequate supervision and management of the works at all times.
- Provide toilet facilities for use by his workers except where provided by the client (NHLS).
- Storage space is not always available for material and sufficient arrangements should be catered for and included in pricing.
- Submit all local authority notices by the works.
- Comply with all statutes, regulations and bylaws of local or other authorities having jurisdiction regarding the execution of the works and obtain all certificates and other documents required by such authorities.
- Notify the Project Manager where compliance with any statute, regulation or bylaw requires a change or variation to the works upon which such change shall be deemed to be a contract instruction.
- Immediately begin the works and continue at a rate of progress satisfactory to the Project Manager in terms of the agreement.

- Comply with all contract instructions in good time.
- Bring the works, within the constructed period, to practical completion in terms of completion.
- Bring the works to final completion.
- Surplus material and waste to be carted away to a suitable dumping site to be found by the Contractor, outside the boundary of the site

Completion

Practical Completion

- The Project Manager shall inspect the works from time to time to give the contractor interpretations and guidance on the standard and state of completion of the works which he will require the contractor to achieve for practical completion
- The contractor shall inform the Project Manager of the date on which he expects to achieve practical completion
- The Project Manager shall inspect the works on or before the date requested by the contractor

Where the works:

- Has reached practical completion the Project Manager shall at once issue a certificate of practical completion to the contractor
- Has not reached practical completion the Project Manager shall issue a practical completion list to the contractor detailing the outstanding work to be done and defects to be rectified to achieve practical completion
- Is not ready for practical completion inspection the Project Manager shall issue a list as a general guide to the contractor of the outstanding areas of work and defects to be attended to before he can request a further inspection.

Final Completion

- Within seven calendar days of practical completion the Project Manager shall prepare and issue to the contractor a final completion list detailing the incomplete work and defects to be rectified within a reasonable period
- The defects liability period of fourteen calendar days shall start on the date of practical completion
- On the expiry of the defects liability period the Project Manager shall immediately inspect the works for final completion.
 Where the works:
- · Has reached final completion the Project Manager shall at once issue a certificate of final completion to the contractor
- Has not reached final completion the Project Manager shall issue a defects list to the contractor detailing any incomplete work and defects to be rectified before the Project Manager will undertake a further inspection
- Where the contractor has achieved final completion the latent defects liability period shall end three years from the date
 of final completion

Employer: The employer shall:

- Hand over the site to the contractor by the date stated in the schedule. The construction period and latent defects liability period shall commence with the handover of the site.
- Arrange for water, sewer and electrical connections as required and pay all fees concerning this
- Provide water and electricity as required for the execution of the works free of charge.
- Not issue instructions to, interfere with, hinder or obstruct any of the contractor's workers or any other persons employed
 or acting on behalf of the contractor.

Risk and Insurance

- The Contractor indemnifies the NHLS against any loss in respect of claims from other parties arising out of or due to the execution of the works or occupation of the site by the contractor consequent upon:
 - o Death or bodily injury or illness of any person.

- o Physical loss and damage to any property other than the works.
- o Removal of or interference with lateral support of an adjoining property.
- The contractor shall take out insurances in respect of his employees as are required by law.
- Where, in the opinion of the Project Manager, loss and damage to the works due to the contractor's negligence the contractor shall be liable for such loss and damage.
- The contractor shall in all circumstances be at risk for loss of, or damage to his construction plant or vehicles.
- The contractor shall enclose the site along the facades where work is being done. He shall furthermore allow for all the
 required scaffolding, gantries, hoarding, etc. to safeguard pedestrian traffic on the sidewalks or paths as well as vehicular
 traffic in the streets
- The form of scaffolding, gantries, hoardings, etc., must be fully detailed in his "method statement" as previously required. It is not the intention to prohibit or deviate pedestrians or traffic during construction and Tenderers are to account for this when pricing the Tender
- Adequate warning signs/ lights/ etc. are to be employed where required. If the Tenderer requires the full pavement width
 and even part of the adjacent street, then he must make all the necessary arrangements with local authorities for the
 pavement and street closure as well as pay for all fees in connection therewith including the loss of income due to parking
 meters
- The existing premises will be occupied at all times and the Contractor will be required to keep all noise to a minimum

Safety

- From the date of site handover to the Contractor until the completed work is handed back to the Employer, the Contractor shall be responsible for maintaining safe working conditions on site
- The Contractor shall be responsible in terms of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) and the regulations promulgated in terms of the Act or Factories, Machinery and Buildings Work Act, whichever is applicable
- The Contractor shall be responsible for supplying and installing the required safety signs as determined by the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) All safety signs shall comply with the requirements of the latest edition of SANS 11861 as Applicable

Programme

	END
	his programme to suit other activities
	has been notified of the acceptance of his tender. If necessary, the Project Manager may instruct the Contractor to adjust
•	The Contractor shall submit his programme of work to the Project Manager not later than 14 days after the Contractor