SCHEDULE - A

Name of Work: Replacement of connecting main, pumping main, pump set and allied works in Outlived CWSS to Umayalpuram and 10 other habitations in Tiruvannamalai District for the year 2021-2022 under Capital Grant Fund (CGF).

SI. No.	Probable Quantity		Description of Work	Rate (Both in figures & Words)Rs.	Unit in Words & Figures	Amount in Rs.
1.0.0			Supply, Delivery and Laying of 80 mm GI Pipes and specials etc. for connecting main				
1.1.0			Earth work excavation and depositing on bank with initial lead of 10 m and initial lift of 2m in narrow trenches for laying of pipes for water supply in the following types of soil				
			Sand, silt or other loose soil, wet sand or silt not under water light black cotton soil, sandy loam and ordinary soil				
1.1.1	822	М	80mm GI Pipes (IW I &II)	127.39	Rupees One Hundred Twenty Seven and Paise Thirty Nine Only	1M (One Metre)	1,04,714.58
1.2.0			Lowering GI pipes and specials in the trenches and laying to proper grade and alignment and as directed by the TWAD Officers				
1.2.1	822	М	80mm GI Pipes	23.40	Rupees Twenty Three and Paise Forty Only	1M (One Metre)	19,234.80
1.3.0			Cutting and threading of GI Pipes				
1.3.1	2	Nos.	80mm GI Pipes Cutting	28.70	Rupees Twenty Eight and Paise Seventy Only	1No (One Number)	57.40
1.3.2	4	Nos.	80mm GI Pipes Threading	62.20	Rupees Sixty Two and Paise Twenty Only	1No (One Number)	248.80

SI. No.	Probab Quanti	-	Description of Work	Rate (Both in figures & Words)Rs.	Unit in Words & Figures	Amount in Rs.
1.4.0			Refiling with excavated sand or other loose soil complying with standerd specification in layers of 15 cm thick well rammed and consolidated after pipes and specials are laid and tested.				
1.4.1	822	М	80mm GI Pipes	26.24	Rupees Twenty Six and Paise Twenty Four Only	1M (One Metre)	21,569.28
1.5.0			Supply and delivery of following pipe conforming to IS specifications				
1.5.1	822	М	80mm GI Pipes Medium	653.00	Rupees Six Hundred Fifty Three and Paise Zero Only	1M (One Metre)	5,36,766.00
1.6.0			Supply and delivery at site of following sizes of GI specials with ISI marking for jointing with GI Pipes including loading, freight unloading, stacking, insurance etc., complete and as directed by the TWAD Board officers				
1.6.1	138	Nos.	80mm GI Coupling	276.00	Rupees Two Hundred Seventy Six and Paise Zero Only	1No (One Number)	38,088.00
					Total Rs.		7,20,678.86
2.0.0			Anchoring Arrangements				
2.1.1	300	M	Drilling of borewells of size 4" to 5" dia. in Sedimentary formation using hand boresets including insertion of casing pipes and removalof casing pipes etc., including supplying and packing of pebbles and conveyance of hand Boreset including loading and nloadingas directed by the TWAD Board Officers.	854.40	Rupees Eight Hundred Fifty Four and Paise Forty Only	1M (One Metre)	2,56,320.00
2.2.1	300	М	Supply and Delivery of 110mm Dia PVC 4KSC pipes (4th Quarter rate)	186.00	Rupees One Hundred Eighty Six and Paise Zero Only	1M (One Metre)	55,800.00

SI. No.	Probab Quanti	-	Description of Work	Rate (Both in figures & Words)Rs.	Unit in Words & Figures	Amount in Rs.
2.3.1	300	М	Laying of 110mm dia PVC pipes into the bore hole.	17.40	Rupees Seventeen and Paise Forty Only	1M (One Metre)	5,220.00
2.4.1	2.852	cum	PCC 1:2:4 using (one cement two sand four HBG) 20mm HBG stone for Bore hole bottom etc.complete.	5590.49	Rupees Five Thousand Five Hundred Ninety and Paise Forty Nine Only	1M3 (One Cubic metre)	15,944.08
2.5.0			Supply and Delivery of following materials				
2.5.1	133.50	Kg	12mm RTS Rod 1.5m	51.75	Rupees Fifty One and Paise Seventy Five Only	/	6,908.63
2.5.2	10	Kg	16mm dia J Bolt & Nut set	111.00	Rupees One Hundred Eleven and Paise Zero Only		1,110.00
2.5.3	15	Kg	MS plate or sheet	47.30	Rupees Forty Seven and Paise Thirty Only		709.50
2.5.4	20	Kg	U clamp	47.30	Rupees Forty Seven and Paise Thirty Only		946.00
					Total Rs		3,42,958.20
3.0.0			Supply, Delivery and Laying of 125mm GI Pipes and specials etc. for pumping main				
3.1.0			Earth work excavation and depositing on bank with initial lead of 10 m and initial lift of 2m in narrow trenches for laying of pipes for water supply in the following types of soil				
			Hard stiff clay, stiff black cotton, hard red earth, shales, murrum gravel, stoney earth and earth mixed with small size boulders and hard gravelly soil.				
3.1.1	200	М	125mm GI Pipes	190.79	Rupees One Hundred Ninety and Paise Seventy Nine Only	1M (One Metre)	38,158.00

SI. No.	Probab Quanti	antity Description of Work	Rate (Both in figures & Words)Rs.	Unit in Words & Figures	Amount in Rs.	
3.2.0			Lowering GI pipes and specials in the trenches and laying to proper grade and alignment and as directed by the TWAD Officers				
3.2.1	200	М	125mm GI Pipes	23.40	Rupees Twenty Three and Paise Forty Only	1M (One Metre)	4,680.00
3.3.0			Refiling with excavated sand or other loose soil complying with standerd specification in layers of 15 cm thick well rammed and consolidated after pipes and specials are laid and tested.				
3.3.1	200	М	125mm GI Pipes	25.94	Rupees Twenty Five and Paise Ninety Four Only	1M (One Metre)	5,188.00
3.4.0			Supply and delivery of following pipe conforming to IS specifications				
3.4.1	200	M	125mm GI Pipes Medium	1336.00	Rupees One Thousand Three Hundred Thirty Six and Paise Zero Only	1M (One Metre)	2,67,200.00
3.5.0			Supply and delivery at site of following sizes of GI specials with ISI marking for jointing with GI Pipes including loading, freight unloading, stacking, insurance etc., complete and as directed by the TWAD Board officers				
3.5.1	32	Nos	125mm Gl Pipes Coupling	832.00	Rupees Eight Hundred Thirty Two and Paise Zero Only	1No (One Number)	26,624.00
					Total R	S	3,41,850.00

SI. No.	Probab Quanti		Description of Work	Rate (Both in figures & Words)Rs.	Unit in Words & Figures	Amount in Rs.
4.0.0			Supply, Delivery and Laying of 63mm PVC 4 KSC and Pipes and specials etc. for pumping main				
4.1.0			Earth work excavation and depositing on bank with initial lead of 10 m and initial lift of 2m in narrow trenches for laying of pipes for water supply in the following types of soil. Hard stiff clay, stiff black cotton, hard red earth, shales, murrum gravel, stoney earth and earth mixed with small size boulders and hard gravelly soil.				
4.1.1	1200	М	63mm PVC 4 Ksc Pipes	152.15	Rupees One Hundred Fifty Two and Paise Fifteen Only	1M (One Metre)	1,82,580.00
4.2.0			Supply and delivery of following PVC, GI pipes and specials as directed by TWAD officers				
4.2.1	1200	М	63mm PVC 4 Ksc Pipes	68.00	Rupees Sixty Eight and Paise Zero Only	1M (One Metre)	81,600.00
4.2.2	2	Nos	63mm PVC Bend 4 Ksc	26.00	Rupees Twenty Six and Paise Zero Only	1No (One Number)	52.00
4.2.3	4	Nos	63mm PVC 4 KSC coupler fabricated	9.00	Rupees Nine and Paise Zero Only	1No (One Number)	36.00
4.3.0			Lowering PVC/ GI rigid Pipes and specials to trench and laying to proper grade and alignment, jointing with PVC couplers with cement paste.			,	
4.3.1	1200	М	63mm PVC 4 Ksc Pipes	17.30	Rupees Seventeen and Paise Thirty Only	1M (One Metre)	20,760.00

SI. No.	Probable Quantity	Description of Work	Rate ((Both in figures & Words)Rs.	Unit in Words & Figures	Amount in Rs.
4.4.0		Refiling with excavated sand or other loose soil complying with standerd specification in layers of 15 cm thick well rammed and consolidated after pipes and specials are laid and tested.				
4.4.1	1200 M	63mm PVC 4 Ksc Pipes	21.07	Rupees Twenty One and Paise Seven Only	1M (One Metre)	25,284.00
				Total Rs).	3,10,312.00
5.0.0		Supply, Delivery and Erection of 5 HP, 12.5 HP and 15 HP Open well sub. Pumpsets and accessories for Infiltration well I & II				
5.1.0		Supply and delivery of open well Sub.Pumpset conforming to IS 14220 / 2002 ans as amended there after and BEE 3 star rated capable of discharging the following dutied due to all causes. the pump shall be stainless steel shaft and dinamically balanced bronze mixed type impeller, CI FG 200 grade casing and brass screws and rotor shall be of copper rod as per IS 613 / 1984 with ISI mark. The pump suitable for installation in sump with 1.1 KV grade 3 core suitable flat sub.cable of 15m with necessary cable joints. The non return valve located at the top of the pump in the discharge outlet connection is to be designed with minimum friction. The pump should be directly coupled to 2880 RPM, three phase 50 Hz (+/- 5), 415 V + 6% and 415 V -15% squirrel cage induction motor suitable for DOL upto 5 HP, Fully Automatic Air breake star delta upto 20 HP and auto transformer starter for above 20 HP starting and for continuous operation.				

SI. No.		Probable Description of Work	Rate (Both in figures & Words)Rs.	Unit in Words & Figures	Amount in Rs.	
5.1.1	1	No	350 Lpm x 75 m for IW-II	69848.00	Rupees Sixty Nine Thousand Eight Hundred Forty Eight and Paise Zero	1No (One Number)	1
5.1.2	1	No	350 Lpm x 25 m for IW-I	30784.00	Rupees Thirty Thousand Seven Hundred Eighty Four and Paise Zero	1No (One	30,784.00
5.2.0			Supply and delivery of direct online starter confirming to IS13947,IEC 60947-1 suitable KW rating for operation in AC/three Phase/50HZ(± 5%)and 415 V(±10%) including Ammeter, Voltmeter, Thermal Overload relay,16 amps 2 pole Magnetic Contactor with under Voltage protection, Indication lamp, starting capacitor, running capacitor and On/Off Push button switches, 5 way connector, wiring with 1 sq. mm/1.5 sq. mm copper PVC insulated cable, powder coated vermin proof box including the capacitor (the cost of capacitor is to be taken separately).				
5.2.1	1	No	For upto 5 HP	14492.00	Rupees Fourteen Thousand Four Hundred Ninety Two and Paise Zero	1No (One Number)	14,492.00
5.3.0			Supply and delivery of Star-Delta starter where panel boards are available confirming to IS13947, IEC 60947-1 suitable KW rating for operation in AC/ three Phase/50Hz(+/- 5%) and 415V (+/-10%) including 3 pole magnetic contactor with under voltage release - 3 Nos., CT operated Ammeter(65 mm dia) with suppressed scale, Voltmeter (65mm dia), Voltmeter selector switch, Minature circuit breaker, Thermal Overload relay, Air Break contactors suitable for next Standard higher KW rating, Single phasing preventor, dry running preventor and On/Off Push button switches, wiring with 1 sq.mm/4 sq. mm copper pvc insulated cable, powder coated vermin proof box, including the capacitor(the cost of capacitor is to be taken separately)				

SI. No.		Probable Quantity	ntity Description of Work	Rate (Both in figures & Words)Rs.	Unit in Words & Figures	Amount in Rs.
5.3.1	2	Nos	For 12.5HP	22991.00	Rupees Twenty Two Thousand Nine Hundred Ninety One and Paise Zero Only	1No (One Number)	45,982.00
5.3.2	2	Nos	For 15HP (for sump)	23938.00	Rupees Twenty Three Thousand Nine Hundred Thirty Eight and Paise Zero Only	1No (One Number)	47,876.00
5.3.3	2	Nos	Supply and delivery of change over switch 100 AMPS	167.40	Rupees One Hundred Sixty Seven and Paise Forty Only	1No (One Number)	334.80
5.3.4	90	М	Supply and delivery of PVC insulated and sheathed 4 sq mm 3 core Flat type copper cable conforming to IS 694 / 1990	186.00	Rupees One Hundred Eighty Six and Paise Zero Only	1M (One Metre)	16,740.00
5.4.0			Supply and delivery of Non Return Valve				
5.4.1	2	Nos	80mm Dia GM NRV	3344.00	Rupees Three Thousand Three Hundred Forty Four and Paise Zero Only	1No (One Number)	6,688.00
5.5.0			Supply and delivery of Gate Valve		,		
5.5.1	2	Nos	80mm Dia GM GV	5113.00	Rupees Five Thousand One Hundred Thirteen and Paise Zero Only	1No (One Number)	10,226.00
5.6.0			Labour charges for the erection of submersible pumpset in borewell / openwell including fixing and jointing submersible cable with proper clamps upto the starter to required depth and also fixing of riser pipes to the required depth valves erection clamps, pressure gauges upto the exterior wall of pump room and erection of panel board consisting of TPICN switches starter, Voltmeter, Ammeter, three pilot (indicating) lamps capacitor single phasing preventor, water level guard and laying and jointing the cables and twin earthing as per IE rules etc., complete and testing the pumpset and trail run for 10 days.				

SI. No.	Probable Quantity		uantity Description of Work	Rate (Both in figures & Words)Rs.	Unit in Words & Figures	Amount in Rs.
5.6.1	1	No	Upto 5 HP	10051.10	Rupees Ten Thousand Fifty One and Paise Ten Only	1No (One Number)	10,051.10
5.6.2	1	No	10 HP TO 20HP	12778.40	Rupees Twelve Thousand Seven Hundred Seventy Eight and Paise Forty Only	1No (One Number)	12,778.40
5.7.0			Supply and delivery of following pipe conforming to IS specifications				
5.7.1	36	М	80mm GI Pipes Medium	653.00	Rupees Six Hundred Fifty Three and Paise Zero Only	1M (One Metre)	23,508.00
5.8.0			Supply and delivery at site of following sizes of GI specials with ISI marking for jointing with GI Pipes including loading, freight unloading, stacking, insurance etc., complete and as d				
5.8.1	6	Nos	80mm GI Elbow	446.00	Rupees Four Hundred Forty Six and Paise Zero Only	1No (One Number)	2,676.00
5.8.2	6	Nos	80mm GI Coupling	276.00	Rupees Two Hundred Seventy Six and Paise Zero Only	1No (One Number)	1,656.00
5.8.3	6	Nos	80mm GI Flange Set	112.00	Rupees One Hundred Twelve and Paise Zero Only	1No (One Number)	672.00
5.8.4	3	Nos	80mm MS Clamp set	538.00	Rupees Five Hundred Thirty Eight and Paise Zero Only	1No (One Number)	1,614.00
5.8.5	2	Nos	80mm GI Tee	557.00	Rupees Five Hundred Fifty Seven and Paise Zero Only	1No (One Number)	1,114.00
			PUMP HOUSING LIGHTING				
5.9.0			Providing pump house internal wiring and lighting as per IE rules including D.B wiring materials with 3/20 PVC insulated copper wire PVC conduit pipes with the following components.(4 PT SUMP)				

SI. No.	Probab Quanti		Description of Work		Both in figures & Words)Rs.	Unit in Words & Figures	Amount in Rs.
5.9.1	1	No	40W box type tube light - 1 No.	642.00	Rupees Six Hundred Forty Two and Paise Zero Only	1No (One Number)	642.00
5.9.2	1	No	Water tight bulk head fitting suitable for 100/60 watts lamp with guard heavy type (PHILIPS/ BAJAJ/ CROMPTON GREAVES/ EQUIVALENT)	274.00	Rupees Two Hundred Seventy Four and Paise Zero Only	1No (One Number)	274.00
5.9.3	1	No	5 Amps /15 amps.3 pin flush type wall socket only.	54.00	Rupees Fifty Four and Paise Zero Only	1No (One Number)	54.00
5.9.4	1	No	Water proof 70 Watts sodium vapour fitting on the top of the pump house for external electrification and campus lighting	2405.00	Rupees Two Thousand Four Hundred Five and Paise Zero Only	1No (One Number)	2,405.00
5.9.5	1	No	Water proof 70 Watts sodium vapour lamp on the top of the pump house for external electrification and campus lighting	380.00	Rupees Three Hundred Eighty and Paise Zero Only	1No (One Number)	380.00
5.9.6	3	each	Providing lighting wiring using MS conduit pipes and specials with 2 runs 1.5 sq.mm PVC copper wire and 1 run 14 swg GI wire for earthing for light , fans and 5A plug points including switch box 5A switch sockets ceiling rose and consumables.	1113.00	Rupees One Thousand One Hundred Thirteen and Paise Zero Only	1E (One Each)	3,339.00
5.9.7	90	M	supply and delivery of PVC INSULATED SINGLE CORE MULTI STRAND FIRE RETARDANT FLEXIBLE COPPER CABLE WITH ISI MARK CONFORMING TO IS 140/0.3 (10 sq.mm)	85.30	Rupees Eighty Five and Paise Thirty Only	1M (One Metre)	7,677.00
					Total Rs.		3,11,811.30

SI. No.	Probab Quanti		Description of Work	Rate (Both in figures & Words)Rs.	Unit in Words & Figures	Amount in Rs.
6.0.0			Supply, Delivery and Laying of 95, 70, 25 sq mm 3 Core 1.1 KV Grade Armoured Aluminium Conductor Cable				
6.1.0			Supply and delivery of LT 3 Core 1.1 KV Grade Armoured Aluminium conductor cross linked Polyethylene insulated PVC sheathed cables conforming to IS 7098 (part I) /1988 with ISI Marking				
6.1.1	1050	М	95 sqmm Cable (For IW-I)	420.00	Rupees Four Hundred Twenty and Paise Zero Only	1M (One Metre)	4,41,000.00
6.1.2	900	М	70 sqmm Cable (For OW)	321.00	Rupees Three Hundred Twenty One and Paise Zero Only	1M (One Metre)	2,88,900.00
6.1.3	50	М	25 sqmm cable (from sump to pumproom)	150.00	Rupees One Hundred Fifty and Paise Zero Only	1M (One Metre)	7,500.00
6.2.0			Laying of 3 Core Aluminium Armoured cable - Below GL including earth work per meter				
6.2.1	1960	М	upto 95 sqmm Cable	160.00	Rupees One Hundred Sixty and Paise Zero Only	1M (One Metre)	3,13,600.00
6.3.0			Inside the pump room or air in meter				
6.3.1	40	М	upto 95 sqmm Cable	103.00	Rupees One Hundred Three and Paise Zero Only	1M (One Metre)	4,120.00
6.4.0			Labour charges for jointing of LT cables 3 core 1.1 KV grade armoured aluminium conductor cable conforming to IS 1554 part I with ISI marking including jointing materials				
6.4.1	2	Nos	70 sqmm Cable	320.00	Rupees Three Hundred Twenty and Paise Zero Only	1No (One Number)	640.00
					Total Rs.		10,55,760.00

SI. No.	Probab Quanti	Description of Work Rate (Both in figures & Work		Both in figures & Words)Rs.	Unit in Words & Figures	Amount in Rs.	
7.0.0			White washing, Colour washing and writing TWAD Board emblem and scheme details				
7.1.1	86.50	M2	Colour washing two coats with approved cement paint for the cement plastered surfaces	173.00	Rupees Twenty Nine and Paise Five Only	1M2 (One Square	14,964.50
7.2.1	116.01	M2	White washing two coats using fine screened shell lime for the new plastered surface for inner and outer side of the room including the cost of materials labour charges etc., complete and as directed by TWAD Board Officers.	29.05	Rupees Two Thousand Six Hundred Seventy Seven and Paise Forty Only	1M2 (One Square metre)	3,370.09
7.3.1	2	M2	Writing TWAD Board emblem and scheme details	2677.40	Rupees Zero and Paise Zero Only	1M2 (One Square	5,354.80
					Total Rs.	•	23,689.39
			One months free maintenance of pipeline, pumpset after complition of works.				
						Sub Total Rs.	31,07,059.75
						GST 12%	3,72,847.17
						Total Rs.	34,79,906.92

Total Rs.3479906.9233376

Rupees Thirty Four Lakhs Seventy Nine Thousand Nine Hundred Six and Paise Ninety Two Only

I/We,	hereby agree to
execute the above item of work at	. % excess over / less then the value mentioned above.

- 1. The percentage filled by the contractor both in figures and words by using two decimal only .
- 2. If there is any discrepancy in percentage quoted in words and in figures, the lowest of the two will be considered.
- 3. If no percentage is quoted, the workers value will be taken as quoted price
- 4. If the contractor failed to score out the word either excess or less. The word less alone will be taken into consideration.