

**Project : Proposed Boundary Wall, Rear Gate, Flag Post, Lounge & Main Gate at
HA. Uligamu School**

Item	Description	Unit	Qty	MaterialRate	LabourRate	Total
	<u>BILL No: 01</u> <u>PRELIMINARIES</u>					
1.1.0	<u>General Notes</u>					
1.1.01	<u>Abbreviations</u> m - metre no - numbers m ³ - cubic metre m ² - square metre m - metre t - tonnes incl - including mm - millimetre dia - diameter SS - Stainless Steel GI - Galvanised Iron					
1.2.0	<u>Site Management Costs</u>					
1.2.01	Allow for all on and off site management cost including costs of foreman and assistants, temporary services, telephone, fax, hoardings, fences, Crane/Concrete pump, Machinaries and similar items	Item	1.00			
1.3.0	<u>Sign Board</u>					
1.3.01	Allow for sign board.	item	1.00			
1.4.0	<u>Safety</u>					
1.4.01	Safety - Providing and fixing scaffolding with G.I. pipes and clamps and pvc netting alaround site during construction	Item	1.00			
1.5.0	<u>Clean-up</u>					
1.5.01	Allow for clean-up of completed works and site upon completion.	Item	1.00			
1.6.0	<u>As-Built Drawings</u>					
1.6.01	Preparation and submission of "as-built" Drawings.	Item	1.00			
BILL No: 01 PRELIMINARIES						
TOTAL OF BILL No: 01 - Carried over to summary						

BILL NO : 02
GROUND WORK

2.1.0	<u>General</u> (a) Rates shall include for: leveling, grading, trimming, compacting to faces of excavation, keep sides plumb, backfilling, consolidating, additional working space and disposing surplus soil.		
2.2.0	<u>Demolition</u>		
2.2.01	Demolition of existing Boundary Wall (Including foundations underground) & Existing Wall Marked. Rate shall include for demolition and disposal of demolished materials from the site.	m ²	207.50
2.3.0	<u>Site clearance</u>		
2.3.01	Clearing site - Demolition of Existing store and dispatch all debris, clearing and dispose all unwanted materials away from site and prepare site ready for proposed construction.	no	1.00
2.4.0	<u>Excavation</u> (a) Excavation quantities are measured to the faces of concrete members. Rates shall include for all additional excavation required to place the formwork, back fill, dewatering and others		
	<u>Excavation</u>		
2.4.01	Excavation for gate foundation	m ³	5.10
2.4.02	Excavation for boundary wall foundation & rear gate column	m ³	8.29
2.4.03	Excavation for flag post	m ³	1.46
2.5.0	<u>Back filling</u> (a) Rates shall include for: leveling, grading, trimming and compacting. (b) Ground need to be compacted to the density required by the consultant		
2.5.01	75mm Compacted hardcore filling under ground slab (Lounge area)	m ³	8.07
2.5.02	75mm Compacted hardcore filling under ground slab (Guard Post)	m ³	0.37
2.5.03	150mm Compacted hardcore filling under ground slab (Flag post)	m ³	1.46
2.6.0	<u>Damp Proof Membrane</u> (a) Rates shall include for: dressing around and sealing to all penetrations, laps and turnups.		
2.6.01	Polythene damp proof membrane (500 gauge) laid on blinding layer.	m ²	29.13
2.7.0	<u>De-Watering</u>		
2.7.01	De-watering the excavation until completion of concrete work as required	item	1.00

BILL No: 02 GROUND WORKS

TOTAL OF BILL No: 02 - Carried over to summary

BILL NO : 03

CONCRETE

3.0.0

(a) Rates shall include for: placing in position; making good after removal of formwork and casting in all required items; additional concrete required to conform to structural and excavated tolerances.

(b) Mix ratio for reinforced concrete shall be 1:2:3 and lean concrete shall be 1:2:3 by volume.

(c) All structural concrete shall be GRADE M30 and lean concrete shall be GRADE M15

(d) Rates shall include for: concrete, formwork, reinforcement, cleaning, fabrication, placing, the provision for all necessary temporary fixings and supports including tie wires and chair supports, laps, distribution bars and wastage.

(e) Rates shall include for: all necessary boarding, supports, erecting, framing, temporary cambering, cutting, perforations for reinforcing bars, bolts, straps, ties, hangers, pipes and removal of formwork.

(f) Rates shall include for: cleaning, fabrication, placing the provision for all necessary temporary fixings and supports including tie wires and chair supports, laps, distribution bars and wastage.

(g) All reinforcing bars shall be high strength bars.

(h) Slab soffits to be finished fairfaced, use plasteciser and formwork with reducing agent.

(i) All exposed & external concrete members shall be casted with Masterpel 777 or equivalent water proofing chemical.

(j) Rate shall include for applying 2 coats of waterproofing chemical to substructure.(Below ground level)

3.0.01 Allow for Concrete Testing. Item 1.00

3.1.0 **MASS CONCRETE**

Quantity is measured to the edges of concrete foundation members. Rates shall be inclusive for any additional concrete required to place the formwork.

50mm thick lean concrete below Foundation

3.1.01 Foundation Footings & Tie beams m³ 0.56

3.2.0 **REINFORCED CONCRETE**

SUB-STRUCTURE

FOUNDATION PADS

3.2.01 700 × 700 × 200mm Foundation pads, F1 m³ 1.86

FOUNDATION BEAMS

3.2.02 200 × 230 mm Foundation beam, TB m³ 1.29

3.2.03 150 × 200 mm Foundation beam, TB1 m³ 0.05

3.2.04 150 × 200 mm Foundation beam, FB m³ 6.36

	<u>COLUMNS</u>					
3.2.05	200 × 200 mm Concrete columns C1 / GC (height 2500)	m ³	1.70			
3.2.06	150 × 150 mm Concrete columns MC (height 1950mm)	m ³	1.01			
3.2.07	125 × 150 mm Concrete columns SC (height 1950mm)	m ³	0.55			
	<u>SLABS</u>					
3.2.08	75 mm thk Concrete Slab on Gates (G1, G2, G3)	m ³	6.47			
3.3.0	<u>ROOF LEVEL</u>					
	<u>ROOF BEAMS</u>					
3.3.01	200 × 350 mm Beam RB1	m ³	2.03			
3.3.02	100 × 210 mm Beam CB	m ³	2.20			
3.3.03	150 × 125 mm Beam RB2	m ³	0.19			
	<u>SLABS</u>					
3.3.04	130 mm thk Concrete Slab on Guard Post	m ³	0.61			
3.4.0	<u>OTHER WORKS</u>					
	<u>PLANTER BOX</u>					
3.4.01	Concrete Planter Box as per detailed drawings	item	1.00			
3.5.0	<u>OTHER CONCRETE WORKS</u>					
3.5.01	<u>WINDOW SILL & LINTELS</u>					
	Charges for construction of R.C.C. Sills and Lintels for the windows and doors as per details. Rate shall include for shuttering and Reinforcement works complete.	item	1.00			
BILL No: 03 - CONCRETE WORKS						
TOTAL OF BILL No: 03 - Carried over to summary						
	<u>BILL No: 04</u>					
	<u>MASONRY</u>					
4.1.0	<u>General</u>					
	a) Rates shall include for cleaning out cavities, forming rebated reveals and pointing and cleaning down to reveals where necessary; fractional size blocks, all necessary machine cutting, cutting or forming chases or edges of floor slabs.					
	b) Cutting or leaving holes and openings as recesses for and building in pipes, conduits , sleeves and similar as required for all trades; leaving surfaces rough or raking out joints for plastering and flashings, bedding frames or plates, building in joints.					
	c) All external walls shall be 125mm thick cement hollow blocks and for masonry mix ratio 1:5 (cement and river sand)					

<u>MASONRY</u>					
4.2.0	<u>BLOCK WORK</u> Cement block wall, bricks laid to form alternate courses of headers and stretchers, laid on and inc. mortar. 125 mm thk 2450mm height				
4.2.01	Guard Post	m ²	15.19		
4.1.02	Cement block wall, bricks laid to form alternate courses of headers and stretchers, laid on and inc. mortar (BELOW GROUND Level). 125 mm thk 500mm below ground level Guard Post	m ²	3.10		
4.1.03	Cement block wall, bricks laid to form alternate courses of headers and stretchers, laid on and inc. mortar. 125 mm thk 1800mm height Boundary Wall	m ²	204.61		
4.2.04	Cement block wall, bricks laid to form alternate courses of headers and stretchers, laid on and inc. mortar (BELOW GROUND Level). 125 mm thk 352mm below ground level Boundary Wall	m ²	38.84		
4.1.05	Cement block wall, bricks laid to form alternate courses of headers and stretchers, laid on and inc. mortar. 125 mm thk 2000mm height Lounge area	m ²	32.65		
4.1.06	Cement block wall, bricks laid to form alternate courses of headers and stretchers, laid on and inc. mortar (BELOW GROUND Level). 125 mm thk 500mm height Lounge area	m ²	7.25		
4.1.07	Cement block wall, bricks laid to form alternate courses of headers and stretchers, laid on and inc. mortar. (FLAG POST AS IN DRAWING) 125 mm thk Flag Post Area	m ²	14.97		
4.1.08	Cement block wall, bricks laid to form alternate courses of headers and stretchers, laid on and inc. mortar. (BELOW GROUND IN FLAG POST AREA) 125 mm thk 300mm height Flag Post Area	m ²	5.85		

BILL No: 04 - MASONRY

TOTAL OF BILL No: 04 - Carried over to summary

BILL NO: 05

STRUCTURAL METAL WORKS

5.1.0

General

(a) Rates shall include for: all fabrication work, welding, marking, drilling for bolts incl. steel brackets, steel plates, bolts, nuts and any type of washer, riveted work, counter sinking and tapping for bolts or machine screws.

(b) Rates shall include for fabrication and erection and temporary supports and fixing into position.

(c) "Welding" is deemed to be in accordance with the specification and for the material to which it is to be used. Gusset plates, shoe plates, ends, caps, cleats, brackets, stiffeners, bolts, etc., are required to be included to the rate of the associated steel work in which they occur.

(d) For the description of materials refer to the Drawings and technical specification

(e) Contractor shall submit shop drawings for approval prior to fabrication.

(f) Unless specified otherwise, rate shall include for: All shop fabrication work, marking, delivery, unloading, hoisting, erecting and fixing as per detail drawings, All welds & allowance for rolling margin, the weight of weld metal in welded constructions, members of any length, cutting to size and shape and joints in the running length, grinding to a smooth finish, unless otherwise required, Machine drilled bolt, holes, bolts, nuts and washers, cleats, shoe and gusset plates and all other connections, Wire brushing to clean all the steel surfaces (except stainless steel) after fabrication and spray painting with two coats of quick drying metal primer zinc phosphate & two coats of matt anti corrosive paint with final paint, all necessary accessories and preparation and submission of Shop Drawings and As Built Drawings as specified.

5.2.0

STEEL TRUSS

Lounge Area & Guard Post

5.2.01

Fixing 50×100mm×2.5mm RHS Rafters using MS plate and anchorbolt on roof structure as per detailed drawing

m

59.55

5.2.02

50×50mm×2.5mm GI purlins @ 450 C/C

m

182.88

BILL No: 05 -STRUCTURAL METAL WORKS

TOTAL OF BILL No: 05 - Carried over to summary

<u>BILL NO: 06</u>					
<u>ROOFING</u>					
6.1.0	<u>General</u> (a) Rates shall include for: fair edges, dressing over angel fillets, roof sealant, turning into grooves, all other labours, circular edges, nails, screws and other fixings and laps.				
6.2.0	<u>ROOF COVERING</u> <u>LOUNGE AREA</u>				
6.2.01	MSP Roofing sheet as per detailed drawing	m ²	94.74		
6.3.0	<u>GUTTER</u> <u>DOOR UNITS</u>				
6.3.01	200 × 250 mm Aluminium Gutter	m	22.74		
6.4.0	<u>FASCIA</u>				
6.4.01	250×35mm fascia board	m	30.68		
6.5.0	<u>ALUMINIUM CLADDING</u>				
6.5.01	Aluminium cladding fixed to RHS as per detailed drawing & incl. 500×25mm fascia board.	item	1.00		
BILL NO: 06 - ROOFING					
TOTAL OF BILL No: 06 - Carried over to summary					
<u>BILL No: 07</u>					
<u>WINNDOWS, SCREENS & LIGHTS</u>					
7.1.0	<u>General</u> (a) Rates shall include for locks, latches, closers, push plates, pull handles, bolts, kick plates, hinges and all door & window hardware. (b) Rates shall include for door frames, mullions, transoms, trims, glazing, tinting, timber panels, boardings, framing, lining, fastenings and all fixings. (c) Sizes are given overall outside dimensions of actual doors and windows. (d) Thickness and sizes of glass panels are shown on the Drawings and doors and windows schedule (e) Rates shall include for all painting as specified (f) Rates shall include all items specified in the door schedule and specification. (g) Frames and sashes to be 25-60 micron white powder coated aluminium other wise specified.				
7.2.0	<u>WINDOWS</u> 800 × 1200 W1 - Aluminium window with aluminium frame and glass panel	no	3.00		
BILL No: 07 - WINNDOWS, SCREENS & LIGHTS					
TOTAL OF BILL No: 07 - Carried over to summary					

BILL No: 08

DOORS, SHUTTERS & HATCHES

8.1.0

General

(a) Rates shall include for locks, latches, closers, push plates, pull handles, bolts, kick plates, stopper, hinges and all door & window hardware.

(b) Rates shall include for door frames, mullions, transoms, trims, glazing, tinting, timber panels, boardings, framing, lining, fastenings and all fixings.

(c) Sizes are given overall outside dimensions of actual doors and windows.

(d) Thickness and sizes of glass panels are shown on the Drawings and doors and windows schedule.

(e) Rates shall include for all painting as specified

(f) Rates shall include all items specified in the door schedule and specification.

(g) Frames and sashes to be 25-60 micron white powder coated aluminium other wise specified.

8.2.0

DOORS

8.2.01

800 × 2100 D1 - Solid timber panel door with timber frame coated with waterproofed varnish/wood dye paint

no

1.00

8.3.0

LOUNGE AREA

8.3.01

1500 × 2068 G1 - Double swing steel gate (50mm and 20mm Square Hollow section) as per detailed drawing

no

1.00

8.3.02

2640 × 2000 G2 - Sliding gate as per detailed drawing

no

2.00

8.4.0

REAR GATE (BOUNDARY WALL AREA)

8.4.01

1650 × 1800 G3 - Sliding gate as per detailed drawing

no

1.00

BILL No: 08 - DOORS, SHUTTERS & HATCHES

TOTAL OF BILL No: 08 - Carried over to summary

BILL No: 09

FLOOR, WALL, CEILING, AND ROOF FINISHINGS

9.1.0	<u>General</u> (a) Rates shall include for: fixing, bedding, grouting, and pointing materials; making good around pipes, and similar; cleaning down and polishing. (b) "Masterseal 588" or equivalent should be applied on top of all slabs, screed and walls upto 600mm height.		
9.2.0	<u>PLASTERING</u> 15 mm thk cement plaster on external surface as specified on the drawing.		
9.2.01	GROUND FLOOR (Guard Post & Lounge area)	m ²	90.79
	15 mm thk cement plaster on internal surface as specified on the drawing.		
9.2.02	GROUND FLOOR (Guard Post)	m ²	18.29
	15 mm thk cement plaster on external surface as specified on the drawing.		
9.2.03	GROUND FLOOR (Boundary Wall)	m ²	391.28
	15 mm thk cement plaster on external surface as specified on the drawing.		
9.2.03	GROUND FLOOR (Flag Post)	m ²	34.07
9.3.0	<u>CEMENT SCREED</u> (a) Rates shall include for laying 75mm thick cement mortar in 1 : 5 mix ratio, cleaning down to reveals where necessary and water proofing of where necessary.		
9.3.01	75 mm thk SCREED on ground floor (Lounge area & Guard Post)	m ²	90.77
9.4.0	<u>TILING</u> (a) Rates shall include for: Fixing, bedding, grouting, and pointing materials, making good around pipes, sanitary fixtures, and similar; cleaning & Polishing. (b) All Tiling work in accordance with specifications and finishes schedule. (c) Tiles rate shall be given as specified in the drawing.		
9.4.01	FLOOR TILING on Guard Post	m ²	3.86
9.5.0	<u>WAVE PATTERN WALL TILES</u>		
9.5.01	GROUND FLOOR (Lounge area)	m ²	21.52
9.6.0	<u>DIGITAL NOTICE BOARD WALL</u>		
9.6.01	100mm wide Plywood board fixed to timber sections(60×30mm @600mm c/c) with 10mm vertical spacing as specified in the drawing	item	2.00
9.7.0	<u>DECORATIVE PLANTER SEAT</u>		
9.7.01	Plywood planks fixed to 50×50mm timber frame finish coated with waterproofed varnish/wood dye paint	item	1.00

9.8.0	<u>SCHOOL NAME AND LOGO</u>				
9.8.01	School name in English letters cut out in acrylic fixed to wall	item	1.00		
9.8.02	School name in Dhivehi letters cut out in acrylic fixed to wall	item	1.00		
9.8.03	School name logo cut out in acrylic fixed to wall	item	1.00		
9.8.04	School name logo cut out in acrylic fixed to aluminium cladding roof front	item	1.00		
9.8.05	School motto in english cut out in acrylic fixed to aluminium cladding roof	item	1.00		
9.8.06	School motto in Dhivehi cut out in acrylic fixed to aluminium cladding roof	item	1.00		
9.9.0	<u>SS FLAG POST</u>				
9.9.01	75mm Dia SS Pipe / Pole with pole sphere head & 8mm round base plate welded with cross plate incl. 6m in length 75mm Dia SS Pipe / Pole with pole sphere head & 8mm round base plate welded with cross plate	no	2.00		
BILL No: 09 - FLOOR, WALL, CEILING, AND ROOF FINISHINGS					
TOTAL OF BILL No: 09 - Carried over to summary					
<u>BILL No: 10</u> <u>PAINTING & DECORATIONS</u>					
10.1.0	<u>General</u> (a) Rates shall include for: the provision, erection and removal of scaffolding, preparation, rubbing down between coats and similar work, the protection and/or masking floors, fittings and similar work, removing and replacing door and window furniture. (b) All painting work shall be carried in accordance with the Specifications				
10.2.0	<u>WALL PAINTING</u> Weatherbound paint finish as specified (EXTERNAL SURFACES)				
10.2.1	GROUND FLOOR	m ²	500.36		
10.2.2	Emulsion paint finish including putty application on brick walls as specified (INTERNAL SURFACES) GROUND FLOOR	m ²	18.29		
10.2.3	Weather emulsion paint finish incl. undercoat of wall sealer and putty application on brick wall & slab FLAG POST	m ²	34.07		
10.3.0	<u>CEILING PAINTING</u>				
10.3.1	Emulsion paint finish including putty application on slab soffit GROUND FLOOR	m ²	4.68		
BILL No: 10 - PAINTING & DECORATIONS					
TOTAL OF BILL No: 10 - Carried over to summary					

BILL No: 11

MECHANICAL & ELECTRICAL SERVICES

11.1.0

General

(a) Design, provide and install electrical network for the entire building complete in accordance to standards set by the local governing body STELCO/FENAKA.

(b) The following items and description and the drawings are given as a guidance as to the nature of the information required to be returned by the contractor. Should they not be appropriate the contractor should provide a similar BOQ using the Additions/Omissions sheets provided at the back of this BOQ.

(c) The cost shall include for: screws, nails, bolts, nuts, standard cable fixing or supporting clips, brackets, straps, rivets, plugs and all incidental accessories.

(d) Rate shall include for necessary chasings, trenching, conduits, cables, cable trays, fittings and clips, cutting holes and chases in brick work/ block work/ concrete work complete with all necessary accessories such as sockets, connections, cable glands and boxes, hardware clips, soldering and jointing materials etc., for proper installing and laying of cables.

(e) Rates for electrical isolators, conduits, fittings, equipment and similar items shall include for: all fixings to various building surfaces.

(f) A light fixture is measured as one point; switch end of wire is not included in the quantity.

(g) A point wiring for power points is measured (regardless of 1 gang, 2 gang etc) as one point for each socket outlet; other end of wire is not included in the quantity.

(h) All under ground cables directly buried in ground/run in trenches to be properly laid and covered with cable tiles/trench covers. Rate for under ground cables shall include for all necessary excavation, sand layers, concrete tiles, warning strips and back filling with approved quality earth properly compacted, hot dipped galvanized brackets for trenches, accessories, etc as applicable.

(i) All equipments shall be guaranteed for a period of 6 months from the date of commissioning or date of practical completion of the project which ever later

(j) The rates shall include for comprehensive maintenance during defects liability period of 6 months from the date of handing over

	<p>(k) Rate for all electrical panels shall include for supply and installation of all necessary MCCBs, MCBS, EFRs, ELCBs, auxiliary contacts, Voltmeters, ammeters, Digital analyser, kWh meters, indicator lamps, selector switches, copper bus bars, inter locks, aligning and grounding of the panel, inter connectors, internal wiring connections to switch gear, steel channels and necessary hardware fixing insulating materials, all in fully enclosed metal clad panels and distribution boards completed as shown in drawing. They shall comply with the specifications and I.E.E. regulations and be complete to working order to the approval of local authorities.</p> <p>(l) Rate shall include for supply, installation, maintaining, testing and commissioning of the system for power and lighting according to drawings and specifications to working order.</p> <p>(m) All materials, equipment wiring shall conform to local codes, specifications, standards/latest I.E.E. regulations (BS 7671).</p>				
11.2.0	<p><u>POINT WIRING AND FITTINGS</u></p> <p>Rate shall include for supply & installation of cable, conduits for point wiring in concealed installations including lights, switches, power outlet, data points, isolators, etc, all as specified in the drawing</p>				
11.2.01	Supply and Installation of 2 × 2C 4mm ² PVC/PVC/Cu + 4mm ² PVC/Cu earth cable c/w uPVC conduit, junction boxes etc. for lights and switches point wiring	no	1.00		
11.3.0	<p><u>LIGHTS, SWITCHES AND SOCKETS</u></p> <p>Rate shall include supply and installation of following lighting fixtures, socket outlets as specified and detailed, fixed in position including all fixing accessories, supports and connect to power, under following conditions</p> <ol style="list-style-type: none"> 1. All bathrooms, out door light fixtures shall be IP65 2. All switches & sockets shall be ABB or equivalent brand. 				
	<u>LIGHTS AND SWITCHES</u>				
11.3.01	Multicolor landscape lights	no	10.00		
11.3.02	Spot lights	no	5.00		
11.3.03	Led Strip lights as per detailed drawing	no	2.00		
11.3.04	5 Gang Light switches	no	3.00		
11.3.05	2 Gang Light switches	no	2.00		
11.3.06	13A Power Socket in Weatherproof Polycarbonate Enclosure	no	1.00		
11.3.07	13A Twin Socket	no	2.00		
11.3.08	15A Switched Socket at High Level	no	1.00		
11.3.09	Emergency Light	no	1.00		
11.3.10	HDMI	no	1.00		
11.3.11	Ceiling Fan 1200mm dia	no	1.00		
11.4.0	<u>ELECTRICAL WIRING</u>				
1)	2.5mm ² Wiring to Light Points	points	11.00		
2)	2.5mm ² Wiring to Power Points	points	4.00		
5)	Cabling - HDMI	points	1.00		
BILL No: 11 - MECHANICAL & ELECTRICAL SERVICES					
TOTAL OF BILL No: 11 - Carried over to summary					

BILL No: 12

ADDITIONS

12.1.0

General

Provision to include quantities as per the drawing which is missed in the bill of quantities.

BILL No: 12 - ADDITIONS

TOTAL OF BILL No: 13 - Carried over to summary

BILL No: 13

OMISSIONS

13.1.0

General

Provision to remove the excess quantity given in the bill quantities if any as per the drawing details

BILL No: 13 - OMISSIONS

TOTAL OF BILL No: 14 - Carried over to summary