TITLE: AUTO SAMPLER DESIGN AND INSTALLATION FOR FORCADOS TERMINAL

DESCRIPTION	F\$USD (Mln)
Design Mobilization/HSSE	0.17
T	0.00
Transportation	0.02
Demolition Works	0.03
Procurement and Integration	2.73
Construction/Installation Works	0.56
Sub Total	3.51
Contingencies	0.53
Total	4.04

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S/N	DESCRIPTION	QTY	Unit	RATE(N)	RATE(\$)	AMOUNT(N)	AMOUNT(S)	FUSD
1	DESIGN, MOBILIZATION/HSSE					32,791,807.55	94,393.62	174,373.64
1.1	Detailed design, reviews, production of construction and installation documents/drawings. This include civil/concrete equipment plinth, electrical and instrument signal cable connection, power and control panel, system/software design, welding details	1	LS	8,228,271.63	70,635.59	8,228,271.63	70,635.59	
1.2	Mobilisation of competent personnel & fit-for-purpose equipment suitable for the operations, allow for all HSSE & community requirements.	1	LS	2,458,361.07	23,758.04	2,458,361.07	23,758.04	
1.3	Provision of complete Personal Protective Equipment (PPEs) for workers (POB = ~55).	1	LS	3,907,700.00	-	3,907,700.00	-	
1.4	Provide fully stocked SPDC Standard First Aid Box with qualified Site Nurse and qualified Safety Officer; Site clinic & ambulance. (POB = ~55).	1	LS	3,224,663.85	-	3,224,663.85	-	
1.5	Provision of site office & site administration; mobile toilets; provision of security for materials & personnel throughout the duration of the project. (POB = \sim 55).	1	LS	14,972,811.00	-	14,972,811.00	-	
2	TRANSPORTATION					2,026,629.30	14,746.32	19,689.32
2.1	Provide logistics (Land/Marine transport -barge, tug, escort boat, crane, trailer, etc.; Lifting/Handling tools at Warri and Forcados site, Security and deliver all equipment/tools/materials to Forcados site from Warri and back to Warri at completion of project.	1	LS	2,026,629.30	14,746.32	2,026,629.30	14,746.32	
3	DEMOLITION WORKS					2,470,143.00	21,298.35	27,323.09
3.1	Removal of all unit of existing Auto sampler including piping ,supports,frames steel materials,accessories.	1	LS	783,455.10	7,075.95	783,455.10	7,075.95	27,020.07
3.2	Dismantling of electrical and instrument cables and connections	1	LS	434,337.90	3,662.40	434,337.90	3,662.40	
3.3	Demolition of concrete plinth/civil member	1	LS	1,252,350.00	10,560.00	1,252,350.00	10,560.00	
4	PROCUREMENT AND INTEGRATION					147,683,761.37	2,366,330.21	2,726,534.51
4.1	Procurement of One Unit Auto Sampler at FOT with Micro Motion CDM 100P Corollis Meter and Micro Motion Elite Coriolis Meter 1" ANSI 600	1	No	122,331,296.57	1,702,435.21	122,331,296.57	1,702,435.21	

4.2	Control Panel for One (1) Unit Auto Sampler at FOT	1	No	25,352,464.80	352,820.00	25,352,464.80	352,820.00
4.3	Installation Specialist OEM Service Charge	1	LS	-	311,075.00	-	311,075.00
5	CONSTRUCTION / INSTALLATION WORKS					51,670,383.42	435,311.26
5.1	Scaffolding covering 3 square meter	30	DAY	7,257.67	10.20	217,730.10	306.00
5.2	Civil/concrete modification and construction	60	M3	71,966.69	-	4,318,001.59	-
5.3	Welding works: modification of spools, fit-up, welds, NDT, radiography, coating	1	LS	1,188,687.40	10,577.00	1,188,687.40	10,577.00
5.4	Hydrotest of welded spool off work site	1	LS	255,197.10	2,394.90	255,197.10	2,394.90
5.5	Installation of Nozzle and quill on the 42" export header.	30	EA	272,934.61	2,623.08	8,188,038.30	78,692.40
5.6	Mounting and bolting of the sampling package which includes but not limited to (Receivers, circulation pump, isolation valve, flow indicator, piping and accessories) on skid with crane, heavy vehicle, self loader, forklift and all required tools and equipment.	30	EA	682,336.53	6,557.70	20,470,095.75	196,731.00
5.7	Provide and deliver 75mm (3") carbon steel(Sch 40)	34	m	-	14.53	-	493.96
5.8	Procure, deliver to site and install 4mm ² x 2core power cables and all accessories including cable tie raps.	55	m	2,583.65	20.13	142,100.97	1,107.04
5.9	Procure, deliver to site and install all required 2.5mm ² x 2core instrument cables and all accessories including cable tie raps.	160	m	1,312.88	11.07	210,060.93	1,771.26
5.10	Procure ,deliver to site and install circuit breaker (MidNite Solar MNEPV100 Din Rail 100A DC Breaker 150Vdc)	1	No	28,980.00	-	28,980.00	-
5.11	Procure ,deliver to site and install 50 x 100mm cable trays and accessories	25	m	11,192.25	22.14	279,806.34	553.52
5.12	Procure, deliver to site and install 6mm ² earthing cables and all accessories including gland,lug,sherould and clamp	35	m	2,691.76	22.14	94,211.66	774.93

This actually hardware procurement (Control Panel)

561,336.59

	TOTAL					236,642,724.64	2,932,079.76
5.19	As Built drawings	1	LS	1,520,182.20	12,818.40	1,520,182.20	12,818.40
5.18	Complete site restoration and demobilisation	5	EA				
5.17	Demobilization of all equipment, materials, tools from site	1	LS	819,453.69	7,919.35	819,453.69	7,919.35
5.16	Testing,commissioning and Handover	1	LS	8,155,679.70	72,415.50	8,155,679.70	72,415.50
5.15	System/software Integration/hook up works	1	LS	-	-	-	-
5.14	Mechanical, piping, electrical and control panel connection and hookup.	1	LS	4,647,642.30	39,189.60	4,647,642.30	39,189.60
5.13	Probing for underground facilities, excavation, laying and termination of the power supply cable at the identified power point source	1	LS	1,134,515.40	9,566.40	1,134,515.40	9,566.40

3,509,257.14 USD 1 = 410 NGN