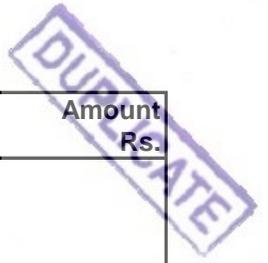


**BILL OF QUANTITIES FOR PROPOSED RE-ARRANGEMENT PLAN OF CREMATING AREAS AND LANDSCAPING AT HINDU SECTION GENERAL CEMETRY ,BORELLA.**

**BILL NO 03**

**DUPLICATE**

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	<p><b>Note:</b> Prior to do pricing the Contractor is adviced to do a detail inspection of the site related to all items mentioned under this Bill.</p> <p><b>BILL NO. C DEMOLITION</b></p> <p><b>Note:</b> 1. Rates for Demolition shall include demolishing, dismantling and removing etc. with the minimum damage to the material in the process of dismantling, temporary supporting and protecting existing work and adjacent properties against damage, dust and weather and stacking and transport to specified location all serviceable materials as directed and disposal of debris from site including spraying water periodically to reduce the amount of dust.</p> <p>2. Precautions should be taken during piling up of debris so as not to disrupt existing drainage pathways, pavements walkways etc</p> <p>3. Rate shall include for Disconnection or plugging water , sewer connection</p>				
03-C-01	Removing existing steel gate in hindu pyre ground entrance.	01	Nr		
03-C-02	Removing topsoil and existing grass patches on proposed turfing areas.(approx)	365.00	m <sup>2</sup>		



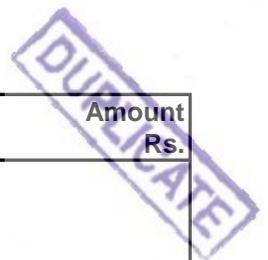
Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
03-C-03	Removing topsoil on proposed pathways areas.	100.00	m <sup>2</sup>		
03-C-04	Removing existing concrete benches.	03	Nr		
	<b>Total carried over to summary</b>				
	<p><b>BILL NO. D</b> <b>EXCAVATION AND EARTH WORK</b></p> <p>1. Unless otherwise measured separately rates shall include for :</p> <ul style="list-style-type: none"><li>· Part return fill in, well rammed and consolidated</li><li>· Disposal of surplus earth away from the site</li><li>· Compact bottom of excavations</li><li>· Earth work supports</li><li>· Working space</li><li>· Dewatering of ground and other water</li><li>· Dewatering of rain water and collecting water</li><li>· Stacking of excavated earth for removal</li><li>· Handling and re-handling of earth</li></ul> <p>2. Rate for Hard Earth Filling shall include for:</p> <ul style="list-style-type: none"><li>· Filling in layers, (not more than 1'0") well ramming and consolidating.</li><li>· The earth shall be free of vegetation, roots, boulders easily decomposable materials, chemicals, industrial waste, plastic etc.</li><li>· The maximum size of particle shall not exceed 75mm.</li><li>· The earth shall be well graded and contain silt and clay (fines) not more than 30%.</li></ul>				

DUPLICATE

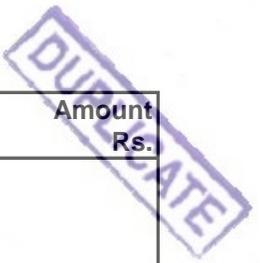
Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
03.D.01	<p><b>3. The measurement for earthwork shall be the net volume of earth after compaction.</b></p> <p>Excavating pits for column footings depth n.e. 1.0m for fixing steel gate column.</p>	0.15	m <sup>3</sup>		
03.D.03	<p>Approved hard earth (available at site) spreading and compaction including watering in 150mm thick layers using machine Rammer in under floor. Rate include hire charges of the machine rammer. (for pathways)</p>	15.00	m <sup>3</sup>		
	<b>Total carried over to summary</b>				
03.F1.01	<p><b>BILL NO.F CONCRETE WORK F1 - INSITU CONCRETE</b></p> <p><b>Note:</b> Rates shall be included for 1. Mixing, handling, hoisting and depositing into position. 2. Packing around reinforcement and vibrating. 3. Curing and clearing as specified.</p> <p><b>Insitu concrete grade 15 (maximum aggregate size 25mm).</b></p> <p>Under column footings. (steel gate column)</p>	0.4	m <sup>2</sup>		
03.F1.02	<p><b>RCC concrete grade 25 (maximum aggregate size 25mm) and column, for the following items .</b></p> <p>In column footings.(steel gate column)</p> <p><b>F2 - FORM WORK</b></p> <p><b>Note:</b> Quality of the form work should be approved by the engineer prior to erection.</p> <p><b>A. Rates shall include for</b></p>	0.2	m <sup>3</sup>		



Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	<p>· All necessary boarding, supports, applications of mould oil as necessary, erecting, framing, cutting angles, cleaning, wetting and treatment before placing concrete and striking or removal etc.</p> <p>· Formwork to be measured net contact surface between concrete &amp; formwork.</p> <p>· Formwork to beams, columns, and casings deemed to include ends.</p> <p>B. The contractor shall provide sufficient formwork and moulds to ensure the adequate progress of the work and the Engineer may direct the contractor to provide at Contractor's expense such additional formwork and moulds as they may deem necessary if in his opinion the proper progress of the work is retarded by their absence.</p>				
03.F2.01	<p>C. Rate to be included erecting and dismantling of scaffolding and formwork.</p> <p>D. Formwork for footing, column, beams, lintel, walls, and slabs are of 15mm thick ply-boards.</p> <p>Formwork shall be properly designed formwork as described in specification and it should be sufficiently strong, rigid and should have an even smooth surface and grout tight and should provide a basic finish.</p> <p>In column footings.(steel gate column)</p>	1.7	m <sup>2</sup>		



Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
03.F3.01	<p><b>F3 - REINFORCEMENT IN INSITU CONCRETE</b></p> <p><b>Note:</b> Rates shall be included for</p> <ol style="list-style-type: none"><li>1. Cleaning, cutting, bending, fabricating with gauge 18 binding wire and placing in position.</li><li>2. Holding and supporting including temporary fixing supports, hingers, binding wire spaces &amp; tor steel stools.which is required for the proper completion of the work.</li><li>3. Providing all necessary laps.</li><li>4. Plain rounded Mild steel of characteristic strength 250 N/mm<sup>2</sup> to BS4449</li><li>5. High Yield steel of characteristic strength 460 N/mm<sup>2</sup> to BS4449 &amp; 4461</li></ol> <p>High-yield tor steel bars diameter 10-16mm for the following items.</p> <p>In column footings.(steel gate column)</p> <p style="text-align: center;"><b>Total carried over to summary</b></p>	28.00	kg		
<b>BILL NO J</b>					
<b>STRUCTURAL METAL WORK</b>					
<p>a.Supplying ,fabricating ,hoisting ,fixing,in position with 7m weding joints or nut &amp; bolts.gusset plates b,sole plates, rag bolts,cleats and all necessary accessories to keep in order as per detailed drawing.</p> <p>b.All steel section grade should be 275 and all the nut &amp; bolt should be grade 8.8 c.All the steel structure should be protected with five coat sigma coating system.</p>					



Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
03.J.01	Suply and fix 100mm x 100mm size 4mm thk GI box bar columns fix to concrete footing with 300mmx300mm , 5mm thk GI base plate and 10mm dia anchor bolts. Rate shall include for welding joints	02	Nr		
03.J.02	Supplying , fabricating & fixing GI box bar gate consisting of 100X25mm box bars for main frame and 75X25mm box bars for sub frames and. fixed to steel columns with necessary hinges, plates,nuts and bolt as per the detail-B. Rate .(Overall size 5700X1550mm)	01	Nr		
<b>Total carried over to summary</b>					
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<b>BILL NO.S</b>					
<b>ELECTRICITY</b>					
<b>Note:</b>					
(a) For the Full description of materials and workmanship refer "Specifications", "Preambles" and "Drawings".					
				Note	
(b).Supply, wire, install and commissioning of the following items as per the latest Edition of the IEE Wiring Regulations.					
				Note	
(c). All Materials and accessories shall be of high quality type subject to the approval of the Engineer.					
				Note	
<b>GENERAL</b>					
The Bidders are requested to refer the General notes, Drawings and study the taxes, safety procedures, site conditions before the pricing. The Bidder shall provide all dimensions, and technical information, of all builders work to the Engineer/Consultant in accordance with the programme of work.					

DUPLICATE

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	<p>Notwithstanding Preamble notes of the standard method of Measurement of Building Works, the Bidder shall refer to the specification and Drawings for full particulars and descriptions of workmanship and shall include prices for the full intent and meaning thereof in.</p>		Note		
	<p>Prices are deemed to include for the following, unless specifically excluded or provided separately;</p>		Note		
	<p>Prices for the panels boards deemed to include for finished enclosures, bus bars , panels locks , legend plates , danger boards , DB's , ACB's , MCB's and the required fixing materials like coach screws , bolts ,nuts and foundations etc.</p>		Note		
	<p>Prices of Distribution boards deemed to include for finished enclosures, MCB's, ELCB's, Neutral links dummy plates if any and the required chipping, fixing of DB in walls etc.</p>		Note		
	<p>Prices for Under Ground Cable deemed to include for excavation, protection of cable with tiles, warning tapes, refilling with excavated earth, consolidation / compaction etc.</p>		Note		
	<p>Prices for Cable termination deemed to include for double compression glands, accessories for crimping / soldering, earth tags and earth connection lugs etc.</p>		Note		
	<p>Prices deemed to include for screws, nails, bolts, nuts, nipples, standard cable fixing or supporting clips, saddles brackets, straps, rivets, plugs and similar items and all incidental accessories.</p>		Note		
	<p>Prices for Earth pits deemed to include for excavation, backfilling, compaction, cable covers, warning tapes, GI/Cu pipes, charcoal, salt and other required materials etc.</p>		Note		



Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	<p>Prices deemed to include for interviewing and connections between components and control gear within the board.</p>		Note		
	<p>Prices deemed to include for cutting and jointing cable for carriers at fittings together with cutting or forming openings in cable carriers for conduits, entries from equipment and control gear and similar items; cradles, pin racks for support.</p>		Note		
	<p>Prices for conduits deemed to include for standard junction boxes and fittings and fixing conduits to or through all building surfaces.</p>		Note		
	<p>Prices deemed to include for all cable supports and fixings; providing draw wires, draw cables and similar items for drawing or hoisting cables.</p>		Note		
	<p>Prices deemed to include for all items listed for conduits, cables and conduit sleeves; all cable joints and skinning ends and connecting cables to switches, outlets, accessories, light fittings and similar items.</p>		Note		
	<p>Prices are also deemed to include the following unless specifically excluded or provided separately;</p>		Note		
	<p>Any additional costs in complying with the programme such as staging and/or phasing, access limitations working in or adjacent occupied areas and maintenance of existing services as set out in the Bid Documents;</p>		Note		
	<p>Co-ordination of works between contractor and subcontractors and/or Principal</p>		Note		
	<p>Strict control to minimize the effects of noise, vibration, dust, mud, smoke, fumes, interruption or hindrance of access and other nuisance which could adversely affect the occupants of adjacent buildings;</p>		Note		

DUPLICATE

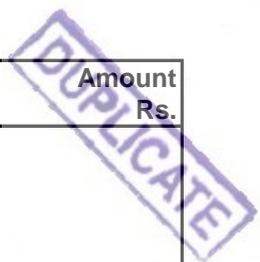
Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	Rectification and making good to services disturbed during construction; and chased walls plaster		Note		
	All chasings in walls, beams, column, slabs wherever required		Note		
	Complying with the relevant Acts, By-laws and regulations.		Note		
	Testing all installations as required and specified.		Note		
	Submit notices, obtaining permits and completion certificates, paying fees and charges in connection with the relevant installations.		Note		
	Obtaining and submitting all guarantees and warranties as specified.		Note		
	Quality Assurance and control as specified.		Note		
	Providing plans, diagrams, manuals and similar items as required for the relevant installations.		Note		
	Coordinating penetrations in connection with the installations.		Note		
	Maintaining operation of the existing buildings during the Contract.		Note		
	Submission of As Built Drawings		Note		
	Penetrations and chases required through new existing walls, ceilings and floors for electrical services cable and fittings including additional support framing members where required.		Note		
	Providing holes and trimmings, suspension and trimming support for the installation of luminaries.		Note		
	Provision of rigid framework in stud walls for the fixing of cable support channels, distribution boards, control panels and similar equipment.		Note		

DUPLICATE

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	Provision of structural support for the fixing of luminaries and examination luminaries.		Note		
	All back box to be deep type		Note		
	All socket outlets to be switched and shuttered type		Note		
	All socket outlets to be SLS approved 13A socket outlets to BS 1363 unless otherwise specified		Note		
	All underground cables to be armoured type.		Note		
	All outdoor underground cables used for lamp point wiring shall be 3 core unless otherwise specified.		Note		
	All underground cables to be run in type uPVC pipes in standard trenches filled with sand, warning tapes and covering tiles.				
	All tread bars and supportive accessories should be HDG.		Note		
	Light fittings should be Energy efficient light and include 2year warranty period.The poles should have minimum10 year warranty period. Samples should be approved by the Architect.		Note		
	<b>Specification for Manufacturing and supplying of lighting fixtures</b>				
	Number of years in business must be 10 years or more		Note		
	Registration of the business must be relevant to industry		Note		
	Should submitted company profile with current reputed project		Note		
	Product must be manufactured in a modular design enabling maintenance and must use E14 and E27 bulbs		Note		
	Switches, holders, wires and power sockets must be SLS certified/approved		Note		



Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	All brass items must be through and through brass and not plated brass		Note		
	All brass sheet items must be 18 gauge or 20 gauge		Note		
	Design must be according to CAD drawings submitted by Architect/Engineer		Note		
	Finishes must be according to approved sample		Note		
	Samples to be provided by supplier cost and number of samples up to 3 to be supplied before approval		Note		
	Delivery, testing and setting up at site at supplier cost		Note		
	All items provided, supplied or given by a single supplier		Note		
	<b>SUPPLY OF LAMP FITTINGS</b>				
02.S.01	Supply & install approved type 3ft black coloured IP65 lamp post with luminare housing 10W LED (Warm White) made of die cast aluminium with the concrete base & complete wiring by using necessary accessories such as outdoor cables, sunk switches, sunk nut boxes and PVC water conduits. Lamp post & luminare shall be approved by the architect.	39	Nrs.		
02.S.02	Supply and install 30A connector bars inside lamp post and connect the underground cable with cable lugs.	39	Nrs.		
02.S.03	<b>Outdoor Feeder Pillar</b> Supply and install 4A 4P outdoor type feeder pillar. Feeder Pillar should have a main breaker, RCCB,a timer, breakers & contactors for lanscape lights, open pyre lights & closed pyre lights.	1	Nrs.		
02.S.04	Supply and install IP 65 connector boxes with terminal connectors.	6	Nrs.		



Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	<b>Supply &amp; Installation</b> Rate to include for supply and installation of cable terminations at both ends and necessary glands. All underground cables to be run in type uPVC pipes in standard trenches filled with sand, warning tapes and covering tiles.		Note		
02.S.05	Supply 4x10 mm <sup>2</sup> Cu/SWA/PVC 4 core cable 1XC 10mm <sup>2</sup> earth cable (From MDB to Feeder Pillar)	22	Lm		
02.S.06	10 mm <sup>2</sup> Earth Cable	3	m		
02.S.07	Supply & install 4x6 mm <sup>2</sup> Cu/SWA/PVC 4 core cable + 1XC 6 mm <sup>2</sup> earth cable (From Feeder Pillar to lamp posts) . <b>The three phases should be balanced after wiring the lamp posts.</b>	250	Lm		
02.S.08	Earth excavation for cable trenches, (width 300mm and height 600mm). Quarry dust layer of 50mm shall be laid at the bottom, then cable shall be laid and again covered with quarry dust layer of 50mm height. Cable shall be fully covered with grade 25 concrete, cable tiles of size 450mmx 200mmx50mm .Then the trench shall be backfilled with excavated soil. A red coloured warning tape with wordings "Electrical cable buried here" shall be laid near to the surface (app. 3" below ground level) and then finish back filling and reinstate surface.	180	Lm		

DUPLICATE

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
02.S.09	<p>Supply and install earthing system with 50mm dia. GI pipe of length 1800mm earth electrodes near the feeder pillar. Each electrode underground should be covered by a gully of 1'x1' and shall be available for visual inspection. Number of rods required to obtain the necessary resistance shall be determined by the contractor. All metal parts of the building shall also be earthed. Testing of earth resistance after installation shall be done by the contractor in the presence of the project Electrical Engineer/Technical officer. All costs for testing shall be borne by the contractor.</p> <p style="text-align: center;"><b>Total carried over to summary</b></p> <p><b>BILL NO V PAINTING</b></p>	1	Nrs		
02.V. 01	<p>Painting walls with two coat of weathershield paint including preparing surface. Rate shall include for sand papering and surface preparation</p> <p style="text-align: center;"><b>Total carried over to summary</b></p>	65	m <sup>2</sup>		
03.X.01	<p><b>BILL NO. X EXTERNAL WORK</b></p> <p>Supply &amp; paving pre cast concrete Curb size 75mm x 175mm x 540mm of 25 N/mm<sup>2</sup> compressive strength laid with 1:3 cement mortar on top of a well compacted earth sub base &amp; tied with Grade 20 cement concrete layer of 150mm thick..</p>	163.00	m		



Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
03.X.02	<p>Supply &amp; paving 60mm thick Rectangular (Approx. size 220mm x 100mm ) natural colour &amp; black colour precast interlocking paving blocks of 15 N/mm2 compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base Paving blocks should confirming to S.L.S 1425 : Part I &amp; II and subject to the approval of the quality &amp; colour including transport and laying. Rate shall include hire charges of 1/2 - 1 ton vibrating roller. Colours and design should be match with Image -B</p> <p>Remove roots and loose gravel particles from the area identified for turfing and level or graded to a uniform surface, spread a 150mm thick layer of top vegetable soil comprising of a mixture of earth and coir dust mixed in proportion of 2:1 and raked to a depth of 150mm while removing gravel pieces.</p>	100.00	m <sup>2</sup>		
03.X.03	Supply and placing(laying) malaysian buffalo grass turves of size not less than 300mm x 300mm x 25mm and laid closed butted to one another while ensuring lateral joints between turves being staggered, where necessary turves shall be pegged to the soil to prevent movement or slippage. Thereafter, turfing shall be compacted, levelled and maintained for a period of there(3) months by watering, weeding and trimming, untill roots are firmly rooted in to the ground.	365.00	m <sup>2</sup>		
03.X.04	Supply and placing pre-cast concrete benches as per the drawing and Image -A.	12	Nr		
<b>Total carried over to summary</b>					