

# THE UNITED REPUBLIC OF TANZANIA

## MINISTRY OF WORKS



## CONSTRUCTION OF JANGWANI BRIDGE AND ASSOCIATED WORKS

TENDER No.: AE/001/2022-23/HQ/W/56

### Addendum No. 1

Date: 26<sup>th</sup> September 2023

**Addendum No. 1 to the Bidding Documents** is issued in accordance with Instructions to Bidders, Clause 8.1 to effect changes to the Bidding Documents and will become binding document, overriding the original provisions to the applicable extent indicated. All other items and conditions of the original Bidding Documents remain unchanged. The following provisions of the Bidding Documents are amended as follows:

## Volume 4: Bill of Quantities

### Bill 2000: Drainage

#### Item No. 1

Replace

Item	Description	Unit	Quantity
SS 27.01	Dredge the deposited materials and other wastes along the River channel and banks and dispose the same to the location authorised by the Engineer	m <sup>3</sup>	267,500
SS 27.02	Allow for maintenance dredging to ensure uninterrupted traffic flow along Morogoro Road across Jangwani Valley to be conducted upon Engineer's instruction	m <sup>3</sup>	40,125

With

Item	Description	Unit	Quantity
SS 27.01	Allow for maintenance desilting or dredging of the river channel to be conducted upon Engineer's instruction and dispose the same to the location authorised by the Engineer to ensure uninterrupted traffic flow along Morogoro Road across Jangwani Valley	m <sup>3</sup>	307,625

#### Item No. 2

Replace:

<b>Section 3600: Earthworks</b>			
36.02	Fill and improved subgrade layers:		
(b)	Improved subgrade layer as specified in the Drawings to require minimum G7 quality material	m <sup>3</sup>	151,373

With:

<b>Section 3600: Earthworks</b>			
36.02	Fill and improved subgrade layers:		
(b)	Improved subgrade layer as specified in the Drawings to require minimum G7 quality material	m <sup>3</sup>	147,773
(c)	Mix granular fill for MSE wall as as specified in the drawing	m <sup>3</sup>	3,600

**Item No. 3**

Replace

<b>3900B</b>	<b>GEOGRID FORTRAC MATERIAL OR EQUIVALENT FOR MSE WALLS</b>			
39B.03	Geogrid - Fortrac or equivalent			
(a)	Geogrid - Fortrac or equivalent 80 T	m <sup>2</sup>	14,400	
(b)	Geogrid - Fortrac or equivalent 110 T	m <sup>2</sup>	84,641	
(c)	Geogrid - Fortrac or equivalent R 300/50-30 T	m <sup>2</sup>	25,994	

With:

<b>3900B</b>	<b>GEOGRID FORTRAC MATERIAL OR EQUIVALENT FOR MSE WALLS</b>			
39B.03	Geogrid - Fortrac or equivalent			
(a)	Geogrid - Fortrac or equivalent 80 T	m <sup>2</sup>	43,650	
(b)	Geogrid - Fortrac or equivalent 110 T	m <sup>2</sup>	84,641	
(c)	Geogrid - Fortrac or equivalent R 300/50-30 T	m <sup>2</sup>	31,360	

**Item No. 4**

Delete BoQ Item 42.01 (a) &amp;(b) entirely

**Item No. 5**

Replace BOQ Items 57.10

Item	Description	Unit	Qty	Rate	Amount
				TZS	TZS
57.10	Extra work for land-scaping	LS			

With BOQ Items 57.10

Item	Description	Unit	Qty	Rate	Amount
				TZS	TZS
57.10 (a)	Extra work for landscaping	Prov. Sum	1		60,000,000
(b)	Allow for Contractor's overheads	%			

	and profits as a percentage of Item 57.10 (a)				
--	-----------------------------------------------	--	--	--	--

**Bill 6000B: Bridges**

**Item No. 6**

Replace

Item	Description	Unit	Quantity
<b>61.14</b>	<b>Establishment on Site for Piling:</b>		
(i)	Establishment on site for Piling for two (2) abutments and retaining walls, twelve (12) pier foundations.	LS	

With

Item	Description	Unit	Quantity
<b>61.14</b>	<b>Establishment on Site for Piling:</b>		
(i)	Establishment on site for Piling for abutments, retaining walls and pier foundations.	LS	

**Item No. 7**

Replace

Item	Description	Unit	Quantity
<b>61.34</b>	<b>Establishment on site for load testing of Piles:</b>		
	Establishment on site for load testing of three (3) pile tests	LS	

With

Item	Description	Unit	Quantity
<b>61.34</b>	<b>Establishment on site for load testing of Piles:</b>		
	Establishment on site for load testing of piles	LS	

**Item No. 8**

Replace

Item	Description	Unit	Quantity
<b>61.35</b>	<b>Load Test on Piles</b>		
(i)	Maximum Load test on piles compression Test, diameter 1000mm, Length 35.00-55.00m, maximum load 2125kN and 2361kN as per drawing No. B1804-08-BR-0102 to B1804-08-BR-0104.	No	2
(ii)	Ultimate Load test on piles compression Test, diameter 1000mm, Length 35.00-55.00m, Ultimate Load determined as per SS613-U-3.	No	1

With

Item	Description	Unit	Quantity
<b>61.35</b>	<b>Load Test on Piles</b>		
(i)	Maximum Load test on piles compression Test, diameter 1000mm, Length 35.00-55.00m, maximum load 2125kN and 2361kN as per drawing No. B1804-08-BR-0102 to B1804-08-BR-0104.	No	9

(ii)	Ultimate Load test on piles compression Test, diameter 1000mm, Length 35.00-55.00m, Ultimate Load determined as per SS613-U-3.	No	1
------	--------------------------------------------------------------------------------------------------------------------------------	----	---

**BILL 6000A: BOX CULVERT**

**Item No. 9**

Replace:

<b>63.01</b>	<b>Steel Reinforcement for:</b>			
(ii)	High yield stress steel bars to:			
(a)	Box culvert including wing walls	t	161	

**With:**

<b>63.01</b>	<b>Steel Reinforcement for:</b>			
(ii)	High yield stress steel bars to:			
(a)	Box culvert including wing walls	t	248	

**Item No. 10****Insert BoQ for New Bus Station**

S/N	DESCRIPTION	QTY	UNIT	RATE	AMOUNT (Tshs)
	<b><u>ELEMENT No. 1: SUBSTRUCTURE (Provisional)</u></b>				
	<b><u>EXCAVATION AND EARTHWORK</u></b>				
A	Excavate over site average 150mm deep to remove vegetable soil and cart away debris	839	SM		
B	Excavate foundation trench commencing at stripped level and not exceeding 1.50 metres deep	174	CM		
C	Excavate pit and the like for foundation base commencing at stripped level and not exceeding 1.50 metres deep	360	CM		
D	Extra over any kind of excavation for breaking up rock and the like	134	CM		
E	Earth backfilling, well rammed and consolidated around foundations	377	CM		
F	Load up surplus excavated material and remove from site	157	CM		
	<b><u>Planking and strutting</u></b>				
G	Allow for the provision and subsequent removal of planking and strutting to uphold and maintain all faces of excavations	ITEM			
	<b><u>Soil sterilisation</u></b>				
H	Aldrin 0.50% solution applied at a rate of 7 litres per square metre on ground surfaces	839	SM		
	<b><u>CONCRETE WORK</u></b>				
	<b><u>Plain concrete grade "10"</u></b>				
I	50mm Blinding	284	SM		
	<b>To collection</b>				

	<b><u>Reinforced concrete grade "30" including vibrating around reinforcement</u></b>			
A	Foundations	66	CM	
B	Ground beams and the like	45	CM	
C	Horizontal beams	9	CM	
D	Columns	27	CM	
E	300mm Wall	5	SM	
F	175mm Wall	279	SM	
G	175mm Horizontal suspended slab	640	SM	
H	175mm Sloping suspended slab	101	SM	
I	138mm (Average) thick suspended slab	41	SM	
J	25mm Kork pack expansion joint filler set vertically between wall/beam	36	SM	
K	Fill exposed edge of expansion joint with 15 x 25mm Genesis trimmer type plastic sealor	41	LM	
	<b><u>Reinforcement</u></b>			
	<b><u>Mild steel round bar reinforcement to BS 4449:1997</u></b>			
L	12mm Bar	2,074	KG	
M	10mm Bar	474	KG	
	<b><u>High tensile hot rolled steel bar reinforcement to BS 4449:1997</u></b>			
N	25mm Bar	7,076	KG	
O	20mm Bar	1,335	KG	
P	16mm Bar	5,695	KG	
Q	12mm Bar	16,775	KG	
	<b>To collection</b>			

A	10mm Bar	KG	4,924		
<b><u>Sawn formwork to</u></b>					
B	Vertical sides of foundations, ground beams, etc	SM	445		
C	Sides and soffits of horizontal beams, left in	SM	87		
D	Horizontal soffits of suspended slab, left in	SM	554		
E	Sloping soffits of suspended slab, left in	SM	88		
<b><u>Wrought formwork to</u></b>					
F	Vertical sides of column and the like	SM	238		
G	Vertical sides of walls and the like	SM	570		
H	Sloping soffits of suspended slab	SM	41		
I	Vertical edge of suspended slab over 150 but not exceeding 225mm high	LM	183		
J	Ditto over 75 but not exceeding 150mm high	LM	123		
<b>To collection</b>					
<b><u>COLLECTION</u></b>					
Page No.1					
Page No. 2					
Page No.3					
<b>TOTAL, SUBSTRUCTURE CARRIED TO SUMMARY</b>					



	<b><u>ELEMENT No. 2: WALLING</u></b>				
	<b><u>BLOCKWORK</u></b>				
	<b><u>Solid concrete blocks to BS 2028 type "A" bedded and jointed in cement mortar (1:4)</u></b>				
A	150mm Wall	SM	11		
	<b><u>STEEL WORK</u></b>				
	<b><u>Unframed weldable mild steel to BS 4360 grade 43 welded and bolted site connections</u></b>				
B	Steel column, I-section IPE180, 2400mm long weighing 18.8 kg per linear metre with mild steel plate size 300 x 250 x 20mm thick with four holes for M18 bolts welded to one end and another end welded with and including 180 x 91 x 12mm mild steel plate with two holes for M18 bolts (Bolts measured separately)	NO	14		
C	Ditto 2100mm long ditto	NO	40		
D	Steel column, I-section IPE180, 1440mm long, weighing 18.8kg per linear metre, both ends welded with and including mild steel plate size 180 x 91 x 12mm thick with two holes for M18 bolts (Bolts measured separately)	NO	8		
E	Ditto 1200mm long ditto	NO	4		
F	Ditto 1170mm long ditto	NO	4		
G	Ditto 1070mm long ditto	NO	4		
H	Ditto 980mm long ditto	NO	4		
I	Ditto 910mm long ditto	NO	4		
J	Ditto 730mm ditto	NO	4		
K	Ditto 410mm long ditto	NO	8		
	<b>Collection</b>				

A	Stainless steel square hollow section column, 4970mm long, cross-sectional size 100 x 100 x 5mm thick, one end welded with and including mild steel plate size 300 x 250 x 25mm thick plate with four holes for M18 bolts and another end welded with and including 120 x 100 x 12mm mild steel plate (Bolt measured separately)	NO	4		
B	Steel post, square hollow section, 1510mm long, cross sectional size 76 x 76 x 3mm thick, one end welded with and including 180 x 90 x 8mm mild steel plate with four holes for M12 bolt and another end welded to RHS rafter (Bolts measured separately)	NO	4		
C	Ditto 1500mm long ditto	NO	4		
D	Ditto 1490mm long ditto	NO	4		
E	Ditto 1480mm long ditto	NO	4		
F	Ditto 1420mm long ditto	NO	4		
G	Ditto 1410mm long ditto	NO	8		
H	Ditto 1360mm long ditto	NO	4		
I	Ditto 1350mm long ditto	NO	4		
J	Ditto 1280mm long ditto	NO	4		
K	Ditto 1270mm long ditto	NO	4		
L	Ditto 1200mm long ditto	NO	4		
M	Ditto 1150mm long ditto	NO	4		
N	Ditto 1100mm long ditto	NO	4		
O	Ditto 990mm long ditto	NO	4		
P	Ditto 880mm long ditto	NO	8		
Q	Ditto 840mm long ditto	NO	4		
R	Ditto 760mm long ditto	NO	4		
S	Ditto 730mm long ditto	NO	14		
<b>Collection</b>					

A	Ditto 700mm long ditto	NO	4		
B	Ditto 670mm long ditto	NO	4		
C	Ditto 600mm long ditto	NO	4		
D	Ditto 590mm long ditto	NO	4		
E	Ditto 580mm long ditto	NO	8		
F	Ditto 550mm long ditto	NO	4		
G	Ditto 520mm long ditto	NO	4		
H	Ditto 100mm long ditto	No	4		
I	Steel post, square hollow section, 2100mm long, cross sectional size 76 x 76 x 3mm thick with one end welded with and including 180 x 90 x 8mm mild steel plate with four holes for M12 bolts and other end welded to IPE180 beam	NO	16		
J	cross sectional size 76 x 76 x 3mm thick with one end welded with and including 180 x 90 x 8mm mild steel plate with four holes for M12 bolts and other end welded to SHS intermediate beam and the like	NO	48		
K	with one hole for M16 bolt at a middle, size 60 x 60 x 6mm thick, both ends welded with and including 215 x 150 x 50mm mild steel plate with two holes for M16 bolts (Bolts measured separately)	NO	8		
L	Ditto 4870mm long ditto	NO	8		
M	Ditto 4760mm long ditto	NO	4		
N	Ditto 4720mm long ditto	NO	4		
O	Ditto 4670mm long ditto	NO	4		
P	Ditto 4610mm long ditto	NO	4		
Q	Ditto 1780mm long ditto	NO	8		
<b>Collection</b>					





	<b><u>Glazed aluminium partition</u></b>				
	<b><u>Provide all materials, fabricate and erect light wall partition to Architectural design comprises of natural finished anodised aluminium framing, bottom part finished with self finished and textured both sides gypsum board and upper part finished with 8.38mm PVB laminated safety glass with tinted PVB layer</u></b>				
A	2100mm high divided into two panels and door shutter size 600 x 2100mm overall divided into two panels, bottom panels filled in with and including 12mm thick self finished gypsum board and top panels filled in with and including 8.38mm PVB laminated safety glass including all necessary ironmongery, refer drg. No. SMEC/BRT/01/ARCH T/4	NO	2		
B	Aluminium framed partition wall size 1550 x 2100mm high divided into four panels, two panels filled in with and including 8.38mm PVB laminated safety glass and another two panels filled in with and including 12mm self finished gypsum board, as per drg. SMEC/BRT/01/ARCH T/4	NO	2		
C	Aluminium framed partition wall size 965 x 2100mm high divided into two panels, bottom panel filled in with 12mm thick self finished gypsum board and top panel filled in with and including 8.38mm PVB laminated safety glass with a hole for cash transfer tray as per drg. SMEC/BRT/01/ARCH T/4	NO	2		
	<b><u>Stainless steel screened wall</u></b>				
D	cross sectional size 50 x 50 x 3mm thick, one end welded to and including 100 x100 x 3mm mild steel base plate and other end sealed with 50 x 50 x 3mm mild steel plate with two holes for 12mm bolts	NO	64		
E	Stainless steel top rail, satin finished, 50mm diameter fixed on top of stainless steel post with 52mm diameter stainless steel clamp (measured separately)	LM	67		
	<b>Collection</b>				

A	Mild steel rail, 20mm diameter fixed through pipe holders riverted to posts (holders measured separately)	LM	865		
B	52mm Diameter stainless steel clamp, 2mm thick bolted to post	NO	64		
C	Mild steel angle cleat, size 40 x 40 x 40 x 3mm thick with 22mm diameter hole for tubular rail riverted to posts, painted	NO	832		
D	Mild steel galvanized bolt, 12mm diameter with one nut and two washers, 50mm long	NO	128		
E	Form mortice in concrete size 100 x 100 x 100mm deep for steel post	NO	64		
F	Prepare and apply two coats of galaxy zinc rich primer to steel surfaces over 100 but not exceeding 200mm girth before erection	LM	120		
G	Ditto not exceeding 100mm girth	LM	865		
	<b><u>Ramp balustrade</u></b>				
H	75mm Diameter, 2mm thick satin finished stainless steel handrail welded on top of steel balusters, open ends closed with flat metal plate	LM	41		
I	50mm Diameter, mild steel hollow section baluster, 900mm long with one end welded to and including 150 x 75 x 3mm mild steel plate with four holes for M10 bolt and another end welded to stainless steel handrail	NO	40		
J	25mm Diameter, mild steel hollow section middle rail welded to balusters	LM	230		
K	10mm Diameter mild steel anchor bolt, 10mm long including building one end into concrete, with one nut and washer	NO	160		
L	Prepare and apply two coats of galaxy zinc rich primer to steel surfaces over 100 but not exceeding 200mm girth before erection	LM	36		
M	Ditto not exceeding 100mm girth	LM	230		
	<b>Collection</b>				

**COLLECTION**

Page No. 4

Page No.5

Page No.6

Page No. 7

Page No.8

Page No. 9

Page No. 10

**TOTAL, WALLING CARRIED TO SUMMARY**



<b><u>ELEMENT No. 3: DOORS</u></b>					
<b><u>Supply and fix composite door unit comprising 8.38mm thick Polyvinyl Butyral (PVB) laminated safety glass with tinted PVB internal layer panes on natural anodised aluminium framing, sliding and fixed panes including all accessories and ironmongery and fixing frame to steel structure to approved manufacturer's specifications and as per drawing SMEC/BRT/01/ARCH C/6</u></b>					
A	Special door type D2 size 6050 x 2100mm overall complete with all ironmongery	NO	8		
B	Ditto type D1 size 4725 x 2100mm overall ditto	NO	8		
C	Door type D4 size 600 x 2100mm overall ditto	NO	2		
D	Supply and fix metal roller shutter to cover opening size 4620 x 2100mm overall to approved design, refer drg. No. SMEC/BRT/01/ARCH C/6, door type D3	NO	2		
E	Supply and fix multi-lock pad lock	NO	4		
<b><u>Turnstile gates openings</u></b>					
F	Provisional for supply, installation and commissioning of turnstile gates for normal and disables persons	PS	1	100,000,000	100,000,000
G	Contractor, overhead and profit as percentage of item F	%			
<b>TOTAL, DOORS CARRIED TO SUMMARY</b>					



<b><u>ELEMENT No. 5: ROOFING</u></b>			
<b><u>Supply and fixing IT5 gauge 22 resin coated aluminium roofing sheets; fixing to steel purlins in accordance to manufacturer's specification;</u></b>			
A	Roof covering sloping not exceeding 45 degrees from horizontal	SM	350
B	Ditto but curved irrespective of radius	SM	639
C	Raking cutting	LM	28
<b><u>Roof structure</u></b>			
<b><u>Unframed weldable mild steel to BS 4360 grade 43 welded and bolted site connection</u></b>			
D	Steel rafter, rectangular hollow section mild steel, cross sectional size 152 x 76 x 5mm welded to steel columns/posts	LM	124
E	Ditto but curved irrespective of radius on deep side (152mm side)	LM	420
F	Z-purlins size 150 x 50 x 22 x 2mm weighing 4,72kg per linear metre	LM	763
G	with one hole for M16 bolt at a middle size 60 x 60 x 6mm thick, both ends welded to and including 215 x 150 x 10mm mild steel plate with two holes for M16 bolts (Bolts measured separately)	NO	8
H	Mild steel angle cleat size 125 x 125 x 85 x 6mm thick with two holes for M16 bolts welded on top of steel I-beam	NO	28
I	Mild steel angle cleat size 90 x 90 x 75 x 6mm thick with two holes for M16 bolts welded on top of steel RHS rafter	NO	234
J	Galvanized bolt, M25 including one nut and two washers, 120mm long	NO	28
K	Galvanized bolt, M16 including one nut and two washers, 50mm long	NO	500
B	Drill 152 x 76 x 6mm thick RHS steel for 25mm bolt	NO	28
C	Drill 8mm thick steel for M16 bolt	NO	32
<b>Collection</b>			

A	Drill 2mm thick steel for M16 bolt	NO	468		
B	Prepare and apply two coats of Galaxy zinc rich primer to surfaces of steel before erection	SM	604		
C	Ditto but steel surfaces over 200 but not exceeding 300mm girth	LM	53		
<b><u>Roof drainage</u></b>					
D	2mm Thick galvanised mild steel gutter, 750mm girth, bent to required shape and fixed to purlins with mild steel brackets at 600mm centres	LM	26		
E	Nozzle outlet	NO	4		
F	Stop-end	NO	8		
G	Prepare and apply two coats of Galaxy zinc rich primer to gutter surfaces before erection	SM	40		
<b><u>Unplasticized PVC pipes and fittings to BS</u></b>					
H	75mm Pipe fixed to steel work with straps	LM	14		
I	Swan-neck 700mm projection	NO	4		
J	Shoe	NO	4		
<b>Collection</b>					
<b><u>COLLECTION</u></b>					
Page No. 14					
Page No. 15					
<b>TOTAL, ROOFING CARRIED TO SUMMARY</b>					

	<b><u>ELEMENT No. 6: FINISHINGS</u></b>			
	<b><u>In-situ finishings</u></b>			
	<b><u>Internal plastering in two coats, steel trowelled to a smooth finish</u></b>			
A	15mm To walls	SM	24	
	<b><u>Tile, slab or block finishings</u></b>			
	<b><u>Coloured porcelain floor tiles as industria code No. max 276 AS14 as per Arkin catalogue 2003 or other equal and approved with cushion edge fixed to screed with adhesive and pointed with coloured grout</u></b>			
B	400 x 400 x 10mm Tiling to floors at	SM	506	
C	100mm Tile skirting	LM	8	
D	300 x 300 x 10mm Tacktiles	SM	20	
	<b><u>Spanish brick heavy duty floor tiles as supplied by C-Tiles or other equal and approved quality, fixed to cement screed with adhesive and pointed with coloured grout to match</u></b>			
E	410 x 410 x 20mm Tiling to floor at connection and ramps	SM	275	
F	Luxalon suspended sloping ceiling lining fixed to ceiling support including all necessary suspended as per manufacturer's recommendations	SM	140	
G	Ditto but curved irrespective of radius	SM	308	
H	50 x 75mm Mild steel rectangular hollow section ceiling support welded to Z-purlin (provisional)	LM	202	
I	Ditto but curved irrespective of radius (provisional)	LM	456	
	<b><u>Balustrade</u></b>			
J	stainless steel baluster, 900mm long with one end welded to and including 150 x 75 x 3mm thick stainless steel foot plate with four holes for M10	NO	128	
K	50mm Diameter, 2mm thick satin finished stainless steel handrail fixed to baluster	LM	94	
	<b><u>Collection</u></b>			





<b><u>ELEMENT No. 8: FITTINGS AND FIXTURES</u></b>				
<b><u>Duct cover</u></b>				
A	Supply and fix aluminium duct cover size 300 x 2100mm overall divided into two panels comprising of natural finished anodised aluminium framing to specialist design, bottom panel filled in with and including aluminium louvre blades and top panel filled in with and including 4mm thick perforated aluminium sheet, complete with all	NO	4	
<b><u>Ticketing booth counter</u></b>				
B	Ticketing both with counter as per Architectural design complete with cash transfer tray and all necessary ironmongery	NO	2	
<b>TOTAL, FITTINGS AND FIXTURES CARRIED TO SUMMARY</b>				



	<b><u>ELEMENT No. 9: ELECTRICAL AND DATA INSTALLATION</u></b>				
	<b><u>DISTRIBUTION BOARD</u></b>				
	<b><u>Supply and install on surface mounted TPN MCB Distribution Boards fitted with 100A, MCCB TPN, c/w automatic change over switch, MCBs outgoiers and the necessary fixings including control cables as shown in schematic drawing</u></b>				
A	12 Ways TPN MCB Distribution Board	NO	2		
	<b><u>CABLES</u></b>				
	<b><u>Multicore PVC insulated , armoured steel wire, PVC copper drawn in galvanized steel pipe, clipped direct on wall, buried underground or concealed under plaster</u></b>				
B	600V /1000V grade 25sq mm 4core cable	LM	120		
C	600V /1000V grade 25sq mm 2core cable	LM	100		
	<b><u>LIGHTING FITTINGS AND WIRING</u></b>				
	<b><u>LIGHT FITTINGS</u></b>				
	<b><u>Supply and install the following luminaire fixed to backgrounds including fixing</u></b>				
D	Standard circular recessed downlight with polycarbonate black and white body, and specular anodized aluminium and specular vacuum metalized plastic as Thorn chalice 190 or equivalent as approved by Engineer	NO	6		
E	Enclosed black technopolymer with polycarbonate photocell. Integral control gear and asymmetrical reflector for 70W clear HPS-E/I lamp. Sealed to IP 65 .As Thorn SONPAK 7 cat No. OTP70E.4 or equivalent as approved by	NO	30		
F	White finish, recessed rectangular light complete with integral control gear and asymmetrical reflector for TD 70w as Philips mini300 or equivalent as approved by Engineer	NO	88		
	Self contained pendant brass exit sign with 8W fluorescent lamp for maintained emergence lighting for 3 hours duration, one side as Thorn status or as approved by Engineer	NO	15		
	<b><u>Collection</u></b>				

	<b><u>WIRING ACCESSORIES</u></b>				
	<b><u>Supply and install all flush accessories in walls, surface mounted as shown on drawings c/w mounting boxes face plate as</u></b>				
B	10A 1gang 1way switch	NO	4		
C	10A 4gangs Grid switch	NO	4		
	<b><u>SMALL POWER OUTLETS</u></b>				
	<b><u>Supply and install small power outlets flush on walls or trunking c/w boxes and accessories as "MEM"</u></b>				
D	13A 2gang switched socket outlet	NO	2		
E	20A DP switch with neon indicator for sliding door	NO	25		
	<b><u>WIRING</u></b>				
F	Power point wired using 2.5 single core cable drawn in 20mm PVC-U conduit concealed under plaster or clipped on wall including wiring and conduit accessories	NO	4		
G	Power point wired using 2.5 single core cable drawn in galvanized pipe in screed including wiring accessories for Turnstile	NO	10		
H	Power point wired using 2.5 single core cable drawn in PVC conduit including wiring accessories for sliding doors	NO	25		
I	Lighting point wired using 1.5sq.mm PVC 3 core cable drawn in concealed pvc conduit including wiring accessories	NO	124		
	<b><u>SERVICE LINE AND POWER SUPPLY</u></b>				
K	Provisional sum for connection of electrical power supply from TANESCO	PS			35,000,000.00
L	applications and attendance up to completion of electrical supply connection as percentage of item K	%			
	<b>Collection</b>				

	<b>VOICE, DATA AND CABLING</b>				
A	RJ 45 Cat5 twin data socket outlet fitted with transparent label holder including fixing as MEM	NO	2		
	<b>WIRING</b>				
B	Data point wired using UTP cable drawn in conduit including wiring, conduit and conduit accessories	NO	4		
	<b>BACKUP POWER SUPPLY</b>				
C	10 kVA, 8 hours capacity. UPS System completely with all necessary wiring to distribution board including accomodating shelvse/cabinets	LS	1		
	<b>EARTHING</b>				
D	Allow for earthing of the entire installation in accordance with the specification				
	<b>SURVEILLANCE FACILITIES</b>				
E	Supply and install CCTV for the station	PS		45,000,000.00	45,000,000.00
F	Contractor's overhead and profit as percentage of item F	%			
	<b>TESTING</b>				
H	Allow for testing and commissioning the whole of the electrical and standby power system to comply with the requirements	LS			
	<b>AS BUILT DRAWINGS</b>				
I	Allow for provision of three sets of As- built drawings for the Bus station including soft copy in both AutoCAD and PDF format	LS			
	<b>Collection</b>				

	<b><u>BUILDER'S WORK IN CONNECTION WITH ELECTRICAL AND DATA INSTALLATION</u></b>				
	<b><u>making good after the concealed electrical system</u></b>				
A	Lighting point and associated switches	NO	124		
B	Switched socket outlet	NO	4		
C	Telephone/Data points	NO	2		
D	Sliding door	NO	25		
E	Turnstile points	NO	20		
<b>Collection</b>					
<b><u>COLLECTION</u></b>					
Page No. 20					
Page No. 21					
Page No. 22					
Page No.23					
<b>TOTAL, ELECTRICAL AND DATA INSTALLATION CARRIED TO SUMMARY</b>					



## Summary of Specified Provisional Sums

### Item No. 11

#### Replace:

Item No	Description	Amount (T.Shs)
	<b>BILL 1000: GENERAL</b>	
12.02	Relocation of Services:	
(a)	Arrange and pay for relocation of TANESCO power utilities	1,500,000,000
(c)	Arrange and pay for relocation of DAWASA utilities (Clean water and sewerage system)	1,000,000,000
(e)	Arrange and pay for relocation of TTCL Telecom lines and other networks	1,000,000,000
SS12.05	Disputes Avoidance/Adjudication Board (DAAB)	
(a)	Provisional Sum to cover the Employer's Obligation to pay the DAAB	500,000,000
SS12.06	Installations of Information and Communication Technology (ICT).	
(a)	Provisional Sum for Installations of Information and Communication Technology (ICT).	500,000,000
14.02	Offices for the Engineer	
SS14.02(c)	Provide airtime for 12 No. mobile phones for the Engineer's staff	28,800,000
15.01	Provision for traffic management and construction of temporary pedestrian bridges	
(b)	Allow a provisional sum to cover for construction of temporary pedestrian bridge(s) during construction period.	20,000,000
17.05	Provisional Sum to cover fees/costs for maintenance and enhancement of environment measures not included in the Works	50,000,000
SS18.02	HIV/AIDS prevention campaign	
(a)	Institute and maintain HIV/AIDS prevention campaign	45,000,000
SS18.03(a)	HIV/AIDS Training	48,000,000
	<b>BILL 6000: STRUCTURES</b>	
61.01	Additional Foundation Investigations	
(a)	Four (4) boreholes (at abutments and piers) each 25 meters deep. Investigations as per Specific Specification 6103	80,000,000
	<b>BILL 7000: TESTING AND QUALITY CONTROL</b>	
71.01	Special Tests Requested by the Employer including Oversight Quality Control	
(a)	Tests	400,000,000
	<b>TOTAL OF SPECIFIED PROVISIONAL SUMS CARRIED TO GRAND SUMMARY TABLE</b>	<b>5,171,800,000</b>

With:

Item No	Description	Amount (T.Shs)
	<b>BILL 1000: GENERAL</b>	
12.02	Relocation of Services:	
(a)	Arrange and pay for relocation of TANESCO power utilities	1,500,000,000
(c)	Arrange and pay for relocation of DAWASA utilities (Clean water and sewerage system)	1,000,000,000
(e)	Arrange and pay for relocation of TTCL Telecom lines and other networks	1,000,000,000
SS12.05	Disputes Avoidance/Adjudication Board (DAAB)	
(a)	Provisional Sum to cover the Employer's Obligation to pay the DAAB	500,000,000
SS12.06	Installations of Information and Communication Technology (ICT).	
(a)	Provisional Sum for Installations of Information and Communication Technology (ICT).	500,000,000
14.02	Offices for the Engineer	
SS14.02(c)	Provide airtime for 12 No. mobile phones for the Engineer's staff	28,800,000
15.01	Provision for traffic management and construction of temporary pedestrian bridges	
(b)	Allow a provisional sum to cover for construction of temporary pedestrian bridge(s) during construction period.	20,000,000
17.05	Provisional Sum to cover fees/costs for maintenance and enhancement of environment measures not included in the Works	50,000,000
SS18.02	HIV/AIDS prevention campaign	
(a)	Institute and maintain HIV/AIDS prevention campaign	45,000,000
SS18.03(a)	HIV/AIDS Training	48,000,000
	<b>BILL 5000: ANCILLARY ROADWORKS</b>	
<b>57.10 (a)</b>	<b>Extra work for landscaping</b>	<b>60,000,000</b>
	<b>BILL 6000: STRUCTURES</b>	
61.01	Additional Foundation Investigations	
(a)	Four (4) boreholes (at abutments and piers) each 25 meters deep. Investigations as per Specific Specification 6103	80,000,000
	<b>BILL 7000: TESTING AND QUALITY CONTROL</b>	
71.01	Special Tests Requested by the Employer including Oversight Quality Control	
(a)	Tests	400,000,000
	<b>PART 2: BRT BUS STATION</b> <sub>[M1]</sub>	

F	<b>ELEMENT No. 3: DOORS</b> <b>Turnstile gates openings</b> Supply, installation and commissioning of turnstile gates for normal and disables persons	100,000,000
K	<b>ELEMENT No. 9: ELECTRICAL AND DATA INSTALLATION</b> <b>Service Line and Power Supply</b> Provisional sum for connection of electrical power supply from TANESCO	35,000,000
E	<b>Surveillance Facilities</b> Supply and installand commissioning of CCTV for the station	45,000,000
	<b>TOTAL OF SPECIFIED PROVISIONAL SUMS CARRIED TO GRAND SUMMARY TABLE</b>	<b>5,411,800,000</b>

**Item No. 12**

**Table C. Summary of Payment Currencies**

Replace: Table: Alternative A

Name of payment currency	A Amount of currency	B Rate of exchange (local currency per unit of foreign)	C Local currency equivalent C = A x B	D Percentage of Net Bid Price (NBP) $\frac{100 \times C}{NBP}$
Local currency		1.00		
Foreign currency #1				
Foreign currency #2				
Foreign currency #3				
Net Bid Price (NBP)				100.00
Less: Specified Provisional Sums (Refer BOQ Grand Summary)	5,411,800,000		5,411,800,000	
Add: Provisional Sum for Physical Contingencies (Refer BOQ Grand Summary)				
Add: Provisional Sum for Variation of Price (Refer BOQ Grand Summary)				
18% VAT Payable by Employer (Refer BOQ Grand Summary)				
TOTAL BID PRICE (Refer BOQ Grand Summary)				



**With:** Table: Alternative A

<b>Name of payment currency</b>	<b>A Amount of currency</b>	<b>B Rate of exchange (local currency per unit of foreign)</b>	<b>C Local currency equivalent C = A x B</b>	<b>D Percentage of Net Bid Price (NBP) <math>\frac{100 \times C}{NBP}</math></b>
Local currency		1.00		
Foreign currency #1				
Foreign currency #2				
Foreign currency #3				
Net Bid Price (NBP)				100.00
Less: Specified Provisional Sums (Refer BOQ Grand Summary)	5,411,800,000		5,411,800,000	
Add: Provisional Sum for Physical Contingencies (Refer BOQ Grand Summary)				
Add: Provisional Sum for Variation of Price (Refer BOQ Grand Summary)				
18% VAT Payable by Employer (Refer BOQ Grand Summary)				
<b>TOTAL BID PRICE (Refer BOQ Grand Summary)</b>				

**Section II - Bid Data Sheet (BDS)**

**Item No. 13**

Repalce ITB 22.1

<b>ITB 22.1</b>	For <b><u>Bid submission purposes</u></b> only, the Employer’s address is: Attention: <i>The Secretary, TANROADS HQ Tender Board</i> Street Address: <i>10 Shaaban Robert Road/Garden Avenue Junction,</i> Floor/Room number: <i>2<sup>nd</sup> Floor,</i> City: <i>Dar es Salaam</i> ZIP/Postal Code: <i>Not Applicable</i> Country: <i>Tanzania</i> <b>The deadline for bid submission is:</b> Date: <i>27<sup>th</sup> September 2023</i> Time: <i>10:00 hrs</i> Bidders <b>shall not</b> have the option of submitting their Bids electronically.
-----------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<b>With ITB 22.1</b>	
<b>ITB 22.1</b>	For <b><u>Bid submission purposes</u></b> only, the Employer’s address is: Attention: <i>The Secretary, TANROADS HQ Tender Board</i> Street Address: <i>10 Shaaban Robert Road/Garden Avenue Junction,</i> Floor/Room number: <i>2<sup>nd</sup> Floor,</i> City: <i>Dar es Salaam</i> ZIP/Postal Code: <i>Not Applicable</i> Country: <i>Tanzania</i> <b>The deadline for bid submission is:</b> Date: <i>25<sup>th</sup> October 2023</i> Time: <i>10:00 hrs</i> Bidders <b>shall not</b> have the option of submitting their Bids electronically.

**Special Specifications 6113.10 Pile Testing**

**Item No. 14**

Replace:

	<b>Integrity Testing</b> <b>Project Specification</b> Integrity testing shall be performed and results interpreted by approved independent specialist firms.  (a) Sonic integrity test method  The method of test to be carried out shall be to the acceptance of the Engineer.  (b) The number of days to elapse between casting and integrity testing  The minimum number of days to elapse between casting and testing shall be seven.  (c) Verticality test
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<p>The contractor shall propose detailed method to check tolerances after pile excavation. No pile shall be placed without satisfactory check of tolerances. Records shall be submitted to the Engineer for approval prior to concreting.</p> <p>(d) Reporting results</p> <p>The contractor shall submit a report of testing conform the ICE Specification.</p> <p>(e) Completion of tests</p> <p>After completion of tests all equipment shall be removed from site</p>
--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

With:

	<p><b>Integrity Testing</b> <b>Project Specification</b></p> <p>Integrity testing shall be performed and results interpreted by approved independent specialist firms.</p> <p>(a) Sonic integrity test method</p> <p>The method of test to be carried out shall be to the acceptance of the Engineer.</p> <p>(b) Minimum number of Sonic Integrity tests to be applied in testing working piles</p> <p>Sonic Integrity tests shall be carried out on 10% of working piles below each bridge pier and abutment and below the wing walls</p> <p>(c) The number of days to elapse between casting and integrity testing</p> <p>The minimum number of days to elapse between casting and testing shall be seven.</p> <p>(d) Verticality test</p> <p>The contractor shall propose detailed method to check tolerances after pile excavation. No pile shall be placed without satisfactory check of tolerances. Records shall be submitted to the Engineer for approval prior to concreting.</p> <p>(e) Reporting results</p> <p>The contractor shall submit a report of testing conform the ICE Specification.</p> <p>(f) Completion of tests</p> <p>After completion of tests all equipment shall be removed from site</p>
--	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**Item No. 15**

Insert specifications for New BRT Bus station.

**Section VII. Works Requirements - DRAWINGS**

**Item No. 16**

Add New Drawings for New BRT Bus Stations. Please refer **Appendix 1**.

**Section IX - Particular Conditions**

**Item No. 17**

Coverage for video	4.20 (b)	<p><i>The following requirement on the progress report is added:</i></p> <p><b><i>Video documentary covering the entire site at the commencement, monthly progress during construction and after completion</i></b></p>
--------------------	----------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**Item No. 18**

Replace:

<b>MSIMBAZI BASIN DEVELOPMENT PROJECT (MBDP)</b>				
<b>CONSTRUCTION OF BRIDGE AND ASSOCIATED WORKS</b>				
<b>GRAND SUMMARY FOR BILLS OF QUANTITIES</b>				
<b>BILL NO.</b>	<b>DESCRIPTION</b>			<b>AMOUNT T.SHS</b>
1000	GENERAL			
2000	DRAINAGE			
3000	EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE			
4000	BITUMINOUS LAYERS AND SEALS			
5000	ANCILLARY ROADWORKS			
6000	STRUCTURES			
7000	TOLERANCES, TESTING AND QUALITY CONTROL			
8100	STREET LIGHTING			
9000	DAYWORKS			
<b>A</b>	<b>TOTAL BILLS (A)</b>			
<b>B</b>	LESS: Specified Provisional Sums included in Total Bills			5,171,800,000.00
<b>C</b>	<b>SUB TOTAL {(A) - (B)}</b>			
<b>D</b>	ADD: Provisional Sum for Physical Contingency (7.5% of C)			
<b>E</b>	<b>SUB TOTAL {(C) + (D)}</b>			
<b>F</b>	ADD: Provisional Sum for Variation of Price {(VoP) (7.5% of (E))}			
<b>G</b>	<b>SUB TOTAL {(E)+ (F)}</b>			
<b>H</b>	ADD: VAT {18% of (G)}			
<b>I</b>	<b>Bid Price [(A)+(D)+(F)+(H)], Carried to Letter of Bid</b>			

With:

<b>CONSTRUCTION OF BRIDGE AND ASSOCIATED WORKS</b>		
<b>GRAND SUMMARY FOR BILLS OF QUANTITIES</b>		
<b>BILL NO.</b>	<b>DESCRIPTION</b>	<b>AMOUNT T.SHS</b>
<b>A</b>	PART A: ROADWORKS	
<b>B</b>	PART B: BRT BUS STATION	
<b>C</b>	<b>TOTAL BILLS (A + B)</b>	
<b>D</b>	LESS: Specified Provisional Sums included in Total Bills	5,411,800,000.00
<b>E</b>	<b>SUB TOTAL {(C) - (D)}</b>	
<b>F</b>	ADD: Provisional Sum for Physical Contingency (7.5% of E)	
<b>G</b>	<b>SUB TOTAL {(E) + (F)}</b>	
<b>H</b>	ADD: Provisional Sum for Variation of Price {(VoP) (7.5% of (G))}	
<b>I</b>	<b>SUB TOTAL {(C) + (F)+ (H)}</b>	
<b>J</b>	ADD: VAT {18% of (I)}	
<b>K</b>	<b>Tender Price [(H)+(J)] Carried to Letter of Bid</b>	