DUPLICATE

36

BILL OF QUANTITY FOR INSTALLATION, COMMISSIONING AND MAINTENANCE OF TRAFFIC SIGNALS AT GEORGE R. DE SILVA MAWATHA / K.CYRIL C. PERERA MAWATHA JUNCTION

Item		Description of Item	Unit	Qty.	Unit Cost Rs.	Amount Rs.
		Bill No. 1 Civil Works				
1	1.00(1)	Site clearing, Removal of existing paving tiles / tar mac and handed over of reusable tiles to campbell park depot and removal of surplus material	Item	Allow		
2	1.00(2)	Remove and transport of reusable street furniture, Guardrails, existing signal light columns, Signal heads etc	Item	Allow		
3	2.00(1)	Excavation for signal column foundation for column with horizontal arm	m^3	10		
4	2.00(2)	Excavation for signal column foundation for column without horizontal arm	m^3	3.08		
5	2.00(3)	Approved ABC (Aggregate Base Course) filling with compaction.	m^3	6		
6	2.00(4)	Removal of excavated surplus material of column foundation	m^3	41.54		
7	3.00(1)	Cement concrete 1 : 2 : 4 (3/4") in signal column bases with horizontal arm.	m^3	2.1		
8	3.00(2)	Cement concrete 1 : 2 : 4 (3/4") in signal column bases without horizontal arm.	m^3	0.8		
9	3.00(3)	Form work for signal column bases with horizontal arm	m^2	8.3		
10	3.00(4)	Form work for signal column bases without horizontal arm	m^2	5.2		
11	4.00(1)	10mm dia. mild steel reinforcements for signal column bases	Kg	73.8		
12	4.00(1)	10mm dia. tor steel reinforcements for signal column bases	Kg	162		
13	5.00(1)	Supply and Lay 110mm PVC duct (type 1000)	Lm	100		
14	5.00(2)	Construction of manholes	No	4		
15	5.00(3)	Construction of controller bases	No	1		
16	6.00(1)	Traffic management and safety	Month	1		
17	7.00(1)	Submission of As-Built Drawings	Item	1		
		Bill No. 1 Total Carried over to Summary				

DUPLICATE

		Bill No. 2 Signal Works	Unit	Qty	Rate (Rs.)	Amount (Rs.)
1		Supply, fabrication and installation of traffic signal columns of clear height 6000mm for horizontal mounting (6000mm from ground level) for three aspects signal heads with electrical terminating unit. Horizontal arm is 6000mm. Rate should include connecting mechanism of two columns by welding or flange mechanism system. Refer Drawing No: TDRS / SIG / OD / 02	Nos.	2		
2		Supply, fabrication and installation of traffic signal columns of height 3500mm for vertical mounting (3500mm from ground level) for three aspects signal heads with electrical terminating unit. Vertical column size is 150mm. Refer Drawing No: TDRS / SIG / OD / 01	Nos.	4		
3		Supply and installation of three aspects (R/A/G) or (R/A/GA) LED traffic signal heads including green arrow of 300 mm optic dia. prepared for horizontal mounting with fixing brackets. (Arm size is 250mm to 200mm)	Nos.	4		
4		Supply and installation of three aspects (R/A/G) or (R/A/GA) LED traffic signal heads of 300 mm optic dia. prepared for vertical mounting with fixing brackets. Vertical column size is 200mm.	Nos.	5		
5		Supply & Installation of vehicle count down system as per specification 2.2 Count down Heads should be framed with a Target board of 1.6mm Aluminium board with durable coating. Sample of the target board should be approved before fixing.	Nos.	2		
6		Upgrading of existing Microprocessor based road traffic control system Controller as per 3.11 of specifications with capacity to control the said junction and should be able to be linked traffic signals installed in future and supply and install an enclosure for the exsisting controller. Rate should include the synchronization of nearby junction. (Maha Vidyala Mw/ Jethewana Rd/ George R. De Silva Mw/ Sri Sumanatissa Mw junction)	Nos.	1		
7		Supply and installation of Armored 1.5 mm2 control cable 4 core 8 core 12 core	 m m m	 150 100 50		
8		Commissioning of the system.	Item	Allow		
		Bill No. 2 Total Carried over to Summary				

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Description	CIVIL WORKS (Rs.)	SIGNAL WORKS (Rs.)	SUB TOTAL FOR EACH JUNCTION (Rs.)
Prelimineries			
George R De Silva Mawatha / K.Cyril C. Perera Mawatha junction			
Sub Total			
Add 10% contingensies			
Sub total 2			
Add 12% VAT			
Tender Amount			

Tendered Amount in words Rs. .....

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Signature of Contractor

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Date

DUPLICATE

Eng. (Ms.) H.Y.E.A. SILVA
Engineer (Design)
Traffic Design & Road Safety Division
Colombo Municipal Council