



TENDER NO.: SC 2166/2020

**ADDITIONS AND ALTERATIONS TO EXISTING BUILDING CONTROL DEPARTMENT FOR OVERSTRAND
MUNICIPALITY, ROYAL STEET, HERMANUS**

SPECIFICATIONS

11. TECHNICAL REQUIREMENTS

This section should describe the requirement in detail. Detailed requirements are best defined by describing functional and performance characteristics as these allow bidders to offer alternatives or innovative solutions. Technical characteristics may also need to be defined where functional and performance characteristics alone are insufficient to adequately define the requirement.

11.1. Technical Specifications for execution of works

11.1.1. Site and building:

- 11.1.1.1. Existing building department site with demarcated area for Contractor as shown on site plan.

11.1.2. General description of building:

- 11.1.2.1. Conventional brick and mortar building.
- 11.1.2.2. External skin plastered and painted.
- 11.1.2.3. Internal skin plastered and painted.
- 11.1.2.4. Concrete floor with vinyl.
- 11.1.2.5. Roof –Concrete Roof and metal sheeting on pre-manufactured trusses.
- 11.1.2.6. Internal drywall skimmed and painted.
- 11.1.2.7. Joinery within existing building

11.1.3. Protection and security:

- 11.1.3.1. The role players (The client and his Contractors) have to comply with the following:
 - (a) Occupational Health & Safety Act No.85 of 1993 as amended by the Occupational Health & safety Amendment Act No.181 of 1993;
 - (b) the Construction regulations No. R1010 of 18 July 2003;
 - (c) General Administrative Regulations, 2003, No. R929 of 25 June 2003;
 - (d) General Safety Regulations, 1986 No. R1031 of 30 May 1986; and
 - (e) All other Regulations that might be applicable.
- 11.1.3.2. Provide security for new building works.
- 11.1.3.3. The responsibility of the building site lies with the Contractor.
- 11.1.3.4. **The existing building area must be secure from the following:**
 - (a) Vandalism.
 - (b) Burglaries - Contractor to provide any security required at any stage of the project.

11.1.4. Detailed description of works:

- 11.1.4.1. Removal of paved surface, vegetation and specified windows.
- 11.1.4.2. New building work.
- 11.1.4.3. New foundations
- 11.1.4.4. New floor finishes
- 11.1.4.5. New walls
- 11.1.4.6. New windows and doors
- 11.1.4.7. New roof structure
- 11.1.4.8. New sanitaryware
- 11.1.4.9. Plumbing and drainage
- 11.1.4.10. Sanitaryware
- 11.1.4.11. New electrical work.
- 11.1.4.12. Painting

Specifications of construction of extension to Building department for Overstrand Municipality:

11.1.5 Demolition work

- 11.1.5.1 Remove paving and vegetation of area when new building is placed and remove from site. Also remove North-facing windows on existing building for connection between the existing building and additions (see demolition plan)

11.1.6 New building work

11.1.6.1 Foundations

- 11.1.6.1.1 as per concrete layout plan:
 - a) 800x300mm concrete footing excavated 700mm into natural ground level. 4x12Y steel in concrete footing with lacing bars at 1m c/c
 - b) all concrete in foundations to be 15MPA concrete as per Structural Engineer's specification

11.1.6.2 Floors

- 11.1.6.2.1 100mm concrete floor on 250-micron damp proof membrane powder floated finish
- 11.1.6.2.2 15 MPA concrete to be used for floor slab
- 11.1.6.2.3 Ref 193 steel mesh in all floors
- 11.1.6.2.4 Filling to be compacted to 95% MOD AASHTO density in layers of 150mm maximum
- 11.1.6.2.5 Floor finish with tiles @ R170/m² material only. Labour tile adhesive and grouting part of contract
- 11.1.6.2.6 Floor finished with SAP 94x22 skirting painted to specification

11.1.6.3 Walls

- 11.1.6.3.1 Foundation walls:
 - a) Cavity walls with 150 mm brick-force every course to floor level. Cavity filled with 15MPA concrete to stepped DPC at floor level
- 11.1.6.3.2 Main structure walls:
 - a) 280m cavity walls with butterfly wall ties every 3 course at rate of 9 per m²
 - b) Precast concrete lintels over door and window openings.
 - c) All walls interior and exterior to be plastered smoothly with pushed joints on internal and external plaster where brick work and concrete work connect. See Structural Engineer details
- 11.1.6.3.3 Dry walls:
 - a) Dry walls with 114 x 38 timber structure and 12mm Rhinoboard (or equivalent and approved) on either side fixed with Timbertek screws or equivalent and approved. Board skimmed with Crestone (or equivalent and approved) material and painted according to paint specs.
 - b) Dry wall according to dry wall detail and specs.

11.1.6.4 Windows and doors

- 11.1.6.4.1 Internal
 - 11.1.6.4.1.1 3 x D2 – Hollow core doors 813mx2055 with 90x55 meranti door frames
 - 11.1.6.4.1.2 1 x D5 – 1-hour fire door
 - 11.1.6.4.1.3 Self-closing mechanism on fire door
 - 11.1.6.4.1.4 4 x 3 lever chrome handle and lock set by Yale (or equivalent and approved)
 - 11.1.6.4.1.5 4x2 pairs of brass hinges
 - 11.1.6.4.1.6 1 x 1200 x 1100 Aluminium sliding window – as per schedule
 - 11.1.6.4.1.7 W6 – white aluminium
- 11.1.6.4.2 External
 - 11.1.6.4.2.1 D1 – 1 x 1790 x 2100 Sliding door as shown in door schedule – white aluminium
 - 11.1.6.4.2.2 D4 - 1 x 2100 x 2100 Sliding door as shown in door schedule – white aluminium
 - 11.1.6.4.2.3 Sliding door to New Manager's office must have a sliding security gate on its outside, running in the same direction as door.
 - 11.1.6.4.2.4 Windows as shown in window schedule – white aluminium
 - 11.1.6.4.2.4.1 W1 - 1 x 1800 x 900 Aluminium window with two side-hung elements
 - 11.1.6.4.2.4.2 W2 - 4 x 1800 x 300 Fixed Aluminium windows
 - 11.1.6.4.2.4.3 W3 - 1 x 600 x 2100 x Aluminium window with 2 top-hung elements
 - 11.1.6.4.2.4.4 W4 - 1 x 1800 x 1200 Aluminium window with two side-hung elements
 - 11.1.6.4.2.4.5 W5 - 2 x 600 x 600 Aluminium windows with top-hung elements
 - 11.1.6.4.2.5 PC amount for the white aluminium doors & windows

R60 000-00 excl VAT (Amount for material and installation of doors and windows)

11.1.7 Roof structure

11.1.7.1 Courtyard verandah roof

- 11.1.7.1.1 New roof – 0.53mm IBR profile sheeting with AZ200 coating in accordance with SANS-9364. Continuous hot-dip Aluminium/Zinc coated steel sheeting or equivalent and approved. (colour charcoal)
- 11.1.7.1.2 Pre-fabricated gang nail roof trusses manufactured by an ITC SA certified truss fabricator at no more than 1,2m c/c for truss spacing. Truss pitch - 12°.
- 11.1.7.1.3 Roof structure to include TC bracing, BC bracing, C runners, Web runners, as well as cross bracing of 38x76mm.
- 11.1.7.1.4 Bottom and top cord where extended into brick wall wrapped in DPC. Bottom cord fixed with brackets as per Structural Engineer detail before building brick work. Front of truss fixed to 50x228mm SAP beam with truss hangers
- 11.1.7.1.5 Waterproofing of head wall and side wall flashings against wall with membrane and 2 coats oil based waterproofing paint.
- 11.1.7.1.6 Fit standard fibre cement facias with 160mm ogee aluminium gutters (colour white) with 1 downpipe in aluminium as indicated on plan.
- 11.1.7.1.7 PC amount for the corrugated roof

R5 000-00 excl VAT (Amount for material only)

11.1.7.2 Concrete Roof

- 11.1.7.2.1 255 mm Concrete slab as per engineer, skimmed underneath with Crestone (or equivalent and approved) finished with standard cove cornice installed with approved cornice fixing silicone
- 11.1.7.2.2 25 mm Screed to fall towards stormwater outlets, sealed with Derbigum (or equivalent and approved) product by a recognized applicator.
- 11.1.7.2.3 80 mm sheet Lambda board R-value of 3.33 (or equivalent and approved), coverer with 50 mm layer 19 mm clean washed loose stones.
- 11.1.7.2.4 Aluminium rainwater head and downpipe as per detail x 3 units

11.1.8 Plumbing and drainage

- 11.1.8.1 Only "Cobra" SABS piping (or equivalent and approved) to be used for water supply

11.1.8.2 New drainage

- 11.1.8.2.1 Drainage run vented with a vent valves as indicated
- 11.1.8.2.2 Rodding eyes at change of direction
- 11.1.8.2.3 Any drainage pipes layed under floors or foundations to be cast in a 300x300 concrete sheath
- 11.1.8.2.4 All waste fittings must be connected to drainage system with 50mm Ø PVC piping and where relevant anti-vac traps to be fitted to prevent anti-syphonage
- 11.1.8.2.5 Layout drawings must be provided by the Contractor for approval by the Employer for the following :
 - 11.1.8.2.5.1 Drainage runs including junctions, vent pipes and sizing of piping
- 11.1.8.2.6 All gulleys to be fitted with a 250x250 PVC manhole cover and to be flush with the surrounding floor or ground level (resin type cover)

11.1.9 Sanitaryware

11.1.9.1 Basin

- 11.1.9.1.1 Beta basin courier commercial (white) (or equivalent and approved)
- 11.1.9.1.2 Aspen light basin mixer f/top (chrome) (or equivalent and approved)
- 11.1.9.1.3 P/button slotted basin waste (chrome)
- 11.1.9.1.4 Bolt set fixing. 884820#1500212 (or equivalent and approved)
- 11.1.9.1.5 Trap – 32 mm PVC basin "P" Trap

11.1.9.2 Water Closet

- 11.1.9.2.1 Beta Astina F/Flush box suite (or equivalent and approved)
- 11.1.9.2.2 Flexible connection hose to be braided
- 11.1.9.2.3 Angle valve Benkiser ½ G10 (or equivalent and approved)

11.1.10 Electrical work

Allowance to be made by Electrical Contractor for:

- 11.1.10.1 Trunking as shown on plan for plug points as well as computer point for future use (165x55mm twin compartment)
- 11.1.10.2 1 x single plug point in wall for printer
- 11.1.10.3 31x single plug points in trunking
- 11.1.10.4 10 x euro plugs in trunking
- 11.1.10.5 4x Fluorescent light fittings in positions as shown fixed to underside of concrete roof.
- 11.1.10.6 2 x ceiling mounted lights in Watering closets as shown to underside of existing ceiling.
- 11.1.10.7 1x outside light fitting in new courtyard
- 11.1.10.8 3 x new light switches as indicated
- 11.1.10.9 PC amount for light fittings – R12 000-00 excl VAT (Amount for fitting only. Labour in electrical contract quote)

11.1.11 Painting

- a) New plaster primer – external :
 - i) 1 coat masonry primer
 - ii) 2 coats Plascon Wall & All (or equivalent and approved) (colour white)
- b) New plaster – internal and dry walls :
 - i) 1 coat masonry primer
 - ii) 2 coats Plascon Double Velvet (or equivalent and approved) (colour white)
- c) Wooden doors and frames and skirtings :
 - i) 2 coats of universal undercoat
 - ii) 2 coats of Plascon Velvagro (or equivalent and approved) (colour white)
- d) Fascia:
 - i) 2 coats of ARP primer
 - ii) 2 coats poly acrylic PVA (colour white)
- e) Head wall flashing to be waterproof with membrane and 2 coats of oil based waterproofing paint

11.1.12 Joinery

- 11.1.12.1 Install new 32 mm Shutterply shelving in kitchen – shelves 350 mm deep
- 11.1.12.2 Install new timber bench in submissions reception, as per plan – 450 mm high
- 11.1.12.3 Cut back portion of existing counter in submissions reception and build new extension to it according to plan – to match existing

PC amount for joinery R10 000-00 excl VAT

11.1.13 Gate

- 11.1.13.1 Remove existing sliding gate and fence on North Eastern corner of property and set aside for later use.
- 11.1.13.2 Adjust existing fence to fit into new position and install the adjusted fence.

PC amount for gate R5 000-00 excl VAT

- 11.1.14 On final completion, an occupancy certificate must be handed to Overstrand Municipality, signed by building control officer of the Overstrand Municipality.

- 11.1.15 Contractor to allow a R50 000-00 contingency amount on contract amount