



MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY
University of Choice

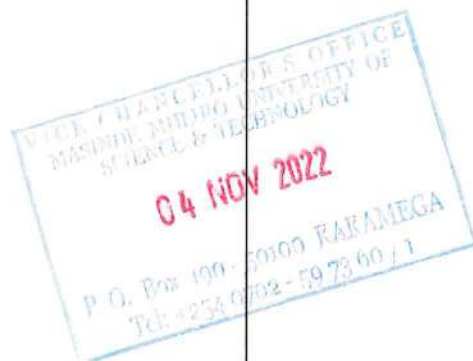
ADDENDUM NO. 1 TO 6 OF 4TH NOVEMBER, 2022

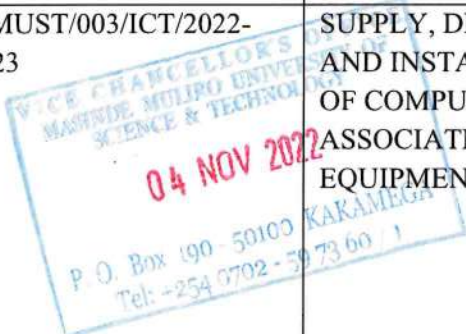
Masinde Muliro University of Science and Technology wishes to notify bidders participating in the tender listed below of the highlighted changes

S/NO.	TENDER NUMBER	TENDER DESCRIPTION	CLARIFICATION	ADDENDUM
1	MMUST/001/SEC/2022-2023	TENDER FOR SUPPLY, DELIVERY, INSTALLATION & COMMISSIONING OF THE PROPOSED THREE (3) NO. 30 METRES HIGH MAST MONOPOLE FLOODLIGHTING AT THE MAIN CAMPUS.	<p>APPENDIX 9. BILLS OF QUANTITIES.</p> <p>1.4 Provision for KPLC Power Supply to the High mast (The Mast to be installed adjacent to the football field and at milimani areas of Main Campus)</p> <p>2.1 - 3no. 30metre monopoles eight sided (octagonal) continuously tapered and fabricated from 30mm thick heavy duty corrosion free mild steel lighting column for high mast lighting system.</p>	<p>1.4 Connectivity of the high mast to the nearest power supply as advised by the Engineer on site Unit (Item) Quantity (3)</p> <p>2.1 - 3no. 30metre monopoles eight sided (octagonal) continuously tapered and fabricated from a thick of 3mm to 4mm (as per the drawing) heavy duty corrosion free mild steel lighting column for high mast lighting system.</p>

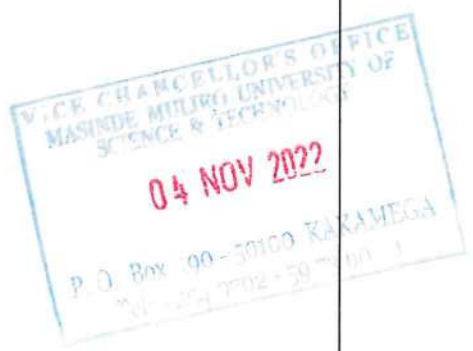
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			<p>Additional requirement</p> <p>2.4a - Supply and install 16mm x 4 core PVC/SWA/PVC armored copper feeder cable complete with cable glands and cable lags from powerhouse to high mast control pillar or approved equivalent</p> <p>Unit (M) Quantity (450)</p>
			<p>Additional requirement</p> <p>2.4b - Supply and install hatari tile makers for the underground cables.</p> <p>Unit (M) Quantity (30)</p>
			<p>Additional requirement</p> <p>2.4c - Trenching, laying, tilling with concrete HATARI cable tiles and backfilling in soft ground for the underground cables.</p> <p>Unit (M) Quantity (450)</p>
			<p>3.15 - Hold Down Bolts/Foundation Bolts</p> <p>(a) Supply and Cast in reinforced concrete column stanchion M24 Grade 8.8 high tensile steel bolts 450mm long 60mm diameter to BS 7419 supplied with nuts and washers</p>
			<p>3.15 - Hold Down Bolts/Foundation Bolts</p> <p>(a) Supply and Cast in reinforced concrete column stanchion M24 Grade 8.8 high tensile steel bolts 450 mm long 25mm diameter to BS 7419 supplied with nuts and washers</p>
2	MMUST/002/SEC/2022-2023	TENDER FOR SUPPLY, DELIVERY,	<p>Standard PTZ Camera Resolution - 5 mega pixel</p>

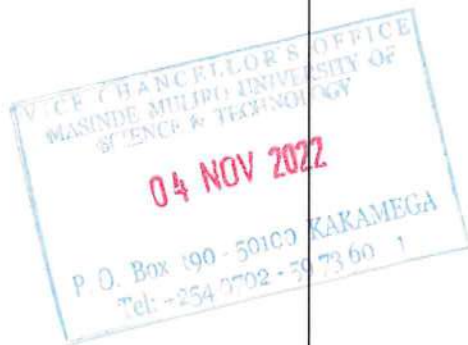


		INSTALLATION, TESTING AND COMMISSIONING OF CCTV CAMERAS PHASE II AT THE MAIN CAMPUS.	<p>Image sensor - 1/1.8' progressive scan CMOS</p> <p>Effective pixels - Up to 2560 × 1440</p> <p>Shutter time - 50Hz 1~ 1/30,000s; 60Hz 1~1/30,000s</p> <p>Privacy masking - 24 privacy masks programmable</p> <p>Auto focus - Auto/Semi-automatic/manual</p> <p>Focal Length - 5.7 mm to 205.2 mm</p> <p>RS-485 Protocols - HIKVISION, Pelco-P, Pelco-D, self-adaptive</p> <p>Power Consumption - 24 VAC (Max. 60 W)</p> <p>Hi-PoE (Max. 50 W)</p> <p>Working temperature / humidity - -40°C to 70°C (-40°F to 158°F)</p> <p>ROI encoding - support</p>	<p>TandemVu 7-inch 4 MP 32X</p> <p>Powered by DarkFighter IR</p> <p>Network Speed Dome</p> <p>1/2.8" Progressive Scan CMOS</p> <p>with 32× optical zoom and 16× digital zoom</p> <p>3D DNR, defog, regional exposure, regional focus, rapid focus</p> <p>Expansive night view with up to 200 m IR distance</p>
3	MMUST/003/ICT/2022-2023	<p>SUPPLY, DELIVERY AND INSTALLATION OF COMPUTERS AND ASSOCIATED EQUIPMENT</p> 	<p>Pg. 28 - MANDATORY TECHNICAL REQUIREMENTS</p> <p>HP ProDesk 400 G6 Microtower Business PC Specifications</p> <p>Pre-installed (Windows) Genuine Windows 11 Pro 64</p>	<p>(Must have OEM COA stickers) or Provide a Sealed disc for each PC</p>
			<p>Display Screen not provided for</p>	<p>Type TN (twisted nematic) LED backlit LCD</p> <p>Viewable image area (diagonal) 46.9 cm (18.5 in) widescreen</p> <p>Panel active area (W x H) 40.98 x 23.04 cm (16.13 x 9.07</p>

				in) Aspect ratio 16:9 Resolution: 1366 x 768 at 60Hz Viewing angle: (typical)Up to 90° horizontal/65° vertical Brightness: 200 cd/m2
4	MMUST/004/ICT/2022-2023	TENDER FOR SUPPLY, DELIVERY, INSTALLATION, TESTING, AND COMMISSIONING OF NETWORKING WORKS AT ABA BUILDING	SECTION VIII: BILL OF QUANTITIES FIFTH FLOOR Add; Copper Patch cords	Factory terminated CAT 6 Siemon 3m patch cords – 1000 pcs
			Pg 79 to 81	Ignore
5	MMUST/005/ICT/2022-2023	TENDER FOR SUPPLY, DELIVERY, INSTALLATION, TESTING, AND COMMISSIONING OF FIBER OPTIC CONNECTIVITY	SECTION VIII: BILL OF QUANTITIES Manholes & Cover 600mmx600mmx1200mm 10 Pcs	Manholes & Cover 600mmx600mmx1200mm 42 Pcs
6	MMUST/006/TVET/2022-2023	SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF STRUCTURED CABLING LAN NETWORK, TELEPHONE & CCTV SURVEILLANCE INSTALLATION WORKS AT THE	<u>SCHEDULE 1 - LOWER GROUND FLOOR</u> HORIZONTAL CABLING 1.5 - S110 (100 pair) cross connector punch down blocks 1.6 - S110 to RJ45; 1m cat 6e patch cord 1.7 - 3m, RJ45 to RJ11 ; cat 6e patch cord	Items 1.5 – 1.9 Withdrawn

<p>PROPOSED ENGINEERING AND TVET COMPLEX</p> 	<p>1.8 - 50 pair cat 6e link from discase to S110 termination block unit.</p> <p>1.9 - Distribution cases (KRONE type Discase) as follows:</p> <p>(a) 20 Pair Discase</p>	
	<p>1.12 - 24 Port 1UH Cat 6 UTP Patch Panel as siemon or approved equivalent</p>	<p>1.12 - 48 Port 1UH Cat 6 UTP Patch Panel as siemon or approved equivalent</p>
	<p>1.13 - 24 Port 1UH Cat 6 Voice Patch Panel as siemon or approved equivalent</p>	<p>Items 1.13 Withdrawn</p>
	<p>1.21 - 24 Port UTP rack mount/manageable edge switch as C1000-24P-4X-L - Cisco Catalyst 1000 Series Switches or approved equivalent.</p>	<p>1.21 - 48 Port UTP rack mount/manageable edge switch as C1000-48P-4X-L - Cisco Catalyst 1000 Series Switches or approved equivalent.</p>
	<p>2.3 - 3m, RJ45 to RJ45 UTP cat 6e Partch cord (Nexans/Siemon)</p> <p>Unit (No.) Quantity (40)</p>	<p>2.3 - 3m, RJ45 to RJ45 UTP cat 6e Partch cord (Nexans/Siemon)</p> <p>Unit (No.) Quantity (130)</p>
	<p>2.4 - 1m, RJ45 to RJ45 UTP cat 6e Partch cord (Nexans/Siemon)</p> <p>Unit (No.) Quantity (24)</p>	<p>2.4 - 1m, RJ45 to RJ45 UTP cat 6e Partch cord (Nexans/Siemon)</p> <p>Unit (No.) Quantity (130)</p>
	<p>2.5 - S110 (100 pair) cross connector punch down blocks</p> <p>2.6 - S110 to RJ45; 1m cat 6e patch cord</p> <p>2.7 - 3m, RJ45 to RJ11 ; cat 6e patch cord</p> <p>2.8 - 50 pair cat 6e link from discase to</p>	<p>Items 2.5 – 2.9 Withdrawn</p>

		<p>S110 termination block unit.</p> <p>2.9 - Distribution cases (KRONE type Discase) as follows:</p> <p>(a) 20 Pair Discase</p>	
		2.12 - 24 Port 1UH Cat 6 UTP Patch Panel as Siemon or approved equivalent	2.12 - 48 Port 1UH Cat 6 UTP Patch Panel as Siemon or approved equivalent
		2.13 - 24 Port 1UH Cat 6 Voice Patch Panel as Siemon or approved equivalent	Items 2.13 Withdrawn
		2.21 - 24 Port UTP rack mount/manageable edge switch as C1000-24P-4X-L - Cisco Catalyst 1000 Series Switches or approved equivalent.	2.21 - 48 Port UTP rack mount/manageable edge switch as C1000-48P-4X-L - Cisco Catalyst 1000 Series Switches or approved equivalent.
		3m, RJ45 to RJ45 UTP cat 6e Partch cord (Nexans/Siemon)	3.3 - 3m, RJ45 to RJ45 UTP cat 6e Partch cord (Nexans/Siemon)
		Unit (No.) Quantity (80)	Unit (No.) Quantity (250)
		1m, RJ45 to RJ45 UTP cat 6e Partch cord (Nexans/Siemon)	3.4 - 1m, RJ45 to RJ45 UTP cat 6e Partch cord (Nexans/Siemon)
		Unit (No.) Quantity (40)	Unit (No.) Quantity (250)
		3.5 - S110 (100 pair) cross connector punch down blocks	Items 3.5 – 3.9 Withdrawn
		3.6 - S110 to RJ45; 1m cat 6e patch cord	
		3.7 - 3m, RJ45 to RJ11 ; cat 6e patch cord	
		3.8 - 50 pair cat 6e link from discase to	



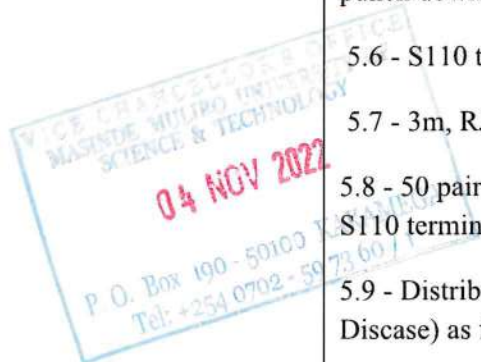
		<p>S110 termination block unit.</p> <p>3.9 - Distribution cases (KRONE type Discase) as follows:</p> <p>(a) 20 Pair Discase</p>	
		3.12 - 24 Port 1UH Cat 6 UTP Patch Panel as siemon or approved equivalent	3.12 - 48 Port 1UH Cat 6 UTP Patch Panel as siemon or approved equivalent. Unit (No) quantity (5)
		3.13 - 24 Port 1UH Cat 6 Voice Patch Panel as siemon or approved equivalent	Items 3.13 Withdrawn
		3.21 - 24 Port UTP rack mount/manageable edge switch as C1000-24P-4X-L - Cisco Catalyst 1000 Series Switches or approved equivalent. Unit (No) quantity (3)	3.21 - 48 Port UTP rack mount/manageable edge switch as C1000-48P-4X-L - Cisco Catalyst 1000 Series Switches or approved equivalent. Unit (No) quantity (5)
		3m, RJ45 to RJ45 UTP cat 6e Partch cord (Nexans/Siemon) Unit (No) quantity (70)	4.3 - 3m, RJ45 to RJ45 UTP cat 6e Partch cord (Nexans/Siemon) Unit (No) quantity (410)
		1m, RJ45 to RJ45 UTP cat 6e Partch cord (Nexans/Siemon) Unit (No) quantity (30)	4.4 - 1m, RJ45 to RJ45 UTP cat 6e Partch cord (Nexans/Siemon) Unit (No) quantity (410)
		4.5 - S110 (100 pair) cross connector punch down blocks	Items 4.5 – 4.9 Withdrawn
		4.6 - S110 to RJ45; 1m cat 6e patch cord	

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			<p>4.7 - 3m, RJ45 to RJ11 ; cat 6e patch cord</p> <p>4.8 - 50 pair cat 6e link from discase to S110 termination block unit.</p> <p>4.9 - Distribution cases (KRONE type Discase) as follows:</p> <p>(a) 20 Pair Discase</p> <p>(b) 100 Pair Discase</p>	
			4.12 - 24 Port 1UH Cat 6 UTP Patch Panel as siemon or approved equivalent	4.12 - 48 Port 1UH Cat 6 UTP Patch Panel as siemon or approved equivalent. Unit (No) quantity (5)
			4.3 - 24 Port 1UH Cat 6 Voice Patch Panel as siemon or approved equivalent	Items 4.3 Withdrawn
			4.23 - 24 Port UTP rack mount/manageable edge switch as C1000-24P-4X-L - Cisco Catalyst 1000 Series Switches or approved equivalent. Unit (No) quantity (1)	4.23 - 48 Port UTP rack mount/manageable edge switch as C1000-48P-4X-L - Cisco Catalyst 1000 Series Switches or approved equivalent. Unit (No) quantity (5)
			4.24 - 24 Port UTP rack mount/manageable core switch as Catalyst 9200L 24-port PoE+ 4x1G uplink Switch, Network Essentials or approved equivalent Unit (No) quantity (1)	4.24 - 24 Port UTP rack mount/manageable fiber core switch as Catalyst C9300X-24Y-A- or approved equivalent Unit (No) quantity (1)
			4.27 - 3KVA UPS as APC manufacture or approved equivalent. Unit (No) quantity	4.27 - 3KVA UPS rack mount as APC manufacture or approved

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			(1)	equivalent. Unit (No) quantity (1)
			5.3 - 3m, RJ45 to RJ45 UTP cat 6e Patch cord (Nexans/Siemon) Unit (No) quantity (50)	5.3 - 3m, RJ45 to RJ45 UTP cat 6e Patch cord (Nexans/Siemon) Unit (No) quantity (160)
			5.4 - 1m, RJ45 to RJ45 UTP cat 6e Patch cord (Nexans/Siemon) Unit (No) quantity (30)	5.4 - 1m, RJ45 to RJ45 UTP cat 6e Patch cord (Nexans/Siemon) Unit (No) quantity (160)
			5.5 - S110 (100 pair) cross connector punch down blocks 5.6 - S110 to RJ45; 1m cat 6e patch cord 5.7 - 3m, RJ45 to RJ11 ; cat 6e patch cord 5.8 - 50 pair cat 6e link from discase to S110 termination block unit. 5.9 - Distribution cases (KRONE type Discase) as follows: (a) 20 Pair Discase	Items 5.5 – 5.9 Withdrawn
			5.12 - 24 Port 1UH Cat 6 UTP Patch Panel as siemon or approved equivalent Unit (No) quantity (3)	5.12 - 48 Port 1UH Cat 6 UTP Patch Panel as siemon or approved equivalent Unit (No) quantity (4)
			5.13 - 24 Port 1UH Cat 6 Voice Patch Panel as siemon or approved equivalent	Items 5.13 Withdrawn
			5.21 - 24 Port UTP rack mount/manageable edge switch as C1000-	5.21 - 48 Port UTP rack mount/manageable edge switch as



			24P-4X-L - Cisco Catalyst 1000 Series Switches or approved equivalent. Unit (No) quantity (3)	C1000-48P-4X-L - Cisco Catalyst 1000 Series Switches or approved equivalent. Unit (No) quantity (4)
			6.3 - 3m, RJ45 to RJ45 UTP cat 6e Partch cord (Nexans/Siemon) Unit (No) quantity (50)	6.3 - 3m, RJ45 to RJ45 UTP cat 6e Partch cord (Nexans/Siemon) Unit (No) quantity (165)
			6.4 - 1m, RJ45 to RJ45 UTP cat 6e Partch cord (Nexans/Siemon) Unit (No) quantity (30)	6.4 - 1m, RJ45 to RJ45 UTP cat 6e Partch cord (Nexans/Siemon) Unit (No) quantity (165)
			6.5 - S110 (100 pair) cross connector punch down blocks 6.6 - S110 to RJ45; 1m cat 6e patch cord 6.7 - 3m, RJ45 to RJ11 ; cat 6e patch cord 6.8 - 50 pair cat 6e link from discase to S110 termination block unit. 6.9 - Distribution cases (KRONE type Discase) as follows: (a) 20 Pair Discase	Items 6.5 – 6.9 Withdrawn
			6.12 - 24 Port 1UH Cat 6 UTP Patch Panel as siemon or approved equivalent Unit (No) quantity (3)	6.12 - 48 Port 1UH Cat 6 UTP Patch Panel as siemon or approved equivalent Unit (No) quantity (4)
			6.13 - 24 Port 1UH Cat 6 Voice Patch Panel as siemon or approved equivalent	Item 6.13 Withdrawn
			6.21 - 24 Port UTP rack mount/manageable edge switch as C1000-24P-4X-L - Cisco Catalyst 1000 Series Switches or approved equivalent. Unit (No) quantity (3)	6.21 - 48 Port UTP rack mount/manageable edge switch as C1000-48P-4X-L - Cisco Catalyst 1000 Series Switches or approved equivalent. Unit (No) quantity (4)

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			<p>7.5 - S110 (100 pair) cross connector punch down blocks</p> <p>7.6 - S110 to RJ45; 1m cat 6e patch cord</p> <p>7.7 - 3m, RJ45 to RJ11 ; cat 6e patch cord</p> <p>7.8 - 50 pair cat 6e link from discase to S110 termination block unit.</p> <p>7.9 - Distribution cases (KRONE type Discase) as follows: (a) 20 Pair Discase</p>	Items 7.5 – 7.9 Withdrawn
			7.12 - 24 Port 1UH Cat 6 UTP Patch Panel as siemon or approved equivalent Unit (No) quantity (3)	7.12 - 48 Port 1UH Cat 6 UTP Patch Panel as siemon or approved equivalent Unit (No) quantity (4)
			7.13 - 24 Port 1UH Cat 6 Voice Patch Panel as siemon or approved equivalent	Item 7.13 Withdrawn
			7.21 - 24 Port UTP rack mount/manageable edge switch as C1000-24P-4X-L - Cisco Catalyst 1000 Series Switches or approved equivalent. Unit (No) quantity (3)	7.21 - 48 Port UTP rack mount/manageable edge switch as C1000-48P-4X-L - Cisco Catalyst 1000 Series Switches or approved equivalent. Unit (No) quantity (4)
SCHEDULE 2B: - CCTV INSTALLATIONS .				
			24 Port switch with POE capacity As CISCO WS-C2960-24PC-S Unit (No) quantity (2)	2.5 - 24 Port switch with POE capacity As CISCO C1000-48P-4X-L Unit (No) quantity (2)
			16 Port switch with POE capacity As CISCO WS-C2960-24PC-S Unit (No) quantity (12)	2.6 - 16 Port switch with POE capacity As C1000-16P-2G-L Unit (No) quantity (12)
			TENDER CLOSING DATE AND TIME	EXTENDED TENDER CLOSING DATE AND TIME

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			Tuesday 8th November 2022 at 10.00 A.M	Tuesday 15th November 2022 at 10.00 A.M
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**Vice Chancellor
Masinde Muliro University of Science & Technology**

