

**PROJECT : R. MADUVVAREE SCHOOL**  
**(BOUNDARY WALL & GATE)**

Item	Description	Unit	Qty	MaterialRate	LabourRate	Total
	<b><u>BILL No: 01</u></b> <b><u>PRELIMINARIES</u></b>					
1.1	<b><u>General Notes</u></b>					
(1)	<b><u>Abbreviations</u></b> m - metre no - numbers m <sup>3</sup> - cubic metre m <sup>2</sup> - square metre m - metre t - tonnes incl - including mm - millimetre dia - diameter SS - Stainless Steel GI - Galvanised Iron					
1.2	<b><u>Site Management Costs</u></b>					
(1)	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	<b><u>Sign Board</u></b>					
(1)	Allow for sign board.	No	1.00			
1.4	<b><u>SAFETY</u></b>					
(1)	Safety - Providing and fixing scaffolding with G.I. pipes and clamps and pvc netting alaround building during construction	Item	1.00			
1.5	<b><u>Clean-up</u></b>					
(1)	Allow for clean-up of completed works and site upon completion.	Item	1.00			
<b>BILL No: 01 PRELIMINARIES</b>						
<b>TOTAL OF BILL No: 01 - Carried over to summary</b>						

Item	Description	Unit	Qty	MaterialRate	LabourRate	Total
	<b><u>BILL NO : 02</u></b> <b><u>GROUND WORK</u></b>					
2.1	<b><u>General</u></b>  (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	<b><u>Site clearance</u></b> Clearing site - Demolition of Existing Wall and dispatch all debris, clearing and dispose all unwanted materials away from site and prepare site ready for proposed construction (including all subsurface structure of the wall).	Item	1.00			
2.4	<b><u>Excavation</u></b> (a) Excavation quantities are measured to the faces of concrete members. Rates shall include for all additional excavation required to place the <b>formwork , back fill , dewatering</b> and others					
2.4.1	<b><u>Excavation</u></b>					
(1)	Foundation Beam TB	m <sup>3</sup>	28.45			
(2)	Foundation Beam (Wall)	m <sup>3</sup>	17.62			
(3)	Foundation Pad		8.00			
2.4.2	<b><u>Back filling</u></b> (a) Rates shall include for: leveling, grading, trimming and compacting. (b) Ground need to be compacted to the density required by the consultant					
1)	Foundation Beam (TB)	m <sup>2</sup>	26.67			
2)	Foundation Beam (Wall)	m <sup>2</sup>	19.60			
3)	Foundation Pad	m <sup>2</sup>	7.28			
2.5	<b><u>Damp Proof Membrane</u></b> (a) Rates shall include for: dressing around and sealing to all penetrations, laps and turnups.					
1)	Polythene damp proof membrane (500 gauge) laid on blinding layer.	m <sup>2</sup>	2.88			
<b>BILL No: 02 GROUND WORKS</b>						
<b>TOTAL OF BILL No: 02 - Carried over to summary</b>						

Item	Description	Unit	Qty	MaterialRate	LabourRate	Total
3.0	<p align="center"><b><u>BILL NO : 03</u></b></p> <p align="center"><b><u>CONCRETE</u></b></p> <p>(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.</p> <p>(b) Mix ratio for reinforced concrete shall be 1:2:3 and lean concrete shall be 1:2:6 by volume.</p> <p>(c) Quantity is measured to the edges of concrete foundation members. Rates shall be inclusive for any additional concrete</p>					
3.1.1	<p><b><u>LEAN CONCRETE</u></b></p> <p><b><u>50mm thick lean concrete below Foundation</u></b></p> <p>Foundation Footings &amp; Tie beams</p>	m <sup>2</sup>	2.88			
3.2	<p align="center"><b><u>REINFORCED CONCRETE</u></b></p>					
3.1.2	<p><b><u>FOUNDATIONS</u></b></p> <p>(1) Foundation Beam (TB)</p> <p>(2) Foundation Beam (Wall)</p> <p>(3) Foundation Pad</p>	m <sup>3</sup> m <sup>3</sup> m <sup>3</sup>	1.78 2.94 0.72			
3.1.3	<p><b><u>COLUMNS &amp; BEAMS</u></b></p> <p>(1) Wall column</p> <p>(2) Gate Column (C1)</p> <p>(3) Capping Beam (Wall Top Beam)</p> <p>(4) Gate Beams (B1, B2)</p> <p>(5) Seating</p> <p>(6) Gate Roof Slab</p>	m <sup>3</sup> m <sup>3</sup> m <sup>3</sup> m <sup>3</sup> m <sup>3</sup> m <sup>3</sup>	6.10 4.10 3.47 2.13 0.60 2.35			
3.2	<p align="center"><b><u>FORM WORK</u></b></p> <p>(a) Exposed surface shall have fair finish while remaining may have rough finish.</p> <p>(b) Timber used for unexposed concrete surface shall sound dressed and seasoned good quality common timber</p> <p>c) Plywood used for forms shall be of commercial standard, moisture resistane concrete form plywoodnot less than 6mm thick and atleast 12mm thick.</p> <p>(d) 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.</p>					
3.2.1	<p><b><u>FOUNDATIONS</u></b></p> <p>(1) Foundation Beam FB</p> <p>(2) Foundation Pad</p>	m <sup>2</sup> m <sup>2</sup>	124.65 0.90			
3.2.2	<p><b><u>COLUMNS</u></b></p> <p>(1) Wall column</p> <p>(2) Gate Column (C1)</p> <p>(3) Capping Beam (Wall Top Beam)</p> <p>(4) Gate Beams (B1, B2)</p> <p>(5) Seating</p> <p>(6) Gate Roof Slab</p>	m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> m <sup>2</sup>	121.92 7.00 30.48 22.76 18.00 25.53			

Item	Description	Unit	Qty	MaterialRate	LabourRate	Total
<b>3.3</b>	<b><u>REINFORCEMENT WORK</u></b> (a) Main reinforcement steel shall be high tensile steel hot rolled deformed bars complying with BS 1119 or BS 1172 Characteristic strength not less than 160N/mm <sup>2</sup> . (b) Stirrups shall be hot rolled mildsteel round bars complying with BS 1119, Characteristic strength not less than 250N/mm <sup>2</sup> (c) Rates shall include for; distribution steel, cleaning, fabrication, placing, the provision for all necessary temporary fixings, and supports including chairs and tie wire, laps and wastage.					
<b>3.3.1</b>	<b><u>BELOW GROUND</u></b>					
<b>3.3.2</b>	<b><u>FOUNDATIONS</u></b>					
(1)	Ground Beam (Wall) 10mm dia deformed bars - 6m 6mm dia deformed bars - 6m	kg kg	599.86 107.64			
(1)	Foundation Beam TB (Gate) 12mm dia deformed bars - 6m 6mm dia deformed bars - 6m	kg kg	115.44 43.59			
(2)	Foundation Pad 10mm dia deformed bars - 6m	kg	28.42			
<b>3.3.3</b>	<b><u>COLUMNS</u></b>					
(1)	Wall column 10mm dia deformed bars - 6m 6mm dia deformed bars - 6m	kg kg	396.12 56.39			
(2)	Gate Column (C1) 12mm dia deformed bars - 6m 6mm dia deformed bars - 6m	kg kg	200.00 82.76			
(3)	Capping Beam (Wall Top Beam) 10mm dia deformed bars - 6m 6mm dia deformed bars - 6m	kg kg	299.93 34.17			
(4)	Gate Beams (B1, B2) 10mm dia deformed bars - 6m 6mm dia deformed bars - 6m	kg kg	125.44 43.59			
(6)	Gate Roof Slab 10mm dia deformed bars - 6m	kg	197.54			
<b>BILL No: 03 - CONCRETE WORKS</b>						
<b>TOTAL OF BILL No: 03 - Carried over to summary</b>						

Item	Description	Unit	Qty	MaterialRate	LabourRate	Total
<b><u>BILL No: 04</u></b>						
<b><u>MASONRY AND PLASTERING</u></b>						
<b>4.1</b>	<b><u>General</u></b>					
	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 wall and all inetrenal walls shall be 100mm thick Solid cement blocks and for masonry mix ratio 1:5 (cement and river sand)					
<b>4.2</b>	<b><u>MASONRY</u></b>					
<b>1.0</b>	<b><u>BELOW GROUND LEVEL</u></b>					
	<b>100mm thick Solid block boundary wall</b>					
	100mm thick solid block single wall	m <sup>2</sup>	69.27			
<b>2.0</b>	<b><u>ABOVE GROUND LEVEL</u></b>					
<b>1 )</b>	<b>Boundary walls</b>					
a )	100mm thick Hollow block <b>single</b> wall	m <sup>2</sup>	437.28			
<b>3.0</b>	<b><u>BELOW GROUND LEVEL</u></b>					
	<b>100mm thick Solid block gate walls</b>					
	100mm thick solid block single wall	m <sup>2</sup>	3.84			
<b>4.0</b>	<b><u>ABOVE GROUND LEVEL</u></b>					
<b>1 )</b>	<b>Gate walls</b>					
a )	100mm thick Hollow block <b>single</b> wall	m <sup>2</sup>	35.84			
<b>4.3</b>	<b><u>PLASTERING</u></b>					
	(a) 20mm thick Cement plastering on Exterior surface of External masonry walls and concrete surfaces and 15mm thick plastering on interior walls and concrete surface as specified incl. wire mesh shall be fixed at the joints of concrete surfaces and walls before plastering. <b>Quantity is measured including concrete surfaces - Parapetwalls, Liftwalls, columns &amp; beams.</b>					
	thick (12+8mm) 2 coats in 1:4 cement and river sand mix ratio					
	c) Rates shall include for approved brand water proofing compound shall be mixed with cement mortar for external wall plastering as per manufacturers specifications.					
<b>4.3.1</b>	<b><u>BELOW GROUND LEVEL</u></b>					
<b>1 )</b>	<b><u>20mm thick Plastering</u></b>					
	Both surface of below ground on boundary walls	m <sup>2</sup>	138.54			
<b>4.3.2</b>	<b><u>ABOVE GROUND LEVEL</u></b>					
<b>1 )</b>	<b>Both Side Plastering</b>					
	Both surface of boundary wall	m <sup>2</sup>	874.56			
<b>4.3.3</b>	<b><u>BELOW GROUND LEVEL</u></b>					
<b>1 )</b>	<b><u>20mm thick Plastering</u></b>					
	Both surface of below ground on Gate walls	m <sup>2</sup>	7.68			

Item	Description	Unit	Qty	MaterialRate	LabourRate	Total
<b>4.3.4</b>	<b><u>ABOVE GROUND LEVEL</u></b>					
<b>1 )</b>	<b>Both Side Plastering</b> Both surface of Gate wall	m <sup>2</sup>	71.68			
<b>BILL No: 04 - MASONRY AND PLASTERING</b>						
<b>TOTAL OF BILL No: 04 - Carried over to summary</b>						
<b><u>BILL NO: 05</u></b> <b><u>DOORS AND WINDOWS</u></b>						
<b>5.1</b>	<b><u>General</u></b> (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 and window frames, mullions, transoms, trims, glazing, tinting, timber panels, boardings, framing, lining, fastenings and all fixings and installation. (c) All Timber door frames shall be treated timber. Rate shall include for Paint/Varnish finish. (d) All louvres, windows and sliding doors shall be 30 micron powder coated aluminium as per details given in Door/Window schedule. (e) All doors and windows shall be accordance with door/window drawing details.					
	<b><u>External</u></b>					
1 )	D1	no	1.00			
2 )	W1	no	2.00			
<b>BILL NO: 05 - DOORS AND WINDOWS</b>						
<b>TOTAL OF BILL No: 05 - Carried over to summary</b>						

Item	Description	Unit	Qty	MaterialRate	LabourRate	Total
	<b><u>BILL No: 06</u></b> <b><u>PAINTING</u></b>					
<b>6.1</b>	<b><u>General</u></b> (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 (c)Rate shall include for weather proof paint finish for <b>exterior surfaces of the wall</b> complete including application of two coats of oil based wall sealer and two coats of weather bond paint (d)Rate shall include for putty and paint finish for <b>interior surfaces of the wall and ceilings</b> complete including application of two coats of wall sealer, two coats of putty finish and two coats of emulsion paint finish on top for Interior painting.					
1)	Painting exterior surfaces of External Wall, Columns & beams.	m <sup>2</sup>	437.28			
	<b>BILL No: 06 - PAINTING</b> <b>TOTAL OF BILL No: 06 - Carried over to summary</b>					
	<b><u>BILL No: 07</u></b> <b><u>METAL WORK</u></b>					
<b>7.1</b>	<b><u>General</u></b> (a) Rates shall include for ; all labour in framing, cutting, welding, cleats, baseplates, flanges,screws, nails, bends, and similar complete with grinding, surface smoothening and polish finishes.					
<b>7.2</b>	<b><u>GALVANIZED STEEL HOLLOW SECTION RAILING WELDED TOGETHER IN BETWEEN THE POSITIONS OF THE EXISTING COLUMNS</u></b>					
<b>1.0</b>	<b><u>Steel Gates</u></b>					
1)	<b><u>Steel Gate</u></b>  Supply, Fabrication and Fixing Steel Gate as per details	Nos	1.00			
<b>2.0</b>	<b><u>Aluminium Cladding on Gate</u></b>					
1)	<b><u>Cladding</u></b>  Supply and Fixing of aluminium cladding on gate building, as per details. This also includes support structrue if required any.	Nos	1.00			
	<b>BILL No: 07 - METAL WORK</b> <b>TOTAL OF BILL No: 07 - Carried over to summary</b>					

Item	Description	Unit	Qty	MaterialRate	LabourRate	Total
	<b><u>BILL No: 08</u></b> <b><u>ELECTRICAL INSTALLATIONS</u></b>					
<b>8.1</b>	<b><u>General</u></b>  (a) Rates shall include for: screws, nails, bolts, nuts, standard cable fixing or supporting clips, brackets, straps, rivets, plugs and all incidental accessories (b) Rates for work in trench shall include for: excavation, maintaining faces of excavations, backfilling, compaction, appropriate cable covers, warning tape and disposal of surplus spoil  (c) Rates shall include for electrical conduits, fittings, equipment and similar all fixings to various building surfaces and also all electrical work shall be carried out according to STELCO standards and specifications.  (d) Each Light/ light fixture and its switch is measured as one one point; similarly each fan or each socket outlet is measured as one point; (e) <b>Rates shall include for supply and complete installation , fittings and fixtures.</b>					
<b>2.1 )</b>	<b><u>ELECTRIC BOARDS</u></b>					
a	Supply and Installation	nos	1.00			
<b>2.2 )</b>	<b><u>ELECTRIC FIXTURES</u></b>					
	Solar Powered LED Gate Lights (12W) IP65	nos	10.00			
<b>2.3 )</b>	<b><u>ELECTRICAL WIRING</u></b>					
1 )	2.5mm <sup>2</sup> Wiring to Light Points	points	4.00			
<b>BILL No: 08 - ELECTRICAL INSTALLATIONS</b>						
<b>TOTAL OF BILL No: 08 - Carried over to summary</b>						



Item	Description	Unit	Qty	MaterialRate	LabourRate	Total
	<b><u>BILL No: 09</u></b> <b><u>ADDITIONS</u></b>					
9.1	<b><u>General</u></b> <b><u>Provision to include quantities as per the drawing which is missed in the bill of quantities.</u></b>					
<b>BILL No: 09 - ADDITIONS</b> <b>TOTAL OF BILL No: 09 - Carried over to summary</b>						

Item	Description	Unit	Qty	MaterialRate	LabourRate	Total
	<b><u>BILL No: 10</u></b> <b><u>OMISSIONS</u></b>					
<b>10.1</b>	<b>General</b>					
	<u>Provision to remove the excess quantity given in the bill quantities if any as per the drawing details</u>					
	<b>BILL No: 10 - OMISSIONS</b> <b>TOTAL OF BILL No: 10 - Carried over to summary</b>					