

# IRRIGATION SCHEDULE OF RATES - 2016

ALL RATES ARE COMMON TO  
COLOMBO, GAMPAHA & KALUTARA  
DISTRICTS



(Rates effective from 01.08.2016 until further notice.)

PROVINCIAL IRRIGATION  
DEPARTMENT

WESTERN - PROVINCE

## **IRRIGATION SCHEDULE OF RATES**

### **General Notes**

- 1 This Irrigation Schedule of Rates (ISR) has effected date from 2016.08.01 until further notice, and this rates are intended to be adopted in pricing an Engineering estimate for the rehabilitation, repairing, improvement or construction of irrigation projects.
- 2 This ISR has been prepared based on work normally adopted for Irrigation works with eight hour labour input. Over head and profit components are included 20% . Provision should be made seperately in the estimate and should allow for maximum up to 10% of the BOQ total as contingencies.
- 3 Any material not conforming to Sri Lanka Standard Specification and /or workmanship not conforming to the (SCA/3/1) specifications for Irrigation and Land Drainage are to be rejected.
- 4 Unit rates and extension shall be given in Sri Lanka rupees to maximum of two significant places of decimals.
- 5 The item description of the BOQ shall confirm to that in the relevant items as appearing in this schedule, When preparing this BOQ base on these rates so as to avoid any ambiguity.
- 6 The rates given in this ISR valid for works carried out as per specification for Irrigation and Land Drainage issued by ICTAD.
- 7 When it is necessary to convert from imperial to metric unit apply conversion factor as follows.

To convert rate per	To rate per	Multiply the
Cube	m <sup>3</sup>	0.353
Square	m <sup>2</sup>	0.108
Sq.ft.	m <sup>2</sup>	10.763
L.ft.	m	3.280
Cwt.	Kg.	0.019

## Units

To convert Lit. to gal. multiply by 0.222  
convert Miles to Km. multiply by 1.609  
convert Kilo to pounds multiply by 2.205

## Steel

Dia. mm	Dia. Inch	Normal weight (m/Kg.)
25	1	3.854
20	3/4	2.466
16	5/8	1.579
12	1/2	0.888
10	3/8	0.617
6	1/4	0.222

## Abbreviations

Abbreviations used in this BOQ denotes the following.

Ft	- Feet	c/c	- Centre to centre
Lft.	- Linear Feet	@	Each
Ft <sup>2</sup>	- Square Feet	Gr.	- Grade
Sqr.	- Squares	Approx.	- Approximately
Sqft.	- Square Feet	Thk.	- Thick
Ft <sup>3</sup>	- Cubic Feet	T.S.	- Tor steel
Cu.	- Cube	Y/T	- Tor steel
Cuft.	- Cubic Feet	T	- Tor steel
m	- metre	M.S.	- Mild steel
Lm.	- Linear metre	R	- Mild steel
m <sup>2</sup>	- Square metre	G.L.	- Ground Level
Sqm.	- Square metre	L.day	- Labour day
m <sup>3</sup>	- Cubic metre	Un. day	- Un skill Labour day
Cm.	- Cubic metre	C.I.	- Cast Iron
mm.	- milli metre	W.I.	- Wrought Iron
cm.	- Centi metre	F/W	- Form work
Kg.	- Kilogramme	R/F	- Reinforcement
h.	- hour	Rs.	- Rupees (Sri Lanka)
BOQ	- Bill of Quantities	cts.	- Cents
Ele.	- Elevation	mr.	- Motar
No.	- Number (to indicate as item,page)	ct.mr.	- Cement motar
Nr.	- Number (to indicate as quantity)	T/T	- Tractor Tailor
RCC	- Reinforced Cement Concrete	Qty.	- Quantity
G.W.L.	-Ground water level	L	- Length
Wk.	- Week	B	- Breadth
Mon.	- Month	H	- Heigth
dia.	- Diameter		

**PRICE LIST FOR ISR - 2016**

ITEM NO.	DESCRIPTION	UNIT	PRICE (excluding VAT)
	<b>MASONRY</b>		
1	Cement - 50kg bags of "Sanstha", "Mahaweli Marine", "Ambuja", "L & T", "Nippon", "Ultra Tech" & "Singhe"(O.P.C. complying to S.L.S.107) (including around 20km transport with loading & unloading )	Nr.	808.70
2	Rubble 6" x 9" (including around 20km transport with loading & unloading )	Cube	4500.00
3	River Sand (including around 20km transport with loading & unloading )	Cube	11050.00
4	Chips 1/2" (including around 20km transport with loading & unloading )	Cube	4750.00
5	Metal 3/4" (including around 20km transport with loading & unloading )	Cube	6250.00
6	Metal 1" (including around 20km transport with loading & unloading )	Cube	6000.00
7	Metal 1 1/2" (including around 20km transport with loading & unloading )	Cube	5500.00
8	Quary Dust (including around 20km transport with loading & unloading )	Cube	6000.00
9	Aggregate Base Course (ABC)- graded 37.5 mm. (including around 20km transport with loading & unloading )	Cube	8875.00
10	Drinking Water	Gal	0.50
	<b>STEEL</b>		
11	Tor steel - (including transport)	kg	115.65
12	Mild steel - (including transport)	kg	106.09
13	Binding wire	lb	90.00
14	25 x 25 x 5mm Angle iron	L.ft	50.00
15	38 x 38 x 6mm Angle iron	L.ft	90.00
16	50 x 50 x 6mm Angle iron	L.ft	125.00
17	65 x 65 x 6mm Angle iron	L.ft	190.00
18	75 x 75 x 6mm Angle iron	L.ft	220.00
19	100 x 50 x 6mm Channel iron	L.ft	305.00
20	125 x 65 x 6mm Channel iron	L.ft	445.00
21	150 x 75 x 6mm Channel iron	L.ft	600.00
22	Steel Wire nails 1"	lb	59.00
23	Steel Wire nails 1 1/2"	lb	61.00
24	Steel Wire nails 2"	lb	62.00
25	Steel Wire nails 3"	lb	73.00
26	Steel Wire nails 5"	lb	82.00
27	3/8" dia. M.S bars	L.ft	25.00
28	10mm thick M.S Plate	Sqft	670.00
29	12mm thick M.S Plate	Sqft	835.00
30	1" dia. Steel chain	L.ft	250.00
31	2" x 1/4" Flat iron	L.ft	80.00

32	20 x 6mm Flat iron	L.ft	25.00
33	Medium duty GI Pipe - 1"dia. X 3.2mm. Thick	L.ft	140.00
34	Medium duty GI Pipe - 2"dia. X 3.6mm. Thick	L.ft	280.00
35	Medium duty GI Pipe - 3"dia. X 4mm. Thick	L.ft	445.00
36	Heavy duty G.I. Pipe - 1"dia x 4 mm thick	L.ft	160.00
37	Heavy duty G.I. Pipe - 1 1/2"dia x 4mm thick	L.ft	260.00
38	Heavy duty G.I. Pipe - 2"dia x 4.5 mm thick	L.ft	340.00
39	Heavy duty G.I. Pipe - 2 1/2"dia x 4.5mm thick	L.ft	445.00
40	Box iron (3/4" x 3/4") heavy duty 1.2mm	L.ft	50.00
41	Pop rivert	Nr.	1.50
42	1/4" dia. 2 1/2" long nut & bolt	Nr.	12.00
43	Heavy duty G.I. Pipe - 3"dia. X 4 mm. thick	L.ft	445.00
	<b><u>HUME PIPE (R.C.C)</u></b>		
44	04" Dia. X 8'-0"	Nr.	2850.00
45	06" Dia. X 8'-0"	Nr.	3050.00
	06" Dia. X 4'-0"	Nr.	1500.00
46	09" Dia. X 8'-0"	Nr.	3660.00
	09" Dia. X 4'-0"	Nr.	1860.00
47	12" Dia. X 8'-0"	Nr.	4200.00
	12" Dia. X 4'-0"	Nr.	2130.00
48	15" Dia. X 8'-0"	Nr.	4650.00
	15" Dia. X 4'-0"	Nr.	2310.00
49	18" Dia. X 8'-0"	Nr.	5100.00
	18" Dia. X 4'-0"	Nr.	2625.00
50	24" Dia. X 8'-0"	Nr.	7350.00
	24" Dia. X 4'-0"	Nr.	3750.00
51	30" Dia. X 8'-0"	Nr.	11400.00
	30" Dia. X 4'-0"	Nr.	6000.00
52	36" Dia. X 8'-0"	Nr.	14100.00
	36" Dia. X 4'-0"	Nr.	7350.00
53	42" Dia. X 8'-0"	Nr.	20400.00
	42" Dia. X 4'-0"	Nr.	10500.00
54	48" Dia. X 8'-0"	Nr.	25800.00
	48" Dia. X 8'-0"	Nr.	13200.00
	<b><u>HUME PIPE COLLARS (R.C.C)</u></b>		
55	06" Dia.	Nr.	420.00
56	09" Dia.	Nr.	420.00
57	12" Dia.	Nr.	450.00
58	15" Dia.	Nr.	510.00
59	18" Dia.	Nr.	600.00
60	24" Dia.	Nr.	780.00
61	30" Dia.	Nr.	870.00
62	36" Dia.	Nr.	1050.00
63	42" Dia.	Nr.	1230.00
64	48" Dia.	Nr.	1770.00
	<b><u>Timber</u></b>		
65	Specified timber "Kumbuk"	Cuft	7652.22
66	Specified timber " Naa, Mee"	Cuft	2135.00

67	Plywood ordinary 12mm thick	Sqft	75.00
68	Plywood ordinary 15mm thick	Sqft	90.00
69	Rubber planks - 3/4" thick	Sqft	33.00
70	Rubber planks - 1" thick	Sqft	30.00
71	Rubber planks - 1 1/2" thick	Sqft	60.00
72	Timber 2" x 1" Class II - for shuttering	L.ft	13.00
73	Timber 2" x 2" Class II - for shuttering	L.ft	30.00
74	Timber 4" x 2" Class II - for shuttering	L.ft	65.00
	<b><u>MISCELLANEOUS</u></b>		
75	Bitumen	Gal	755.00
76	Brass padlock (2")	Nr.	850.00
77	PVC Pipe 4" dia. (type 250)	L.ft	101.00
78	Polysack Bags (filling 65kg capacity) with transport	Nr.	29.50
79	Anticorrosive paint	1Lt.	745.00
80	Enamel paint	1Lt.	930.00
81	Wood preservative	Gal.	1200.00
82	Turf	Sqft	450.00
83	Digital print (stiker type)	Sqft	85.00
84	Paint Brush 1"	Nr.	180.00
85	Paint Brush 1 1/2"	Nr.	225.00
86	Paint Brush 2"	Nr.	305.00
87	Paint Brush 3"	Nr.	460.00
88	Paint Brush 4"	Nr.	660.00
89	Paint Brush 6"	Nr.	865.00
90	Sand paper	Nr.	20.00
91	Grease	Kg.	842.80
	<b><u>PLANT</u></b>		
92	Water pump (with necessary items)	Per Day	2400.00
93	Tractor & Tailer	Per Day	5000.00
94	Hydrolic Backhoe excavator (1Cu.yd) (output 102.2Cubes/ 8 hours)	Per Hour	3500.00
95	Hydrolic Backhoe excavator (1Cu.yd) (output 102.2Cubes/ 8 hours) with barge PC 100-PC 40	Per Hour	4950.00
96	Concrete mixer with operator & fuel /(8 hour day)	Per Day	5000.00
97	Vibrator / (8 hour day)	Per Day	3500.00
98	Welding Plant / (8 hour day)	Per Day	1000.00
	<b><u>VEHICLE TRANSPORT</u></b>		
99	Low bed tailer (first 15km)	Each	9500.00
100	Additional 1km	Each	220.00
	<b><u>LABOUR</u></b>		
101	Skill Labour - (Carpenter, mason, bar bender etc.)/ 8 hours	Per Day	1,557.00
102	Semi skill Labour / 8 hours	Per Day	1,460.00
103	Unskill Labour / 8 hours	Per Day	1,340.00
	<b><u>CAST IRON SLUICE GATES &amp; COMPONENTS</u></b>		
104	3" (75 mm.) dia. Cast iron sluice gate complete with fitting	Nr.	13425.00
105	4" (75 mm.) dia. Cast iron sluice gate complete with fitting	Nr.	13425.00
106	6" (75 mm.) dia. Cast iron sluice gate complete with fitting	Nr.	15765.00
107	9" (75 mm.) dia. Cast iron sluice gate complete with fitting	Nr.	24438.00
108	12" (75 mm.) dia. Cast iron sluice gate complete with fitting	Nr.	28600.00
109	15" (75 mm.) dia. Cast iron sluice gate complete with fitting	Nr.	46058.00

110	18" (75 mm.) dia. Cast iron sluice gate complete with fitting	Nr.	52785.00
111	24" (75 mm.) dia. Cast iron sluice gate complete with fitting	Nr.	72490.00
112	30" (75 mm.) dia. Cast iron sluice gate complete with fitting	Nr.	135253.00
113	36" (75 mm.) dia. Cast iron sluice gate complete with fitting	Nr.	157137.00
114	40" (75 mm.) dia. Cast iron sluice gate complete with fitting	Nr.	235871.00
	<b>CAST IRON SLUICE GATE SPARES</b>		
115	C.I. Housing & Base Plate - 3/4"	Nr.	1600.00
116	C.I. Housing & Base Plate - 1"	Nr.	1600.00
117	C.I. Housing & Base Plate - 1 1/4"	Nr.	2160.00
118	C.I. Housing & Base Plate - 1 1/2"	Nr.	3370.00
119	C.I. Housing & Base Plate - 2"	Nr.	3800.00
120	C.I. Housing & Base Plate - 2 1/2"	Nr.	5020.00
121	Pin Type L Device (without padlock) - 3/4"	Nr.	465.00
122	Pin Type L Device (without padlock) - 1"	Nr.	465.00
123	Pin Type L Device (without padlock) - 1 1/4"	Nr.	480.00
124	Pin Type L Device (without padlock) - 1 1/2"	Nr.	570.00
125	Pin Type L Device (without padlock) - 2"	Nr.	660.00
126	Pin Type L Device (without padlock) - 2 1/2"	Nr.	1200.00
127	Plate Type L Device (without padlock) - 3/4"	Nr.	960.00
128	Plate Type L Device (without padlock) - 1"	Nr.	960.00
129	Plate Type L Device (without padlock) - 1 1/4"	Nr.	990.00
130	Plate Type L Device (without padlock) - 1 1/2"	Nr.	1150.00
131	Plate Type L Device (without padlock) - 2"	Nr.	1550.00
132	Plate Type L Device (without padlock) - 2 1/2"	Nr.	2450.00
133	Brass Nut 04 T.P.I- 3/4"	Nr.	4080.00
134	Brass Nut 04 T.P.I - 1"	Nr.	4080.00
135	Brass Nut 04 T.P.I- 1 1/4"	Nr.	4790.00
136	Brass Nut 04 T.P.I - 1 1/2"	Nr.	6420.00
137	Brass Nut 04 T.P.I - 2"	Nr.	9530.00
138	Brass Nut 04 T.P.I - 2 1/2"	Nr.	12080.00
139	Brass Nut 02 T.P.I - 2"	Nr.	9530.00
140	Brass Nut 02 T.P.I - 2 1/2"	Nr.	12080.00
141	Steel Spindle - 3/4"	L.ft	560.00
142	Steel Spindle - 1"	L.ft	560.00
143	Steel Spindle - 1 1/4"	L.ft	970.00
144	Steel Spindle - 1 1/2"	L.ft	1341.00
145	Steel Spindle - 2"	L.ft	1600.00
146	Steel Spindle - 2 1/2"	L.ft	3025.00
147	Spindle Bush Welding - 3/4"	Nr.	245.00
148	Spindle Bush Welding - 1"	Nr.	245.00
149	Spindle Bush Welding - 1 1/4"	Nr.	265.00
150	Spindle Bush Welding- 1 1/2"	Nr.	310.00
151	Spindle Bush Welding - 2"	Nr.	685.00
152	Spindle Bush Welding - 2 1/2"	Nr.	900.00

153	Threading 04 T.P.I.- 3/4"	L.ft	170.00
154	Threading 04 T.P.I. - 1"	L.ft	170.00
155	Threading 04 T.P.I.- 1 1/4"	L.ft	230.00
156	Threading 04 T.P.I.- 1 1/2"	L.ft	320.00
157	Threading - 04 T.P.I. - 2"	L.ft	765.00
158	Threading - 04 T.P.I.- 2 1/2"	L.ft	900.00
159	Threading - 02 T.P.I. - 2"	L.ft	765.00
160	Threading - 02 T.P.I.- 2 1/2"	L.ft	900.00
161	Steel Operating wheel 16" $\phi$ for- 3/4"	Nr.	2970.00
162	Steel Operating wheel 16" $\phi$ for- 1"	Nr.	2970.00
163	Steel Operating wheel 18" $\phi$ for- 1 1/4"	Nr.	2970.00
164	Steel Operating wheel 18" $\phi$ for- 1 1/2"	Nr.	3470.00
165	Steel Operating wheel 20" $\phi$ for- 2"	Nr.	3890.00
166	Steel Operating wheel 16" $\phi$ for- 2 1/2"	Nr.	4810.00
	<b>STEEL RAG BOLT SIZES</b>		
167	Steel Rag Bolt 3/4" $\phi$ - 1/2" x 8"	Nr.	165.00
168	Steel Rag Bolt - 1" $\phi$ x - 1/2"x 6"	Nr.	141.00
169	Steel Rag Bolt - 1 1/4" $\phi$ - 5/8"x 9"	Nr.	240.00
170	Steel Rag Bolt - 1 1/2" $\phi$ - 5/8" x 6"	Nr.	178.00
171	Steel Rag Bolt - 2" $\phi$ - 3/4" x 9"	Nr.	330.00
172	Steel Rag Bolt - 2 1/2" $\phi$ - 3/4" x 6"	Nr.	420.00
	<b>STEEL RAG BOLT H. STOCK SIZES</b>		
173	Steel Rag Bolt H. Stock - 1/2" x 6"	Nr.	125.00
174	Steel Rag Bolt H. Stock - 5/8" x 6"	Nr.	145.00
175	Steel Rag Bolt H. Stock - 3/4" x 6"	Nr.	225.00
	<b>STEEL BOLTS &amp; NUT SIZES</b>		
176	Steel Bolts & Nuts - 2" x 1/2"	Nr.	40.00
177	Steel Bolts & Nuts - 2 1/2" x 1/2"	Nr.	45.00
178	Steel Bolts & Nuts - 3" x 1/2"	Nr.	50.00
	<b>STEEL WASHERS SIZES</b>		
179	Steel Washers - 1/2"	Nr.	6.00
180	Steel Washers - 5/8"	Nr.	8.00
181	Steel Washers - 3/4"	Nr.	12.00
	<b>BLASTING MATERIALS</b>		
181	Steel jumper	Kg.	189.80
182	Fuse wire	L.m.	39.80
183	Blasting powder	Kg.	609.40
184	Dyna cord	L.m.	78.70
185	Gelignite	Kg.	515.60
186	Ordinary Detonator	Nr.	15.00
187	Electric Detonator	Nr.	121.90
188	Amonium Nitrate	Kg.	134.40



## RATES FOR IRRIGATION AND DRAINAGE WORKS -2016

### PROVINCIAL IRRIGATION DEPARTMENT - WESTERN PROVINCE

ITEM NO.	DESCRIPTION	UNIT	RATE 2016
<b>01</b>	<b>CLEARING AND GRUBBING</b>		
1.1	<b>Light jungle clearing</b> along channel trace Including removing outside reservation and burning (up to 12" girth) .	Ac.	<b>55,717.00</b>
1.2	<b>Medium jungle clearing</b> along channel trace Including removing outside reservation and burning (up to 12" girth) .		<b>83,576.00</b>
1.3	<b>Secondary growth jungle</b> clearing along channel trace, including removing out side reservation and burning .	Ac.	<b>27,859.00</b>
<b>02</b>	<b>EARTH WORK</b>		
2.1	<b>Manual earth Excavation and spoil to waste or fill material</b> , cutting and lift 0'-5', spreading 100' along the bund.	Cu.	<b>2,927.00</b>
2.2	<b>Manual earth excavation in canals</b> and forming canal bunds cutting and lift 0'- 5', spreading 100'.	Cu.	<b>3,293.00</b>
2.3	<b>Manual Earth excavation in canals and forming bunds</b> , cut and lift 0'-5', spread upto 100' / Cu	Cu.	<b>3,659.00</b>
2.4	<b>Manual earth excavation from borrow and forming bunds</b> , cutting and lift 0' - 5', spreading 100' .	Cu.	<b>4,391.00</b>
2.5	<b>Manual earth excavation for foundation, spoil to waste or back filling and ram and surplus disposed</b> within the site as directed, cutting up to 5' and lift 0' - 5', spreading 100' .	Cu.	<b>4,025.00</b>
2.6	<b>Manual earth excavation, additional</b> to cut and lift over 5' up to 10', spreading 100' along the bund.	Cu.	<b>2,538.00</b>
2.7	<b>Manual earth excavation, additional</b> to cut and lift over 10' up to 15', spreading 100' along the bund.	Cu.	<b>2,752.00</b>
2.8	<b>Manual gravel excavation and spoil to waste</b> or fill material , cutting and lift 0' - 5', spreading 100'.	Cu.	<b>4,846.00</b>
2.9	<b>Manual soft rock excavation and spoil to waste</b> or fill material , cutting and lift 0' - 5', spreading 100'.	Cu.	<b>7,483.00</b>
2.10	<b>Approved hard Earth spreading , levelling watering and manual compaction, using standered cast iron stamper</b> or equivalent and filling in 6" thick layers (loose volume) in earth available at site.	Cu.	<b>2,484.00</b>
2.11	<b>Approved earth supplying</b> within 20 Km from the source and piled at site (measured at piled volume)	Cu.	<b>3,400.00</b>
2.12	<b>Manual haul earth/ Gravel/ soft rock, haul 100'</b> in each step up to max. of 300'.	Cu.	<b>902.00</b>
2.13	<b>Manual Stripping top soil</b> up to 3" depth, haul up to 100'.	Sqr.	<b>1,099.00</b>

2.14	<b>Manual Scraping top vegetation</b> , haul up to 100'.	Sqr.	<b>164.00</b>
2.15	<b>Manual Forming puddle core wall</b> , including compacting (Maudling) of puddle and solid mass including cutting clay. excluding transport.	Cu.	<b>9,841.00</b>
2.16	<b>Manual Placing and compacting earth in canal/ backfill</b> including watering , including picking roots & spreading.	Cu.	<b>977.00</b>
2.17	<b>Furnishing , Planting and Watering turf (Full turfing)</b> , excluding haul.	Sqr.	<b>1,660.00</b>
2.18	<b>Furnishing , Planting and Watering turf (Strip turfing)</b> , excluding haul.	Sqr.	<b>830.00</b>
2.19	<b>Placing and Packing 6" - 9" / 9" - 12"</b> rubble in slope of embankment , excluding haul but including rubble within 20 Km. by T-T/ Lorry.	Cu.	<b>6,873.00</b>
2.20	<b>Placing and packing 9"-12" /12"-18"</b> rubble in slope of embankment, excluding haul but including rubble within 20 Km. by T-T/ Lorry.	Cu.	<b>6,683.00</b>
2.21	<b>9" Thick rubble pitching in 1:5 cement &amp; sand mr. with 6"-9" rubble</b> and lift 5'-0", haul 100'. (This rate shall be applicable for transport of cement, sand & rubble within 20 Km. by T-T/ Lorry)	Sq.	<b>20,159.00</b>
<b>3A</b>	<b>CANAL CLEARING AND DESILTING</b>		
3A.1	<b>Desilting in canals, spoil to waste</b> or fill material cut up to 6" depth, Spreading/ haul up to 100'. <b>(Manual)</b>	Sqr.	<b>927.00</b>
3A.2	<b>Removal of water-hycinths and deposit</b> as directed. <b>(Manual)</b>	Sqr.	<b>331.00</b>
3A.3	<b>Uprooting shrub jungle in canals</b> and / or <b>canal reservations</b> including removing out side reservation and burning , height 2' - 3' <b>(Manual)</b>	Sqr.	<b>480.00</b>
3A.4	<b>Uprooting shrub jungle in canals</b> and / or <b>canal reservations</b> including removing out side reservation and burning , height over 3' <b>(Manual)</b>	Sqr.	<b>828.00</b>
<b>3B</b>	<b><u>EARTH EXCAVATION IN CANAL BY MACHINERY.</u></b>		
3B.1	<b>Earth excavation in canals/channels using machinery</b> according to the given levels and side slopes and spreading excavated soil on bunds as directed. Unserviceable excavated earth should not be deposited on bunds. Fill material cut up to 5 ft. lift up to 5 ft.spreading 100 ft. (When using this item, items 3A.1,3A.2,3A.3 & 3A.4 should not included in BOQ.)Machine transport will be paid seperately)	Cu.	<b>369.00</b>

3B.2	<b>Earth excavation in canals/channels using machinery</b> according to the given levels and side slopes and spreading excavated soil on bunds as directed. Unservicable excavted earth should not be deposited on bunds. Fill material cut 5' - 10'. lift up to 10ft.spreading 100 ft. (When using this item, items 3A.1,3A.2,3A.3 & 3A.4 should not included in BOQ.)Machine transport will be paid seperately	Cu.	<b>378.00</b>
3B.3	<b>Earth excavation in canals/channels using machinery</b> according to the given levels and side slopes and spreading excavated soil on bunds as directed. Unservicable excavted earth should not be deposited on bunds. Fill material cut 10' - 15'. lift up to 15ft.spreading 100 ft. (When using this item, items 3A.1,3A.2,3A.3 & 3A.4 should not included in BOQ.)Machine transport will be paid seperately	Cu.	<b>386.00</b>
3B.4	<b>Earth excavation in canals/channels using machinery</b> according to the given levels and side slopes and spreading excavated soil on bunds as directed. Unservicable excavted earth should not be deposited on bunds. Fill material cut 15' - 20'. lift up to 15ft.spreading 100 ft.( When using this item, items 3A.1,3A.2,3A.3 & 3A.4 should not included in BOQ.)Machine transport will be paid seperately	Cu.	<b>395.00</b>
3B.5	<b>Earth excavation in canals/channels and side slopes using machinery</b> and spreading excavated soil on bunds as directed. Unserviceable excavated earth should not be deposited on bunds. Cutting depth 1'-0" and spreading 100'.( When using this item, items 3A.1,3A.2,3A.3 & 3A.4 should not included in BOQ.)Machine transport will be paid seperately	Sqr.	<b>369.00</b>
3B.6	<b>Earth excavation</b> in canals or channels and side slopes <b>Using backhoe with barge</b> and spreading excavated soil on bunds as directed. Unserviceable excavated earth should not be deposited on bunds. Cutting depth 1'-0" and spreading 100'.( When using this item, items 3A.1,3A.2,3A.3 & 3A.4 should not included in BOQ.)Machine transport will be paid seperately	Sqr.	<b>547.00</b>
<b>04 REINFORCEMENT</b>			
4.1	<b>Tor steel reinforcement</b> cutting , bending to shape laid in position and tied with 16 B.W.G. binding wire	Kg	<b>229.00</b>
4.2	<b>Mild steel reinforcement</b> cutting , bending to shape laid in position and tied with 16 B.W.G. binding wire	Kg	<b>216.00</b>
4.3	Supplying and fixing <b>16 mm dia, M/S dowel</b> bending half round shape at one end and fixing the other end to the rock, including boring hole with filling cement grout	Lft.	<b>576.00</b>

<b>05</b>	<b>FORM WORK</b>		
5.1	Furnishing, making, fixing and removing <b>formwork for sides of foundation using 3/4" thick rubber planks</b> , excluding transport (for 2 users)	Sqr.	<b>5,473.00</b>
5.2	Furnishing and making <b>formwork using 3/4" thick timber shuttering planks</b> for each of two uses including fixing and removing same once, excluding transport	Sqr.	<b>13,441.00</b>
5.3	Furnishing and making <b>formwork using 3/4" thick</b> timber shuttering planks for one use including fixing and removing , excluding transport	Sqr.	<b>16,401.00</b>
5.4	Furnishing and making <b>formwork using 15 mm thick ply wood</b> for each of 2 uses including fixing and removing, excluding transport	Sqr.	<b>18,554.00</b>
5.5	<b>Timbering in foundation using 1 1/2" thick</b> timber planks, including necessary struts and props, Excluding transport (Close type)	Sqr.	<b>14,125.00</b>
<b>06</b>	<b>CONCRETE</b>		
6.1	<b>1:4:8 (1 1/2") Concrete</b> excluding formwork, excluding lift over 5' and excluding haul ( <b>hand mixing</b> ), (The rate shall be applicable for transport of cement, sand & metal within 20 Km by T-T/Lorry)	Cu.	<b>43,866.00</b>
6.2	<b>1:3:6 (1 1/2") Concrete</b> excluding formwork, excluding lift over 5' and excluding haul ( <b>hand mixing</b> ), (The rate shall be applicable for transport of cement, sand & metal within 20Km by T-T/Lorry)	Cu.	<b>44,809.00</b>
6.3	<b>1:3:6 (1 1/2") Concrete</b> excluding formwork, excluding lift over 5' and excluding haul <u>using concrete mixer</u> ) (The rate shall be applicable for transport of cement, sand & metal within 20Km by T-T/Lorry)	Cu.	<b>34,759.00</b>
6.4	<b>1:3:6 (1") Concrete</b> excluding formwork, excluding lift over 5' and excluding haul ( <b>hand mixing</b> ), (The rate shall be applicable for transport of cement, sand & metal within 16Km by T-T/Lorry)	Cu.	<b>45,463.00</b>
6.5	<b>1:3:6 (1 ") Concrete</b> excluding formwork, excluding lift over 5' and excluding haul <u>using concrete mixer</u> ), (The rate shall be applicable for transport of cement, sand & metal within 20Km by T-T/Lorry)	Cu.	<b>35,413.00</b>
6.6	<b>1:2:4 (3/4") Concrete</b> excluding formwork, excluding lift over 5' and excluding haul ( <b>hand mixing</b> ), (The rate shall be applicable for transport of cement, sand & metal within 20Km by T-T/Lorry)	Cu.	<b>49,126.00</b>
6.7	<b>1:1.5:3 (3/4") Concrete</b> excluding formwork, excluding lift over 5' and excluding haul ( <b>hand mixing</b> ), (The rate shall be applicable for transport of cement, sand & metal within 20Km by T-T/Lorry)	Cu.	<b>52,936.00</b>

6.8	<b>Additional lift</b> of concrete over 5' up to 10'	Cu.	<b>2,192.00</b>
6.9	<b>Additional for haul</b> of materiel for concrete in each step of 100', (maximum 300')	Cu.	<b>2,126.00</b>
<b>07</b>	<b>RANDOM RUBBLE WORK</b>		
7.1	<b>6"-9" Random rubble masonry</b> in 1:5 ct. mt. ,(This rate shall be applicable for transport of cement, sand,& rubble within 20km T-T/Lorry)	Cu.	<b>28,264.00</b>
7.2	<b>Additional for haul</b> of materiel for rubble masonry in each step of 100', (max = 300')	Cu.	<b>2,183.00</b>
7.3	<b>6"-9" Random Rubble masonry</b> in 1:5 ct.mr. lift 0' - 5' , rubble available at site .	Cu.	<b>20,974.00</b>
<b>08</b>	<b>PLASTERING</b>		
8.1	<b>1/2" thick semi rough cement plastering</b> 1:3 cement, sand mixture, (transport of cement and sand within 20km T-T/Lorry) .	Sqr.	<b>5,492.00</b>
8.2	<b>3/4" thick semi rough cement plastering</b> 1:3 cement, sand mixture, (transport of cement and sand within 20km T-T/Lorry) .	Sqr.	<b>7,019.00</b>
<b>9A</b>	<b>RCC HUME PIPES IN STRUCTURES (without Collars)</b>		
	<b>According to the site condition collar rate should be added seperately</b>		
9A.1	Furnish, lay and joint <b>6" RCC</b> Hume pipes, including trenching & backfill, excluding transport .	Lft.	<b>708.00</b>
9A.2	Furnish, lay and joint <b>9" RCC</b> Hume pipes, including trenching & backfill, excluding transport .	Lft.	<b>930.00</b>
9A.3	Furnish, lay and joint <b>12" RCC</b> Hume pipes, including trenching & backfill, excluding transport .	Lft.	<b>1,127.00</b>
9A.4	Furnish, lay and joint <b>15" RCC</b> Hume pipes, including trenching & backfill, excluding transport .	Lft.	<b>1,244.00</b>
9A.5	Furnish, lay and joint <b>18" RCC</b> Hume pipes, including trenching & backfill, excluding transport .	Lft.	<b>1,444.00</b>
9A.6	Furnish, lay and joint <b>24" RCC</b> Hume pipes, including trenching & backfill, excluding transport .	Lft.	<b>1,998.00</b>
9A.7	Furnish, lay and joint <b>30" RCC</b> Hume pipes, including trenching & backfill, excluding transport .	Lft.	<b>2,861.00</b>
9A.8	Furnish, lay and joint <b>36" RCC</b> Hume pipes, including trenching & backfill, excluding transport .	Lft.	<b>3,411.00</b>
9A.9	Furnish, lay and joint <b>42" RCC</b> Hume pipes, including trenching & backfill, excluding transport .	Lft.	<b>4,649.00</b>
9A.10	Furnish, lay and joint <b>48" RCC</b> Hume pipes, including trenching & backfill, excluding transport .	Lft.	<b>5,686.00</b>
<b>9B</b>	<b>Supplying R.C.C. Hume Pipe Collars</b>		
9B.1	Supplying & fixing <b>6" dia R.C.C.</b> Hume pipe collars excluding transport .	No.	<b>539.00</b>

9B.2	Supplying & fixing <b>9" dia R.C.C.</b> Hume pipe collars excluding transport .	No.	<b>574.00</b>
9B.3	Supplying & fixing <b>12" dia R.C.C.</b> Hume pipe collars excluding transport .	No.	<b>610.00</b>
9B.4	Supplying & fixing <b>15" dia R.C.C.</b> Hume pipe collars excluding transport .	No.	<b>716.00</b>
9B.5	Supplying & fixing <b>18" dia R.C.C.</b> Hume pipe collars excluding transport .	No.	<b>824.00</b>
9B.6	Supplying & fixing <b>24" dia R.C.C.</b> Hume pipe collars excluding transport .	No.	<b>1,040.00</b>
9B.7	Supplying & fixing <b>30" dia R.C.C.</b> Hume pipe collars excluding transport .	No.	<b>1,148.00</b>
9B.8	Supplying & fixing <b>36" dia R.C.C.</b> Hume pipe collars excluding transport .	No.	<b>1,399.00</b>
9B.9	Supplying & fixing <b>42" dia R.C.C.</b> Hume pipe collars excluding transport .	No.	<b>1,685.00</b>
9B.10	Supplying & fixing <b>48" dia R.C.C.</b> Hume pipe collars excluding transport .	No.	<b>2,472.00</b>
<b>10</b>	<b>STOP PLANKS</b>		
10.1	Supplying & fixing <b>6" x 3" stop planks</b> in specified class timber ( <b>Kumbuk</b> ) including applying two coats of hot tar and fixing 2 Nos. of M/S hooks made by 3/8" dia. M/S bars with applying two coats of anticorrosive paint for the surfaces of hooks, excluding transport.	Cu.ft.	<b>11,308.00</b>
10.2	Supplying & fixing <b>6" x 3" stop planks</b> in specified class timber ( <b>Naa,or Mee</b> ) including applying two coats of hot tar and fixing 2 Nos. of M/S hooks made by 3/8" dia. M/S bars with applying two coats of anticorrosive paint for the surfaces of hooks, excluding transport.	Cu.ft.	<b>4,687.00</b>
10.3	Applying two coats of hot tar and fixing 2nos.of M/S hooks made by 3/8"M.S. bars with painting two coats of anticorrosive paint removing rust for the <b>timber planks (6"x3") provided by the department</b> excluding transport.	Cu.ft.	<b>2,125.00</b>
<b>11</b>	<b>MISCELLANEOUS</b>		
11.1	Furnishing <b>2" brass padlock</b> and handing over.	each	<b>1,020.00</b>
11.2	Furnishing, bending and fixing <b>50 x 5 mm. flat iron and 10 mm. dia. M/S hooks</b> or using flat iron hooks as a locking arrangement for anicut planks including removing rust and <b>applying two coats of anticorrosive.</b>	Lft.	<b>288.00</b>
11.3	Furnishing <b>1" dia. 3' long steel chain</b> as a locking arrangement for the operating wheel .	each	<b>810.00</b>
11.4	Pumping water using <b>2" dia. Water pump</b> , (Wet basin with operator.) .	Per day	<b>2,880.00</b>

11.5	Coffer damming using large size <b>polysack bags</b> including placing and removing .	Nr.	<b>304.00</b>
11.6	Providing wheep holes using <b>4" dia. PVC</b> pipes (Type 250) .	Lft.	<b>303.00</b>
11.7	<b>Hire charges</b> for T-T (Wet Lease basis including operator) .	per day	<b>6,000.00</b>
11.8	Making <b>temperory shed (size10'x 10')</b> during construction/repairing period & removing.	Nr.	<b>4,008.00</b>
<b>12</b>	<b>Transport cost for haul earth / sand / gravel by T-T Excluding loading</b>		
12.1	Up to 0.25 miles	Per Cu.	<b>924.00</b>
12.2	Up to 0.50 miles	Per Cu.	<b>990.00</b>
12.3	Up to 0.75 miles	Per Cu.	<b>1,140.00</b>
12.4	Up to 1.00 miles	Per Cu.	<b>1,290.00</b>
12.5	Up to 1.50 miles	Per Cu.	<b>1,440.00</b>
12.6	Up to 2.00 miles	Per Cu.	<b>1,590.00</b>
12.7	Up to 3.00 miles	Per Cu.	<b>1,800.00</b>
12.8	Up to 4.00 miles	Per Cu.	<b>1,950.00</b>
12.9	Up to 5.00 miles	Per Cu.	<b>2,100.00</b>
<b>13</b>	<b>Making &amp; Fixing NAME BOARDS</b>		
13.1	Providing a <b>Digital printing Name Board size (4'-0" x 2'-0")</b> for project using 3/4"x3/4" box iron heavy duty 1.2 mm thick frame 0.4 mm thick Zink Aluminium sheet with aluminium L - bar around the frame fixed with pop riverts at 6" c/c and fixing to 1" dia. medium duty 3.2 mm.thick G.I. pipe with 1/4" dia. 2 1/2" long nut & bolts and concreting bottom using 4" dia. PVC pipe with 2'-3" high as per detail plan no 1 inclusive transport.(name board plan no:1 ) & directed. <b>(Up to estimate cost Rs.500,000/=)</b>	Item	<b>9,736.00</b>
13.2	Providing a <b>Digital printing Name Board size (6'-0" x 4'-0")</b> for project using 3/4"x3/4" box iron heavy duty 1.2 mm thick frame 0.4 mm thick Zink Aluminium sheet with aluminium L - bar around the frame fixed with pop riverts at 6" c/c and fixing to 1 1/2" dia. medium duty 3.2 mm.thick G.I. pipe with 1/4" dia. 2 1/2" long nut & bolts and concreting bottom using 4" dia. PVC pipe with 2'-3" high as per detail plan no.2 inclusive transport.(name board plan no: 2 ) & directed. <b>(Exceeding estimate cost Rs.500,000/=)</b>	Item	<b>14,146.00</b>
<b>14</b>	<b>Making, Supplying &amp; Fixing Steel gate</b>		

14.1	Making <b>lifting steel gate using 75 x 75 x 6 mm angle iron &amp; 5 mm. thick MS plate with 10 mm.thick MS bracket</b> as given detail plan No 1. of the steel gate and fixing to the anicut as directed.((This rate for <b>only four nr.75 x 75 x 6 mm.angle iron for both ways</b> as detail plan No 1 and not inclusive other necessary items.)including removing rust and applying two coats of anticorrosive paint. Excluding transport.	Sqft.	<b>2,156.00</b>
14.2	Making <b>lifting steel gate using 65 x 65 x 6 mm angle iron &amp; 5 mm. thick MS plate with 10 mm.thick MS bracket</b> as given detail plan No 2. of the steel gate and fixing to the anicut as directed. (This rate for <b>only four nr.65 x 65 x 6 mm. angle iron for both ways</b> as detail plan No 2 and not inclusive other necessary items.) including removing rust and applying two coats of anticorrosive paint.Excluding transport.	Sqft.	<b>2,090.00</b>
<b>15</b>	<b>SURVEYING</b>		
15.1	<b>Medium jungle clearing</b> for surveying work, 4 ft .wide.	Mile	<b>12146.00</b>
15.2	<b>Light jungle clearing</b> for surveying work, 4 ft .wide.	Mile	<b>8502.00</b>
15.3	<b>Chaining</b> inclusive of cutting jungle pegs and pegging.	Mile	<b>2277.00</b>
15.4	<b>Levelling</b> every 100ft. Establishing bench marks on rock or tree and checking back.	Mile	<b>4555.00</b>
15.5	<b>Surveying</b> including fixing angle pickets and taking angles .	Mile	<b>4555.00</b>
15.6	<b>Chaining traverse</b> line and taking off sets .	Mile	<b>6073.00</b>
15.7	<b>Detail site surveys</b> - breaches, spill site etc., including spot levels, chaining, pegging and establishing bench mark ( <b>400' x 400'</b> )	Nr.	<b>15182.00</b>
15.8	<b>Detail site surveys</b> - breaches, spill site etc., including spot levels, chaining, pegging and establishing bench mark ( <b>200' x 200'</b> )	Nr.	<b>3796.00</b>
15.9	<b>Detail site surveys</b> - breaches, spill site etc., including spot levels, chaining, pegging and establishing bench mark ( <b>100' x 100'</b> )	Nr.	<b>949.00</b>