

TWAD BOARD, RWS DIVISION, CHENGALPATTU

Name of work: Outsourcing the Operation and Maintenance of Combined Water supply Scheme for the Year 2022 - 23 to Pudhupattinam and 18 Other Habitations in Chengalpattu District.

SCHEDULE A

Item No.	Description of work	Probable quantity Figures		Units in	Rates in		Amount in figures
					Figures	Words	
1	CWSS to Pudhupattinam and 18 Other Habitations in Chengalpattu District.						
	Operation and Maintenance of the Electro Mechanical installations, equipments, components, pipelines valves and appurtenances, water retaining structures including protection of all scheme components from damages/ theft undertaking legal actions for such untoward incidents, preventive maintenance, disinfection and deliverance of water as per quality standards and supply of earmarked quantity of water to the beneficiaries as per Annexure, carrying out the O&M as per standard operating procedures, Acts and rules in force and as directed by TWAD Board Officers and excluding cost towards attending leak, burst repair and replacement works to electro mechanical installations consumables for disinfection of water, cleaning of all water retaining structure, electricity .	319.80	1 MLD	1 MLD (One Million Litre Day)	2054.40	Rupees Two Thousand & Fifty Four - Paise Fourty Only	656997.12
A	ATTENDING LEAKS/BURSTS IN THE PVC & DI PIPELINES						
1	Earth work Excavation and Depositing on bank with initial lead of 10 m and lift of 2m in sand ,silt or other loose soil,wet sand or silt not under water,light black cotton soil,sandy loam and ordinary soil including excavated as per SS20B.						
a	150mm DI K7 Pipes	4.33	m3	1Cum (One Cubic Metre)	322.50	Rupees Three Hundred & Twenty Two - Paise Fifty Only	1396.43
b	90mm HDPE pipes	4.37	m3	1Cum (One Cubic Metre)	322.50	Rupees Three Hundred & Twenty Two - Paise Fifty Only	1409.33
2	Earth work Excavation and Depositing on bank with initial lead of 10 m and lift of 2m in hard stiff clay, stiff block cotton soil, hard red earth, shales, murram, gravelly soil and earth mixed with small size boulders as per SS20B.						
a	250mm DI Pipes	4.20	m3	1Cum (One Cubic Metre)	483.00	Rupees Four Hundred & Eighty Three Only	2030.41
b	200mm DI Pipes	4.27	m3	1Cum (One Cubic Metre)	483.00	Rupees Four Hundred & Eighty Three Only	2064.54
c	150mm DI Pipes	4.33	m3	1Cum (One Cubic Metre)	483.00	Rupees Four Hundred & Eighty Three Only	2091.08

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Item No.	Description of work	Probable quantity Figures		Units in	Rates in		Amount in figures
					Figures	Words	
d	250mm PVC 4KSC Pipes	8.41	m3	1Cum (One Cubic Metre)	483.00	Rupees Four Hundred & Eighty Three Only	4060.82
e	225mm PVC 4KSC Pipes	8.48	m3	1Cum (One Cubic Metre)	483.00	Rupees Four Hundred & Eighty Three Only	4095.84
f	200mm PVC 4KSC Pipes	4.27	m3	1Cum (One Cubic Metre)	483.00	Rupees Four Hundred & Eighty Three Only	2062.41
g	140mm PVC 4KSC Pipes	4.34	m3	1Cum (One Cubic Metre)	483.00	Rupees Four Hundred & Eighty Three Only	2096.22
h	110mm PVC 4KSC Pipes	4.36	m3	1Cum (One Cubic Metre)	483.00	Rupees Four Hundred & Eighty Three Only	2105.88
l	90mm PVC 4KSC Pipes	4.37	m3	1Cum (One Cubic Metre)	483.00	Rupees Four Hundred & Eighty Three Only	2110.71
j	75mm PVC 4KSC Pipes	4.38	m3	1Cum (One Cubic Metre)	483.00	Rupees Four Hundred & Eighty Three Only	2115.54
k	63mm PVC 4KSC Pipes	4.39	m3	1Cum (One Cubic Metre)	483.00	Rupees Four Hundred & Eighty Three Only	2120.37
l	50mm PVC 6KSC Pipes	4.39	m3	1Cum (One Cubic Metre)	483.00	Rupees Four Hundred & Eighty Three Only	2120.37
3	Refilling the trench with excavated sand complying with the standard specification after attending the jointing work and testing etc., complete						
a	150mm DI K7 Pipes	4.33	m3	1Cum (One Cubic Metre)	29.50	Rupees Twenty Nine - Paise Fifty Only	127.74
b	90mm HDPE pipes	4.37	m3	1Cum (One Cubic Metre)	29.50	Rupees Twenty Nine - Paise Fifty Only	128.92
4	Refilling the trench with excavated soil (other than sand) complying with the standard specification after attending the jointing work and testing etc., complete						
a	250mm DI Pipes	4.20	m3	1Cum (One Cubic Metre)	33.60	Rupees Thirty Three - Paise Sixty Only	141.12
b	200mm DI Pipes	4.27	m3	1Cum (One Cubic Metre)	33.60	Rupees Thirty Three - Paise Sixty Only	143.47
c	150mm DI Pipes	4.33	m3	1Cum (One Cubic Metre)	33.60	Rupees Thirty Three - Paise Sixty Only	145.49
d	250mm PVC 4KSC Pipes	8.41	m3	1Cum (One Cubic Metre)	33.60	Rupees Thirty Three - Paise Sixty Only	282.58
e	225mm PVC 4KSC Pipes	8.48	m3	1Cum (One Cubic Metre)	33.60	Rupees Thirty Three - Paise Sixty Only	284.93
f	200mm PVC 4KSC Pipes	4.27	m3	1Cum (One Cubic Metre)	33.60	Rupees Thirty Three - Paise Sixty Only	143.47
g	140mm PVC 4KSC Pipes	4.34	m3	1Cum (One Cubic Metre)	33.60	Rupees Thirty Three - Paise Sixty Only	145.82

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Item No.	Description of work	Probable quantity Figures		Units in	Rates in		Amount in figures
					Figures	Words	
h	110mm PVC 4KSC Pipes	4.36	m3	1Cum (One Cubic Metre)	33.60	Rupees Thirty Three - Paise Sixty Only	146.50
I	90mm PVC 4KSC Pipes	4.37	m3	1Cum (One Cubic Metre)	33.60	Rupees Thirty Three - Paise Sixty Only	146.83
j	75mm PVC 4KSC Pipes	4.38	m3	1Cum (One Cubic Metre)	33.60	Rupees Thirty Three - Paise Sixty Only	147.17
k	63mm PVC 4KSC Pipes	4.39	m3	1Cum (One Cubic Metre)	33.60	Rupees Thirty Three - Paise Sixty Only	147.50
l	50mm PVC 6KSC Pipes	4.39	m3	1Cum (One Cubic Metre)	33.60	Rupees Thirty Three - Paise Sixty Only	147.50
5	Labour Charges for Jointing the following D.I-S/S pipes and specials with neat cement or cement mortar and spun yarn including caulking the joints, curing. (including cost of jointing materials)						
a	250mm DI Pipes	2.00	Joint	1 No (Each)	401.70	Rupees Four Hundred & One - Paise Seventy Only	803.40
b	200mm DI Pipes	2.00	Joint	1 No (Each)	339.50	Rupees Three Hundred & Thirty Nine - Paise Fifty Only	679.00
c	150mm DI Pipes	2.00	Joint	1 No (Each)	215.60	Rupees Two Hundred & Fifteen - Paise Sixty Only	431.20
	JOINTING HDPE PIPES AND SPECIALS BY BUTT FUSION WELDING/ELECTRO FUSION WELDING JOINTS USING FUSION EQUIPMENT AS PER ISO 21307-2011 AND PER IS 7634 (PART2): 2012 INCLUDING COST OF HIRE CHARGES FOR BUTT FUSION EQUIPMENT POWER SUPPLY ARRANGEMENT ETC, COMPLETE AS DIRECTED BY TWAD BOARD OFFICIERS						
	90mm HDPE	3.00	Joint	1 No (Each)	142.60	Rupees One Hundred & Fourty Two - Paise Sixty Only	427.80
6	Supply and delivery of following DI socket/spigot pipes for class K7 as per IS 8329/2000						
a	250mm DI Pipes	2.00	m	1M (One Metre)	2797.00	Rupees Two Thousand Seven Hundred & Ninety Seven Only	5594.00
b	200mm DI Pipes	2.00	m	1M (One Metre)	2120.00	Rupees Two Thousand One Hundred & Twenty Only	4240.00
c	150mm DI Pipes	2.00	m	1M (One Metre)	1615.00	Rupees One Thousand Six Hundred & Fifteen Only	3230.00
7	Supply and delivery of the following PVC Pipes as per IS 4985/2000						
a	250mm PVC 4KSC Pipes	4.00	m	1M (One Metre)	723.00	Rupees Seven Hundred & Twenty Three Only	2892.00
b	225mm PVC 4KSC Pipes	4.00	m	1M (One Metre)	723.00	Rupees Seven Hundred & Twenty Three Only	2892.00
c	200mm PVC 4KSC Pipes	2.00	m	1M (One Metre)	723.00	Rupees Seven Hundred & Twenty Three Only	1446.00
d	140mm PVC 4KSC Pipes	2.00	m	1M (One Metre)	357.50	Rupees Three Hundred & Fifty Seven - Paise Fifty Only	715.00
e	110mm PVC 4KSC Pipes	2.00	m	1M (One Metre)	216.50	Rupees Two Hundred & Sixteen - Paise Fifty Only	433.00
f	90mm PVC 4KSC Pipes	2.00	m	1M (One Metre)	151.00	Rupees One Hundred & Fifty One Only	302.00
g	75mm PVC 4KSC Pipes	2.00	m	1M (One Metre)	109.00	Rupees One Hundred & Nine Only	218.00
h	63mm PVC 4KSC Pipes	2.00	m	1M (One Metre)	78.50	Rupees Seventy Eight - Paise Fifty Only	157.00
i	50mm PVC 6KSC Pipes	2.00	m	1M (One Metre)	69.50	Rupees Sixty Nine - Paise Fifty Only	139.00
8	Supply and delivery of the following PVC Specials as per IS 10124/1982 Part II						
a	250mm PVC 4KSC Coupler	2.00	No	1 No (Each)	197.00	Rupees One Hundred & Ninety Seven Only	394.00
b	225mm PVC 4KSC Coupler	2.00	No	1 No (Each)	197.00	Rupees One Hundred & Ninety Seven Only	394.00
c	200mm PVC 4KSC Coupler	2.00	No	1 No (Each)	197.00	Rupees One Hundred & Ninety Seven Only	394.00
d	140mm PVC 4KSC Coupler	2.00	No	1 No (Each)	60.00	Rupees Sixty Only	120.00

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					Figures	Words	
e	110mm PVC 4KSC Coupler	2.00	No	1 No (Each)	33.00	Rupees Thirty Three Only	66.00
f	90mm PVC 4KSC Coupler	2.00	No	1 No (Each)	21.00	Rupees Twenty One Only	42.00
g	75mm PVC 4KSC Coupler	2.00	No	1 No (Each)	13.00	Rupees Thirteen Only	26.00
h	63mm PVC 4KSC Coupler	2.00	No	1 No (Each)	9.00	Rupees Nine Only	18.00
i	50mm PVC 6KSC Coupler	2.00	No	1 No (Each)	7.00	Rupees Seven Only	14.00
a	110mm PVC 4KSC Bend	2.00	No	1 No (Each)	111.00	Rupees One Hundred & Eleven Only	222.00
b	90mm PVC 4KSC Bend	2.00	No	1 No (Each)	65.00	Rupees Sixty Five Only	130.00
c	75mm PVC 4KSC Bend	2.00	No	1 No (Each)	43.00	Rupees Forty Three Only	86.00
d	63mm PVC 4KSC Bend	2.00	No	1 No (Each)	26.00	Rupees Twenty Six Only	52.00
e	50mm PVC 6KSC Bend	2.00	No	1 No (Each)	21.00	Rupees Twenty One Only	42.00
a	110mm PVC 4KSC Elbow (Mould) BIS 7834/1975 part VI	2.00	No	1 No (Each)	146.00	Rupees One Hundred & Fourty Six Only	292.00
b	90mm PVC 4KSC Elbow (Mould) BIS 7834/1975 part VI	2.00	No	1 No (Each)	99.00	Rupees Ninety Nine Only	198.00
c	75mm PVC 4KSC Elbow (Mould) BIS 7834/1975 part VI	2.00	No	1 No (Each)	57.00	Rupees Fifty Seven Only	114.00
d	63mm PVC 4KSC Elbow (Mould) BIS 7834/1975 part VI	2.00	No	1 No (Each)	44.00	Rupees Forty Four Only	88.00
e	50mm PVC 6KSC Elbow (Mould) BIS 7834/1975 part VI	2.00	No	1 No (Each)	28.00	Rupees Twenty Eight Only	56.00
a	110mm PVC 4KSC Male Threaded Adapter	2.00	No	1 No (Each)	85.00	Rupees Eighty Five Only	170.00
b	90mm PVC 4KSC Male Threaded Adapter	2.00	No	1 No (Each)	54.00	Rupees Fifty Four Only	108.00
c	75mm PVC 4KSC Male Threaded Adapter	2.00	No	1 No (Each)	35.00	Rupees Thirty Five Only	70.00
d	63mm PVC 4KSC Male Threaded Adapter	2.00	No	1 No (Each)	22.00	Rupees Twenty Two Only	44.00
e	50mm PVC 6KSC Male Threaded Adapter	2.00	No	1 No (Each)	16.00	Rupees Sixteen Only	32.00
9	Removing the following burst PVC pipe in the maintenance works when burst occurs and replacing it with sound pipes including the cost of refilling the trench and the removal of slushy soil etc., complete (pipes and special jointing materials will be supplied with in 200mm lead and at the respective TWAD Board divisional stores free of cost), 2 times ordinary rate allowed for the works are done during day time since the works are done in confined reaches.						
a	225mm PVC 4KSC Pipes	1.00	m	1M (One Metre)	3096.40	Rupees Three Thousand & Ninety Six - Paise Fourty Only	3096.40
10	Dewatering using diesel engine pumpset including Hire charges, cost of Diesel, Engine oil, pump operator, labour charges, conveyance of pumpset and fuel to site and back, loading, unloading and any other incidental charges etc., complete.						
a	5HP Diesel Engine	2.00	Hrs	1 Hour (One Hour)	296.50	Rupees Two Hundred & Ninety Six - Paise Fifty Only	593.00
11	Providing PCC 1:2:4 using 20mm HBG including mixing concrete, laying, curing, and compacting of concrete,etc., complete for arresting the leaks and including cost of all materials and as directed by the TWAD Board Officers	0.50	m3	1Cum (One Cubic Metre)	5720.22	Rupees Five Thousand Seven Hundred & Twenty - Paise Twenty Two Only	2860.11
12	Hire charges for deploying earth moving machinery (JCB/Poclain) for earthwork including diesel, oil and labour charges etc., complete.	2.00	Hrs	1 Hour (One Hour)	784.00	Rupees Seven Hundred & Eighty Four Only	1568.00

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					Figures	Words	
B	ATTENDING PUMPSET REPAIR IN THE SOURCES & COLLECTION SUMP						
1	Labour charges for Removal of openwell Submersible Pumpset and its accessories from the Sources/Collection Sump including disjoining the submersible cable, etc., complete for the rewinding work.						
a	5.0 HP at vayaloor	1.00	Job	1 No (Each)	5025.55	Rupees Five Thousand & Twenty Five - Paise Fifty Five Only	5025.55
b	20.0 HP at vayaloor	1.00	Job	1 No (Each)	6389.20	Rupees Six Thousand Three Hundred & Eighty Nine - Paise Twenty Only	6389.20
2	Labour charges for Re –erection of Openwell Submersible Pumpset and its accessories after rewinding work into Sources/Collection Sump						
a	5.0 HP at vayaloor	1.00	Job	1 No (Each)	5025.55	Rupees Five Thousand & Twenty Five - Paise Fifty Five Only	5025.55
b	20.0 HP at vayaloor	1.00	Job	1 No (Each)	6389.20	Rupees Six Thousand Three Hundred & Eighty Nine - Paise Twenty Only	6389.20
3	Labour charges for Rewinding of the Openwell Submersible Pumpset with first class insulation wire including removal of burnt coil, servicing the motor testing, commissioning, etc., Complete						
a	5.0 HP at vayaloor	1.00	Job	1 No (Each)	4850.00	Rupees Four Thousand Eight Hundred & Fifty Only	4850.00
b	20.0 HP at vayaloor	1.00	Job	1 No (Each)	10260.00	Rupees Ten Thousand Two Hundred & Sixty Only	10260.00
4	Labour charges for Servicing the Pumpset including cost of Pump bushes, Motor bushes, Supply and fixing of Gunmetal bushes, Oil seal, thrust bearing, bolt and nuts, including Conveyance, etc., Complete						
a	5.0 HP at vayaloor	1.00	Job	1 No (Each)	2200.00	Rupees Two Thousand Two Hundred Only	2200.00
b	20.0 HP at vayaloor	1.00	Job	1 No (Each)	4800.00	Rupees Four Thousand Eight Hundred Only	4800.00
5	Supply and Delivery of the following PVC Insulated and Sheathed 3 Core Flat type Copper Cable confirming to IS 694/1990 and as amended thereafter for erecting into the sources						
a	4 Sq.mm	6.00	m	1M (One Metre)	186.00	Rupees One Hundred & Eighty Six Only	1116.00
6	Attending the Cable fault in the following sizes of Aluminium Armoured Cable of Sources						
a	Earth work Excavation and Depositing on bank with initial lead of 10 m and lift of 2m in Sand, silt or other loose soil, wet sand or silt not under water, light black cotton soil, sandy loam and ordinary soil including excavated earth SS 20 B.						
	70 Sq.mm LT Cables	35.77	m3	1Cum (One Cubic Metre)	322.50	Rupees Three Hundred & Twenty Two - Paise Fifty Only	11535.01
b	Labour charges for Jointing of the following LT Cables - 3 Core 1.1 KV Grade Armoured Aluminium Conductor Cable Confirming to IS 1554 and as amended thereafter Part I with ISI Marking including cost of jointing materials, testing and commissioning etc., Complete						
	70 Sq.mm LT Cables	6.00	Joint	1 No (Each)	320.00	Rupees Three Hundred & Twenty Only	1920.00

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					Figures	Words	
c	Refilling the trench with excavated sand after attending the cable fault in LT Cables and jointing, etc, complete.						
	70 Sq.mm LT Cables	35.77	m3	1Cum (One Cubic Metre)	29.50	Rupees Twenty Nine - Paise Fifty Only	1055.22
d	Supply and delivery of the following 3 Core Armoured Aluminium Conductor Cross Linked Polyethylene Insulated PVC Sheathed Cables Conforming to IS 7098 (PART I)/1988 with ISI Marking						
	70 Sq.mm LT Cables	15.00	m	1M (One Metre)	321.00	Rupees Three Hundred & Twenty One Only	4815.00
7	Supply, Delivery and Fixing of the following Electrical Items required for the Openwell Submersible Pumpset in the pumproom.						
a	0A to 15A directly operated bimetallic thermal over load relay which operates in case of over load and in case of under voltage with manual and auto rest model	1.00	No	1 No (Each)	1486.00	Rupees One Thousand Four Hundred & Eighty Six Only	1486.00
b	32 Amps Electro magnetic contactors of suitable capacity in AC three phase rating conforming to IS/IEC 60947	1.00	No	1 No (Each)	4343.00	Rupees Four Thousand Three Hundred & Fourty Three Only	4343.00
c	Single phase preventer should protect the motor against single phasing reverse phasing and unbalance supply	1.00	No	1 No (Each)	1152.00	Rupees One Thousand One Hundred & Fifty Two Only	1152.00
d	supply and delivery of 500 Amps porcelain fuse (500v)	1.00	No	1 No (Each)	550.00	Rupees Five Hundred & Fifty Only	550.00
e	supply and fixing of 200 Amps three phase 500 v 4 pole change over switch with HRC fuse intirior	1.00	No	1 No (Each)	7594.00	Rupees Seven Thousand Five Hundred & Ninety Four Only	7594.00
f	supply and fixing of 63 Amps three phase 500 v 3 pole change over switch with HRC fuse	1.00	No	1 No (Each)	2372.00	Rupees Two Thousand Three Hundred & Seventy Two Only	2372.00
g	Charges for removing the burnt power capacitor and labour charges for fixing the new 3 KVAR capacitor suitable length copper cable wiring this panel board testing etc. complete after adjusted the old scrap materials.						
a	vayaloor BS 20+5 HP	2.00	KVAR	1 KVAR	315.00	Rupees Three Hundred & Fifteen Only	630.00
b	Nerumbur BS 5*4+7.5=27.5 HP	2.00	KVAR	1 KVAR	315.00	Rupees Three Hundred & Fifteen Only	630.00
8	Cleaning of all storage points like sumps, elevated reservoirs of various capacities available in this scheme at a frequency of once in three months including scrapping the inner side of compartment completely, scouring / dewatering / desilting using required machineries, materials, labour and all other incidental charges, application of bleaching powder/ solution etc complete.						
a	1.00LL SUMP VAYALLOOR	3.00	Nos	1 No (Each)	7050.00	Rupees Seven Thousand & Fifty Only	21150.00
b	0.60 LL SUMP NERUMBUR	3.00	Nos	1 No (Each)	6350.00	Rupees Six Thousand Three Hundred & Fifty Only	19050.00
9	Supply and delivery of the following Electrical Works :consumable items at the site of work to carryout the general maintenace works						
a	Voltmeter	2.00	Nos	1 No (Each)	284.00	Rupees Two Hundred & Eighty Four Only	568.00
b	Ammeter	2.00	Nos	1 No (Each)	547.00	Rupees Five Hundred & Fourty Seven Only	1094.00
c	Bulbs (led/Tube/Incadescent/others)	4.00	Nos	1 No (Each)	338.00	Rupees Three Hundred & Thirty Eight Only	1352.00

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					Figures	Words	
10	Supply and Delivery of the following consumable items for pumpset repairs at the site of work to carry out the general maintenance works						
A	80mm GM Gate valve	1.00	Nos	1 No (Each)	5113.00	Rupees Five Thousand One Hundred & Thirteen Only	5113.00
B	R I Sheet	5.00	kg	1kg(kilogram)	96.00	Rupees Ninety Six Only	480.00
C	80mm GI pipe	5.00	m	1M (One Metre)	653.00	Rupees Six Hundred & Fifty Three Only	3265.00
D	100mm GI pipe	5.00	m	1M (One Metre)	930.00	Rupees Nine Hundred & Thirty Only	4650.00
						Sub Total -I Rs	8,67,904.75
						Service charges @ 10% for labour cost Rs	57,006.25
						GRAND TOTAL	9,24,911.00

Rupees Nine Lakh Twenty Four Thousand Nine Hundred & Eleven Only

I/We agree to the execute all the above components of works atpercentage Execss/Less over the department value mentioned above
 (The percentage should be mentioned both in words and figure)

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