TENDER DOCUMENT

FOR

Earthwork, Repair & Construction of Distribution Network of Nabinagar, Amba, Aurangabad, Madanpur and Gaya Divisions of Right Main Canal, Bihar and its Structures under North Koel Reservoir Project, Jharkhand and Bihar

TENDER NO: WAP/NK/RMC/DISTRIBUTION/BIHAR/2026

Price Schedule (Madanpur)

WAPCOS

(भारत सरकार का उपक्रम–जल शक्ति मंत्रालय)

(A Government of India Undertaking-Ministry of Jal Shakti)

Preamble to the Price Schedule

1. In case of Percentage Rate Tenders, contractor shall fill up the usual printed form, stating at what percentage below/above (in figures as well as in words) the total estimated cost given in Price Schedule; he will be willing to execute the work. The tender submitted shall be treated as invalid if :-
    - The contractor does not quote percentage above/below/ at per on the total amount of tender or any section/sub head of the tender.
    - The percentage above/below/ at per is not quoted in figures & words both on the total amount of tender or any section/sub head of the tender.
    - The percentage quoted above/below/ at per is different in figures & words on the total amount of tender or any section/sub head of the tender.
2. In case the lowest tendered amount (amount worked on the basis of percentage above/below) of two or more contractors is same, such lowest contractors will be asked to submit sealed revised offer in the form of letter mentioning percentage above/ below on estimated cost of tender including all sub sections/sub heads as the case may be, but the revised percentage quoted above/below on tendered cost or on each sub section/ sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers.
3. In case any of such contractor refuses to submit revised offer, then it shall be treated as withdrawal of his tender before acceptance and 50% of earnest money shall be forfeited.
4. If the revised tendered amount of two more contractors received in revised offer is again found to be equal, the lowest tender, among such contractors, shall be decided by draw of lots in the presence of Evaluation Committee of the Employer and the lowest contractors those have quoted equal amount of their tenders.
5. In case all the lowest contractors those have quoted same tendered amount, refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each bidder.
6. Contractor(s), whose earnest money is forfeited because of non-submission of revised offer, shall not be allowed to participate in the re-tendering process of the work.
7. Only percentage rate quoted tenders shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the contractor in percentage rate tender shall be accurately filled in figures and words, so that there is no discrepancy.
8. In Percentage Rate Tender, the tenderer shall quote percentage below/above (in figures as well as in words) at which he will be willing to execute the work. He shall also work out the total amount of his offer and the same should be written in figures as well as in words in such a way that no interpolation is possible. In case of figures, the word 'Rs.'

should be written before the figure of rupees and word ‘P’ after the decimal figures, e.g. ‘Rs. 2.15P and in case of words, the word ‘Rupees’ should precede and the word ‘Paisa’ should be written at the end.

9. Contractor should satisfy himself with the total amount of the contract (as worked out in the Price Schedule) for the execution of the complete work.
10. Any error, if any in the Price Schedule, Design, Drawings to be bought in the notice of WAPCOS on or before Pre-BID meeting.

Note:

1. The estimated amounts for items are given in the Estimate.
2. The tenderer has to quote their offer in percentage above/below/ at-par the estimated amount.
3. The percentage rate shall be quoted up to 2 decimals.
4. **The Percentage (%) rate quoted for the contract shall be inclusive of all charges, except GST @18% as indicated in the Price Schedule**. GST as applicable shall be paid on submission of proof and Bill shall be accepted only after Bill is uploaded at GST Portal, subject to receipt of the same by Employer on back to back terms.
5. **The rate for carriage of materials shall be on actual lead at site at the time of execution, if the lead is more than provided in the BOQ, nothing will be paid extra. However, if the lead is less than the BOQ, then a proportionate rate will be deducted.**
6. **The final rates on which the works is to be executed are to be approved by the competent authority based on the Financial Bids submitted by the Bidders. In case any item scheduled/non-scheduled whose rates have not been included in the BOQ, then the rate shall be decided by the competent authority for payment.**
7. The payment will be made as per the actual work done and item wise measurement basis.
8. Rate filled at any other place in the document shall not be considered.
9. Where there is a discrepancy between the words and figures, the lesser of the two will only be taken in to consideration.
10. Where there is an arithmetical discrepancy in the page total as well as grand total, the corrected total by the Employer will govern.
11. The rates quoted shall be for carrying out the work in conformity to the IS Standards and Technical Specifications and other Terms and Conditions set out in the Bid Document
12. All pages in the BOQ should be signed without omission. All corrections/over writing should be properly attested by the Bidder.
13. Change in the Quantities - If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item/items, the rates as in the agreement for the relevant items shall be paid.
14. The Method of measurement of completed work for payment shall be in accordance with the requirement as stated in the individual section of Technical Specifications or as per CPWD Specifications.
15. The contractor shall carry out the site establishment works/temporary works at his own cost. Nothing shall be paid over and above the contract amount.
16. **The rates quoted by the bidder shall be deemed to include all costs related to leads and lifts of disposal of earth work required for the proper execution of the work, as described in the BOQ. If the actual lead and lift is more than provided in the BOQ, nothing will be paid extra and No extra payment shall be made whatsoever admissible on these accounts.**
17. **The rates quoted by the bidder shall be deemed to include all costs related to dewatering (including above nominal) and shoring (including above nominal) that is necessary for the execution of works. No extra payment shall be made whatsoever admissible on these accounts.**

Bihar Distribution Network- Madanpur Division
(Total Cost – Rs. 50.95 Crores)

Summary of Cost

Sr. No.	Name of Canal	Cost Approved in Crores
1	Chain Nawada Dy.	12.07
2	Kotwara Dy.	38.88
	Total	**50.95**

Madanpur Division – Chain Nawada Dy.
(Total Cost – Rs. 12.07 Crores)

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND ABSTRACT OF COST (CHAIN NAWADA SUB DY.)								
S. No.	**Items**	**Qty.**	**Unit**	**Rate**	**Seigniorage Charges**	**Amount (Rs.) Including Seigniorage Charges**	**Reference for Rate**	**Page No.**
1	Earthwork							
	CHAIN NAWADA SUB DY.	1	Job	50300307.00	0.00	₹ 5,03,00,307.00	AOC Earthwork Chain Nawada Sub Dy.	24
	PARANPUR MINOR	1	Job	8011273.04	0.00	₹ 80,11,273.04	AOC Earthwork Paranpur Minor	26
	SALAIYA MINOR	1	Job	4856208.44	0.00	₹ 48,56,208.44	AOC Earthwork Salaiya Minor	28
	DHAMANI SUB DY.	1	Job	10291902.61	0.00	₹ 1,02,91,902.61	AOC Earthwork Dhamani Sub Dy.	30
2	Head Regulator							
	PARANPUR MINOR	1	No.	2007082.92	14295.67	₹ 20,21,378.59	HR (AOC) Paranpur mr.	36
	SALAIYA MINOR	1	No.	1723270.54	12039.86	₹ 17,35,310.40	HR (AOC) Salaiya mr.	40
	DHAMANI SUB-DY.	1	No.	2944042.54	18488.31	₹ 29,62,530.85	HR (AOC) Dhamani Sub Dy.	43
3	Falls							
	CHAIN NAWADA SUB DY.							
	0.762 m Fall at Ch. 9.150 Km	1	No.	1715467.07	15317.09	₹ 17,30,784.16	Fall (AOC) Chain Nawada Sub Dy.	61
	0.762 m Fall at Ch. 9.330 Km	1	No.	1442960.23	12831.77	₹ 14,55,792.00		64
	1.520 m Fall at Ch. 12.900 Km	1	No.	2319068.59	20693.76	₹ 23,39,762.34		67
	0.914 m Fall at Ch. 13.325 Km	1	No.	1516936.10	13491.08	₹ 15,30,427.18		70
	PARANPUR MINOR							
	0.762 m Fall at Ch. 0.200 Km	1	No.	1111946.08	9418.12	₹ 11,21,364.20	Fall (AOC) Paranpur Mr.	73
	1.220 m Fall at Ch. 0.400 Km	1	No.	1410823.97	11954.11	₹ 14,22,778.09		76
	1.220 m Fall at Ch. 0.550 Km	1	No.	1420076.79	11954.11	₹ 14,32,030.90		79
	0.914 m Fall at Ch. 0.950 Km	1	No.	1105559.74	9318.63	₹ 11,14,878.37		82
	1.220 m Fall at Ch. 1.050 Km	1	No.	1293170.28	10859.66	₹ 13,04,029.94		85
	1.524 m Fall at Ch. 1.150 Km	1	No.	1610616.09	13657.56	₹ 16,24,273.65		88
	1.828 m Fall at Ch. 1.950 Km	1	No.	913460.67	7929.44	₹ 9,21,390.11		91
	0.457 m Fall at Ch.2.100 Km	1	No.	500067.75	4135.19	₹ 5,04,202.94		94
	1.828 m Fall at Ch.2.215 Km	1	No.	1611875.51	13617.37	₹ 16,25,492.88		97
	2.134 m Fall at Ch.2.525 Km	1	No.	1236392.53	10554.78	₹ 12,46,947.32		100
	1.524 m Fall at Ch.2.810 Km	1	No.	471956.59	3864.58	₹ 4,75,821.17		102
	1.830 m Fall at Ch.2.870 Km	1	No.	1199811.89	9880.92	₹ 12,09,692.82		104
	SALAIYA MINOR							
	2.134 m Fall at Ch. 0.030 Km	1	No.	1485094.62	13063.12	₹ 14,98,157.74	Fall (AOC) Salaiya Mr.	107
	0.914 m Fall at Ch. 0.300 Km	1	No.	648917.04	5468.71	₹ 6,54,385.75		110
	0.914 m Fall at Ch. 1.500 Km	1	No.	537706.31	4512.89	₹ 5,42,219.20		113
	DHAMANI SUB-DY.							
	1.220 m Fall at Ch. 3.300 Km	1	No.	1278666.03	12141.52	₹ 12,90,807.55	Fall (AOC) Dhamani Sub Dy.	116
	1.524 m Fall at Ch. 3.800 Km	1	No.	1672875.95	14906.64	₹ 16,87,782.60		119
	1.524 m Fall at Ch. 3.950 Km	1	No.	1632102.02	14906.64	₹ 16,47,008.67		122
	0.915 m Fall at Ch. 4.595 Km	1	No.	1107379.24	9666.65	₹ 11,17,045.89		125
4	*Cross Drainage*							
	PARANPUR MINOR							
	At Km 1.660	1	No.	2117191.12	18058.05	₹ 21,35,249.17	C.D. Main canals-AOC	217
5	*Repair of Structures*							
	CHAIN NAWADA SUB DY.	24	No.	1903018.177	7197.89	₹ 19,10,216.06	Abstract (Repair St.) Chain nawada sub dy.	221

S. No.	Items	Qty.	Unit	Rate	Seigniorage Charges	Amount (Rs.) Including Seigniorage Charges	Reference for Rate	Page No.
	PARANPUR MINOR	2	No.	77868.94055	0	₹ 77,868.94	Abstract (Repair St.) Paranpur Minor	222
	SALAIYA MINOR	3	No.	327027.8968	3284.10	₹ 3,30,312.00	Abstract (Repair St.) Salaiya Minor	223
	DHAMANI SUB-DY.	5	No.	308402.8851	1543.28	₹ 3,09,946.17	Abstract (Repair St.) Dhamani Sub Dy.	223
6	Outlets							
	CHAIN NAWADA SUB DY.	19	No.	127744.47	1100.17	₹ 24,48,048.17	Outlet-AOC'!G19	263
	PARANPUR MINOR	10	No.	127744.47	1100.17	₹ 12,88,446.41	Outlet-AOC'!G19	263
	SALAIYA MINOR	8	No.	127744.47	1100.17	₹ 10,30,757.13	Outlet-AOC'!G19	263
	DHAMANI SUB-DY.	11	No.	127744.47	1100.17	₹ 14,17,291.05	Outlet-AOC'!G19	263
7	Kilometer Stone	27	No.	3853.40	0.00	₹ 1,04,041.80	Rates '!F61	296
	TOTAL (In Rs.)					**120728163.28**		
	TOTAL (In Lacs)					**1207.28**		

	Carriage of Materials -Abstract		
1	Steel & Cement (30 Km)	M.T.	**742.00**
2	RCC Hume Pipe (30 Km)	Per Meter	
	150 mm dia	Per Meter	**82.00**
	600 mm dia	Per Meter	**919.00**
	1000 mm dia	Per Meter	**1470.00**
	1200 mm dia	Per Meter	**1838.00**
3	Bricks (15 Km)	Per 1000 no	**3.18**
4	Boulder (60 Km)	Cumecs	**1159.0**
5	Coarse Sand (60 Km)	Cumecs	**1075.00**
6	Stone Chips/Aggregate (100 Km)	Cumecs	**1398.0**

CARRIAGE OF MATERIAL BY TIPPER OF 18 CUM CAPACITY INCLUDING OVER HEAD CHARGES & C.P																		
Sr No	Name Of Materials	Unit	Gross Tipper Capacity Per Trip	(For Void) Multiplying Factor	Net Tipper capacity (Payable Quantity) Per Trip	Cost of Loading,Unloading & Stacking Per Trip of Tipper (Tipperr capacity 18 cum x Xa_1	Cost of Haulage Per cum			Cost of Haulage Per Tipper of 18 cum capacity (Tipper capacity 18 Cum x H)			Lead in KM			Carriage of Cost =[(18Hsa.Ls+18Hua.Lu+18Hka.Lk)+18 X_a	Per Unit Rate =(col 17 / Net Payable capacity)
							For Surface Road	For Unsurfaced Graveted Road	For Kacha Track & Track in River Bed / Nallah Bed & Choe Bed	For Surface Road	For Unsurfaced Graveted Road	For Kacha Track & Track in River Bed / Nallah Bed & Choe Bed	For Surface Road	For Unsurfaced Graveted Road	For Kacha Track & Track in River Bed / Nallah Bed & Choe Bed		
						$18X_a$	H_{Sa}	H_{ua}	H_{ka}	$18H_{Sa}$	$18H_{Ua}$	$18H_{Ka}$	L_S	L_U	L_K		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Boulder (60 Kms)	M^3	18	0.80	14.4	6507.00	9.10	11.10	22.20	163.80	199.80	399.60	50	10	0	16695	1159.00
2	Stone Aggregate (100 Kms)	M^3	18	0.924	16.63	6507.00	9.10	11.10	22.20	163.80	199.80	399.60	90	10	0	23247	1398.00
3	Sand (60 Kms)	M^3	18	0.924	16.63	6507.00	9.10	11.10	22.20	163.80	199.80	399.60	45	10	5	17874	1075.00

CARRIAGE OF MATERIAL BY TIPPER OF 25 TONNES CAPACITY INCLUDING OVER HEAD CHARGES & C.P																	
Sr No	Name Of Materials	Unit	Gross Tipper Capacity Per Trip	(For Void) Multiplying Factor	Net Tipper capacity (Payable Quantity) Per Trip	Cost of Loading,Unloading & Stacking Per Trip of Tipper (Tipperr capacity 25 t x X_b)	Cost of Haulage Per cum			Cost of Haulage Per Tipper of 8 tonne capacity (Tipper capacity 8x H)			Lead in KM			Carriage of Cost =[(25Hsa.Ls+25Hua.Lu+25Hka.Lk)+25 X_a	Per Unit Rate =(col 17 / Net Payable capacity)
							For Surface Road	For Unsurfaced Graveted Road	For Kacha Track & Track in River Bed / Nallah Bed & Choe Bed	For Surface Road	For Unsurfaced Graveted Road	For Kacha Track & Track in River Bed / Nallah Bed & Choe Bed	For Surface Road	For Unsurfaced Graveted Road	For Kacha Track & Track in River Bed / Nallah Bed & Choe Bed		
						$25X_b$	H_{Sb}	Hub	H_{Kb}	$25H_{Sb}$	$25H_{Ub}$	$25H_{Kb}$	L_S	L_U	L_K		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	**Cement & Steel (30 Kms)**	M.T	25	1	25	13250.00	6.60	8.00	16.00	165.00	200.00	400.00	20	10	0	18550	742.00
2	**Brick ($9^{3/4}$x$4^{3/4}$x$2^{3/4}$) (15 Kms)**	Per % 0	5000	1	5000	13250.00	6.60	8.00	16.00	165.00	200.00	400.00	10	5	0	15900	3180.00
3	**R.C.C hume, A.C. pipe (30 Km)**																
a	**150 mm dia**	mtr	225	1	225	13250.00	6.60	8.00	16.00	165.00	200.00	400.00	25	5	0	18375	82.00
b	**500 mm & 600 mm dia**	mtr	20	1	20	13250.00	6.60	8.00	16.00	165.00	200.00	400.00	25	5	0	18375	919.00
c	**900mm & 1000 mm dia**	mtr	12.5	1	12.5	13250.00	6.60	8.00	16.00	165.00	200.00	400.00	25	5	0	18375	1470.00
d	**1100 & 1200 m dia**	mtr	10	1	10	13250.00	6.60	8.00	16.00	165.00	200.00	400.00	25	5	0	18375	1838.00

NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND

CONCRETE MIX RATIO TABLE

Sl. No.	Mixes	Unit by Volume (Cum)	Crushed Aggregate			
			Cement (bags of 50 kg)	Sand (Cum)	Coarse Aggregate (Cum)	Boulder (Cum)
1	M -10 (1:3:6)	1.00	4.49	0.47	0.94	
2	M -15 (1:2:4)	1.00	6.48	0.45	0.90	
3	M -20 (1:1.5:3)	1.00	8.25	0.43	0.86	
4	M -25 (1:1:2)	1.00	11.34	0.39	0.79	
5	M-30 (1:0.75:1.5)	1.00	13.96	0.36	0.73	
6	RR Masonary (1:4)	1.00	2.880	0.40		1.00
7	Brick Work (1:4)	1.00	2.304	0.320		
8	Cement Plaster (1:4)	1.00	1.037	0.015		
9	Cement Punning	1.00	0.0015			

DETAIL QUANTITIES OF EARTHWORK

CHAIN NAWADA SUB DY (0.000 TO 13.800 KM)

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
0		0.000	0	0	0.000	0	0.000
100	100	6.863	3.432	343.150	7.936	3.968	396.800
200	100	4.586	5.725	572.450	7.304	7.620	762.000
300	100	2.700	3.643	364.300	7.713	7.509	750.850
400	100	1.585	2.143	214.250	10.690	9.202	920.150
500	100	7.886	4.736	473.550	7.715	9.203	920.250
600	100	4.151	6.019	601.850	7.923	7.819	781.900
700	100	1.491	2.821	282.100	9.319	8.621	862.100
800	100	0.341	0.916	91.600	10.083	9.701	970.100
900	100	0.564	0.453	45.250	10.244	10.164	1016.350
1000	100	1.262	0.913	91.300	12.879	11.562	1156.150
1100	100	0.477	0.870	86.950	16.197	14.538	1453.800
1200	100	0.248	0.363	36.250	19.709	17.953	1795.300
1300	100	0.089	0.169	16.850	23.568	21.639	2163.850
1400	100	1.906	0.998	99.750	8.387	15.978	1597.750
1500	100	0.016	0.961	96.100	11.081	9.734	973.400
1600	100	0.000	0.008	0.800	12.179	11.630	1163.000
1700	100	0.000	0.000	0.000	16.360	14.270	1426.950
1800	100	2.126	1.063	106.300	3.681	10.021	1002.050
1900	100	1.686	1.906	190.600	3.826	3.754	375.350
2000	100	7.057	4.372	437.150	8.365	6.096	609.550
2100	100	15.153	11.105	1110.500	9.698	9.032	903.150
2200	100	16.341	15.747	1574.700	3.178	6.438	643.800
2300	100	16.430	16.386	1638.550	6.028	4.603	460.300
2400	100	16.597	16.514	1651.350	11.207	8.618	861.750
2500	100	3.486	10.042	1004.150	3.385	7.296	729.600
2600	100	15.703	9.595	959.450	2.324	2.855	285.450
2700	100	0.008	7.856	785.550	6.246	4.285	428.500
2800	100	0.679	0.344	34.350	5.271	5.759	575.850
2900	100	3.579	2.129	212.900	5.367	5.319	531.900
3000	100	7.614	5.597	559.650	7.430	6.399	639.850
3100	100	12.321	9.968	996.750	8.963	8.197	819.650
3200	100	17.258	14.790	1478.950	9.908	9.436	943.550
3300	100	24.878	21.068	2106.800	6.865	8.387	838.650
3400	100	16.598	20.738	2073.800	6.464	6.665	666.450
3500	100	9.787	13.193	1319.250	4.350	5.407	540.700
3600	100	4.338	7.063	706.250	3.689	4.020	401.950
3700	100	4.927	4.633	463.250	11.881	7.785	778.500
3800	100	2.629	3.778	377.800	9.665	10.773	1077.300
3900	100	2.220	2.425	242.450	10.453	10.059	1005.900
4000	100	1.268	1.744	174.400	12.936	11.695	1169.450
4100	100	1.089	1.179	117.850	14.639	13.788	1378.750
4200	100	0.578	0.834	83.350	13.967	14.303	1430.300

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
4300	100	0.298	0.438	43.800	13.408	13.688	1368.750
4400	100	0.000	0.149	14.900	14.985	14.197	1419.650
4500	100	0.000	0.000	0.000	15.819	15.402	1540.200
4600	100	0.000	0.000	0.000	47.757	31.788	3178.800
4700	100	0.000	0.000	0.000	29.430	38.594	3859.350
4800	100	0.000	0.000	0.000	25.426	27.428	2742.800
4900	100	0.000	0.000	0.000	23.333	24.380	2437.950
5000	100	0.000	0.000	0.000	18.464	20.899	2089.850
5100	100	0.000	0.000	0.000	14.803	16.634	1663.350
5200	100	0.000	0.000	0.000	11.576	13.190	1318.950
5300	100	0.374	0.187	18.700	9.268	10.422	1042.200
5400	100	3.290	1.832	183.200	8.869	9.069	906.850
5500	100	8.853	6.072	607.150	14.031	11.450	1145.000
5600	100	18.871	13.862	1386.200	7.123	10.577	1057.700
5700	100	17.274	18.073	1807.250	4.699	5.911	591.100
5800	100	17.155	17.215	1721.450	3.726	4.213	421.250
5900	100	11.954	14.555	1455.450	3.413	3.570	356.950
6000	100	7.408	9.681	968.100	2.260	2.837	283.650
6100	100	0.424	3.916	391.600	7.896	5.078	507.800
6200	100	0.000	0.212	21.200	11.879	9.888	988.750
6300	100	0.000	0.000	0.000	13.466	12.673	1267.250
6400	100	0.000	0.000	0.000	17.196	15.331	1533.100
6500	100	0.000	0.000	0.000	19.794	18.495	1849.500
6600	100	0.000	0.000	0.000	22.170	20.982	2098.200
6700	100	0.000	0.000	0.000	15.535	18.853	1885.250
6800	100	0.621	0.311	31.050	31.597	23.566	2356.600
6900	100	0.000	0.311	31.050	11.761	21.679	2167.900
7000	100	0.000	0.000	0.000	20.464	16.113	1611.250
7100	100	0.000	0.000	0.000	29.640	25.052	2505.200
7200	100	0.000	0.000	0.000	24.156	26.898	2689.800
7300	100	0.000	0.000	0.000	15.493	19.825	1982.450
7400	100	0.279	0.140	13.950	8.146	11.820	1181.950
7500	100	2.057	1.168	116.800	3.115	5.631	563.050
7600	100	5.603	3.830	383.000	2.946	3.031	303.050
7700	100	7.902	6.753	675.250	1.669	2.308	230.750
7800	100	6.803	7.353	735.250	0.941	1.305	130.500
7900	100	4.899	5.851	585.100	1.710	1.326	132.550
8000	100	5.684	5.292	529.150	1.512	1.611	161.100
8100	100	6.773	6.229	622.850	1.936	1.724	172.400
8200	100	10.252	8.513	851.250	2.554	2.245	224.500
8300	100	12.515	11.384	1138.350	4.938	3.746	374.600
8400	100	18.243	15.379	1537.900	8.799	6.869	686.850
8500	100	28.872	23.558	2355.750	8.303	8.551	855.100
8600	100	17.785	23.329	2332.850	5.588	6.946	694.550
8700	100	18.017	17.901	1790.100	4.531	5.060	505.950
8800	100	13.726	15.872	1587.150	3.397	3.964	396.400

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
8900	100	8.767	11.247	1124.650	3.410	3.404	340.350
9000	100	4.621	6.694	669.400	3.454	3.432	343.200
9100	100	1.766	3.194	319.350	3.861	3.658	365.750
9200	100	2.918	2.342	234.200	5.147	4.504	450.400
9300	100	0.483	1.701	170.050	9.215	7.181	718.100
9400	100	0.000	0.242	24.150	7.495	8.355	835.500
9500	100	0.000	0.000	0.000	10.849	9.172	917.200
9600	100	0.047	0.024	2.350	9.636	10.243	1024.250
9700	100	0.000	0.024	2.350	16.943	13.290	1328.950
9800	100	4.432	2.216	221.600	3.565	10.254	1025.400
9900	100	0.000	2.216	221.600	15.100	9.333	933.250
10000	100	0.000	0.000	0.000	16.971	16.036	1603.550
10100	100	0.000	0.000	0.000	19.127	18.049	1804.900
10200	100	0.000	0.000	0.000	20.573	19.850	1985.000
10300	100	0.000	0.000	0.000	22.218	21.396	2139.550
10400	100	0.000	0.000	0.000	19.148	20.683	2068.300
10500	100	0.000	0.000	0.000	19.001	19.075	1907.450
10600	100	0.000	0.000	0.000	15.898	17.450	1744.950
10700	100	0.000	0.000	0.000	13.074	14.486	1448.600
10800	100	0.000	0.000	0.000	10.502	11.788	1178.800
10900	100	0.000	0.000	0.000	8.159	9.331	933.050
11000	100	0.018	0.009	0.900	6.040	7.100	709.950
11100	100	0.707	0.363	36.250	7.094	6.567	656.700
11200	100	0.646	0.677	67.650	7.529	7.312	731.150
11300	100	0.395	0.521	52.050	7.032	7.281	728.050
11400	100	0.439	0.417	41.700	6.415	6.724	672.350
11500	100	0.278	0.359	35.850	9.182	7.799	779.850
11600	100	0.306	0.292	29.200	8.641	8.912	891.150
11700	100	0.952	0.629	62.900	5.832	7.237	723.650
11800	100	1.542	1.247	124.700	4.945	5.389	538.850
11900	100	3.058	2.300	230.000	3.831	4.388	438.800
12000	100	4.964	4.011	401.100	3.018	3.425	342.450
12100	100	7.202	6.083	608.300	2.455	2.737	273.650
12200	100	9.756	8.479	847.900	2.094	2.275	227.450
12300	100	8.087	8.922	892.150	3.418	2.756	275.600
12400	100	5.526	6.807	680.650	2.639	3.029	302.850
12500	100	3.557	4.542	454.150	2.738	2.689	268.850
12600	100	2.326	2.942	294.150	2.526	2.632	263.200
12700	100	9.340	5.833	583.300	1.588	2.057	205.700
12800	100	4.744	7.042	704.200	1.548	1.568	156.800
12900	100	15.832	10.288	1028.800	2.053	1.801	180.050
13000	100	3.672	9.752	975.200	3.946	3.000	299.950
13100	100	0.335	2.004	200.350	7.552	5.749	574.900
13200	100	0.000	0.168	16.750	18.508	13.030	1303.000
13300	100	0.135	0.068	6.750	9.624	14.066	1406.600
13400	100	2.378	1.257	125.650	2.685	6.155	615.450

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
13500	100	0.571	1.475	147.450	3.667	3.176	317.600
13600	100	0.205	0.388	38.800	5.161	4.414	441.400
13700	100	0.000	0.103	10.250	4.267	4.714	471.400
13800	100	0.282	0.141	14.100	6.537	5.402	540.200
Total				**59459.300**			**136123.750**
TOTAL QUANTITY OF EARTHWORK IN EXCAVATION							**59459.300**
TOTAL QUANTITY OF EARTHWORK IN BACKFILLING							**136123.750**
NET QUANTITY OF EARTHWORK							**76664.45**

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
DETAIL QUANTITIES OF EARTHWORK							
PARANPUR MR (0.000 TO 3.050 KM)							
0		0.000	0	0	0.000	0	0.000
100	100	0.337	0.169	16.850	3.223	1.612	161.150
200	100	2.852	1.595	159.450	2.068	2.646	264.550
300	100	0.675	1.764	176.350	2.478	2.273	227.300
400	100	0.520	0.598	59.750	4.093	3.286	328.550
500	100	0.507	0.514	51.350	4.053	4.073	407.300
600	100	0.722	0.615	61.450	4.149	4.101	410.100
700	100	0.581	0.652	65.150	3.999	4.074	407.400
800	100	0.334	0.458	45.750	3.666	3.833	383.250
900	100	0.245	0.290	28.950	4.204	3.935	393.500
1000	100	0.486	0.366	36.550	1.633	2.919	291.850
1100	100	0.358	0.422	42.200	3.917	2.775	277.500
1200	100	0.301	0.330	32.950	4.811	4.364	436.400
1300	100	0.225	0.263	26.300	4.220	4.516	451.550
1400	100	0.153	0.189	18.900	3.646	3.933	393.300
1500	100	0.083	0.118	11.800	4.917	4.282	428.150
1600	100	0.015	0.049	4.900	3.076	3.997	399.650
1700	100	0.000	0.008	0.750	4.392	3.734	373.400
1800	100	0.000	0.000	0.000	5.750	5.071	507.100
1900	100	0.000	0.000	0.000	7.159	6.455	645.450
2000	100	0.709	0.355	35.450	3.690	5.425	542.450
2100	100	0.000	0.355	35.450	3.784	3.737	373.700
2200	100	0.000	0.000	0.000	9.223	6.504	650.350
2300	100	0.174	0.087	8.700	3.630	6.427	642.650
2400	100	0.000	0.087	8.700	6.394	5.012	501.200
2500	100	0.000	0.000	0.000	17.752	12.073	1207.300
2600	100	0.368	0.184	18.400	3.321	10.537	1053.650
2700	100	0.159	0.264	26.350	3.772	3.547	354.650
2800	100	0.000	0.080	7.950	10.055	6.914	691.350
2900	100	1.438	0.719	71.900	3.201	6.628	662.800
3000	100	0.034	0.736	73.600	4.098	3.650	364.950
3050	50	0.000	0.017	0.850	9.081	6.590	329.475
Total				**1126.750**			**14561.975**
TOTAL QUANTITY OF EARTHWORK IN EXCAVATION							**1126.750**
TOTAL QUANTITY OF EARTHWORK IN BACKFILLING							**14561.975**
NET QUANTITY OF EARTHWORK							**13435.23**

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
DETAIL QUANTITIES OF EARTHWORK SALAIYA MR (0.000 TO 2.200 KM)							
0		0.000	0	0	0.000	0	0.000
100	100	0.021	0.011	1.050	5.915	2.958	295.750
200	100	1.349	0.685	68.500	3.299	4.607	460.700
300	100	2.251	1.800	180.000	2.449	2.874	287.400
400	100	0.568	1.410	140.950	1.161	1.805	180.500
500	100	0.007	0.288	28.750	7.074	4.118	411.750
600	100	0.000	0.004	0.350	15.602	11.338	1133.800
700	100	0.450	0.225	22.500	3.160	9.381	938.100
800	100	0.000	0.225	22.500	8.708	5.934	593.400
900	100	0.850	0.425	42.500	1.826	5.267	526.700
1000	100	0.000	0.425	42.500	7.361	4.594	459.350
1100	100	0.415	0.208	20.750	2.619	4.990	499.000
1200	100	0.040	0.228	22.750	8.081	5.350	535.000
1300	100	0.209	0.125	12.450	2.847	5.464	546.400
1400	100	0.077	0.143	14.300	4.207	3.527	352.700
1500	100	1.105	0.591	59.100	2.641	3.424	342.400
1600	100	0.560	0.833	83.250	3.605	3.123	312.300
1700	100	0.284	0.422	42.200	5.582	4.594	459.350
1800	100	0.223	0.254	25.350	6.673	6.128	612.750
1900	100	1.217	0.720	72.000	1.804	4.239	423.850
2000	100	0.617	0.917	91.700	2.248	2.026	202.600
2100	100	0.173	0.395	39.500	1.948	2.098	209.800
2200	100	0.000	0.087	8.650	4.652	3.300	330.000
Total				**1041.600**			**10113.600**
TOTAL QUANTITY OF EARTHWORK IN EXCAVATION							**1041.600**
TOTAL QUANTITY OF EARTHWORK IN BACKFILLING							**10113.600**
NET QUANTITY OF EARTHWORK							**9072.00**

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
DETAIL QUANTITIES OF EARTHWORK DHAMNI SUB DY (0.000 TO 4.700 KM)							
0		0.000	0	0	0.000	0	0.000
100	100	0.654	0.327	32.700	4.794	2.397	239.700
200	100	0.898	0.776	77.600	1.927	3.361	336.050
300	100	1.030	0.964	96.400	3.927	2.927	292.700
400	100	1.299	1.165	116.450	5.446	4.687	468.650
500	100	3.174	2.237	223.650	4.776	5.111	511.100
600	100	2.156	2.665	266.500	7.492	6.134	613.400
700	100	1.784	1.970	197.000	3.665	5.579	557.850
800	100	1.298	1.541	154.100	3.058	3.362	336.150
900	100	0.895	1.097	109.650	3.852	3.455	345.500
1000	100	0.687	0.791	79.100	3.732	3.792	379.200
1100	100	0.606	0.647	64.650	4.187	3.960	395.950
1200	100	0.545	0.576	57.550	4.929	4.558	455.800
1300	100	1.215	0.880	88.000	3.727	4.328	432.800
1400	100	2.128	1.672	167.150	2.172	2.950	294.950
1500	100	5.361	3.745	374.450	1.101	1.637	163.650
1600	100	7.398	6.380	637.950	1.026	1.064	106.350
1700	100	3.397	5.398	539.750	1.707	1.367	136.650
1800	100	2.061	2.729	272.900	3.118	2.413	241.250
1900	100	0.974	1.518	151.750	4.318	3.718	371.800
2000	100	0.117	0.546	54.550	6.773	5.546	554.550
2100	100	0.136	0.127	12.650	8.050	7.412	741.150
2200	100	0.070	0.103	10.300	11.229	9.640	963.950
2300	100	0.000	0.035	3.500	13.940	12.585	1258.450
2400	100	0.000	0.000	0.000	10.953	12.447	1244.650
2500	100	0.000	0.000	0.000	9.034	9.994	999.350
2600	100	0.000	0.000	0.000	7.110	8.072	807.200
2700	100	0.000	0.000	0.000	5.904	6.507	650.700
2800	100	2.127	1.064	106.350	3.723	4.814	481.350
2900	100	0.009	1.068	106.800	2.814	3.269	326.850
3000	100	0.076	0.043	4.250	7.527	5.171	517.050
3100	100	0.965	0.521	52.050	4.438	5.983	598.250
3200	100	0.341	0.653	65.300	3.318	3.878	387.800
3300	100	9.460	4.901	490.050	1.984	2.651	265.100
3400	100	1.323	5.392	539.150	3.750	2.867	286.700
3500	100	0.112	0.718	71.750	5.466	4.608	460.800
3600	100	0.009	0.061	6.050	6.208	5.837	583.700
3700	100	0.432	0.221	22.050	4.174	5.191	519.100
3800	100	6.581	3.507	350.650	3.498	3.836	383.600
3900	100	1.144	3.863	386.250	4.735	4.117	411.650
4000	100	3.369	2.257	225.650	1.003	2.869	286.900
4100	100	0.000	1.685	168.450	9.798	5.401	540.050
4200	100	1.018	0.509	50.900	5.117	7.458	745.750

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
4300	100	0.499	0.759	75.850	8.962	7.040	703.950
4400	100	0.648	0.574	57.350	3.139	6.051	605.050
4500	100	3.025	1.837	183.650	3.953	3.546	354.600
4600	100	7.994	5.510	550.950	2.297	3.125	312.500
4700	100	0.000	3.997	399.700	12.715	7.506	750.600
Total				**7701.500**			**23420.850**
TOTAL QUANTITY OF EARTHWORK IN EXCAVATION							**7701.500**
TOTAL QUANTITY OF EARTHWORK IN BACKFILLING							**23420.850**
NET QUANTITY OF EARTHWORK							**15719.35**

NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND				
CHAIN NAWADA SUB DY. (0.000 TO 13.800 KM)				
JUNGLE CLEARANCE QUANTITY				
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Quantity**	
0.00 - 4.150	4150	7.74	32121.00	Sqm
4.150 - 9.325	5175	7.190	37208.25	Sqm
9.325 - 11.070	1745	6.41	11185.45	Sqm
11.070 - 13.800	2730	5.82	15888.60	Sqm
	TOTAL		**96403.30**	**Sqm**

LIP CUTTING QUANTITY					
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Thickness (m)**	**Quantity**	
0.00 - 4.150	4150	7.740	0.15	4818.15	Cum
4.150 - 9.325	5175	7.190	0.15	5581.24	Cum
9.325 - 11.070	1745	6.410	0.15	1677.82	Cum
11.070 - 13.800	2730	5.820	0.15	2383.29	Cum
	TOTAL			**14460.50**	**Cum**

PARANPUR MINOR (0.000 TO 3.050 KM)				
JUNGLE CLEARANCE QUANTITY				
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Quantity**	
0.00 - 0.800	800	3.23	2584.00	Sqm
0.800 - 2.100	1300	2.72	3536.00	Sqm
2.100 - 2.215	115	2.41	277.15	Sqm
2.215 - 2.700	485	1.95	945.75	Sqm
2.700 - 3.050	350	1.4	490.00	Sqm
	TOTAL		**7832.90**	**Sqm**

LIP CUTTING QUANTITY					
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Thickness (m)**	**Quantity**	
0.00 - 0.800	2300	3.23	0.15	1114.35	Cum
0.800 - 2.100	1850	2.72	0.15	754.80	Cum
2.100 - 2.215	800	2.41	0.15	289.20	Cum
2.215 - 2.700	801	1.95	1.15	1796.24	Cum
2.700 - 3.050	802	1.4	2.15	2414.02	Cum
	TOTAL			**6368.61**	**Cum**

SALAIYA MINOR (0.000 TO 2.250 KM)				
JUNGLE CLEARANCE QUANTITY				
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Quantity**	
0.00 - 0.810	810	2.730	2211.30	Sqm
0.810 - 1.500	690	2.110	1455.90	Sqm
1.500 - 1.885	385	1.600	616.00	Sqm
1.885 - 2.250	365	1.300	474.50	Sqm
	TOTAL		**4757.70**	**Sqm**

LIP CUTTING QUANTITY					
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Thickness (m)**	**Quantity**	
0.00 - 0.810	810	2.73	0.15	331.70	Cum
0.810 - 1.500	690	2.11	0.15	218.39	Cum
1.500 - 1.885	385	1.60	0.15	92.40	Cum
1.885 - 2.250	365	1.30	1.15	545.68	Cum
	TOTAL			**1188.16**	**Cum**

DHAMANI SUB DY. (0.000 TO 4750 KM)				
JUNGLE CLEARANCE QUANTITY				
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Quantity**	
0.00 - 2.200	2200	5.68	12496.00	Sqm
2.200 - 4.750	2550	5.09	12979.50	Sqm
	TOTAL		**25475.50**	**Sqm**

LIP CUTTING QUANTITY					
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Thickness (m)**	**Quantity**	
0.00 - 2.200	2200	5.68	0.15	1874.40	Cum
2.200 - 4.750	2550	5.09	0.15	1946.93	Cum
	TOTAL			**3821.33**	**Cum**

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND DETAILS OF QUANTITIES FOR EARTH WORK FOR CHAIN NAWADA SUB DY.				
S.No.	**Items**	**No.**	**Quantity**	**Unit**
1	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.			
	Separate sheet attached	1	*96403.30*	***Sqm***
2	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I. **(Total Excavation) Separate sheet attached.**			
a.	100% of Total Cutting for ordinary soil	1	59459.300	Cum
3	Extra for wet earth all complete as per specifications and direction of E/I.			
	(40% of Total Cutting)	1	23783.72	Cum
4	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.			
	Excavated earth to be used for filling	1	76664.450	Cum
5	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)			
a.	Lead Beyond 150 m but upto 500 m (30 % of net filling)	1	22999.34	Cum
b.	Lead Beyond 500 m but upto 1 km (25% of net filling)	1	19166.11	Cum
c.	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	1	34499.00	Cum
6	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.	1	14460.50	Cum

S.No.	Items	No.	Quantity	Unit
7	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.			
		1	76664.45	Cum

S.No.	Items	No.	Quantity	Unit
	DETAILS OF QUANTITIES FOR EARTH WORK FOR PARANPUR MINOR			
1	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.			
	Separate sheet attached	1	***7832.90***	***Sqm***
2	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I. **(Total Excavation) Separate sheet attached.**			
a.	100% of Total Cutting for ordinary soil	1	1126.750	Cum
3	Extra for wet earth all complete as per specifications and direction of E/I.			
	(40% of Total Cutting)	1	450.7	Cum
4	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.			
	Excavated earth to be used for filling	1	13435.225	Cum
5	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)			
a.	Lead Beyond 150 m but upto 500 m (30 % of net filling)	1	4030.57	Cum
b.	Lead Beyond 500 m but upto 1 km (25% of net filling)	1	3358.81	Cum
c.	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	1	6045.85	Cum
6	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.	1	6368.61	Cum

S.No.	Items	No.	Quantity	Unit
7	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.			
		1	14561.98	Cum

S.No.	Items	No.	Quantity	Unit
	DETAILS OF QUANTITIES FOR EARTH WORK FOR SALAIYA MINOR			
1	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.			
	Separate sheet attached	1	***4757.70***	***Sqm***
2	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I. **(Total Excavation) Separate sheet attached.**			
a.	100% of Total Cutting for ordinary soil	1	1041.600	Cum
3	Extra for wet earth all complete as per specifications and direction of E/I.			
	(40% of Total Cutting)	1	416.64	Cum
4	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.			
	Excavated earth to be used for filling	1	9072.000	Cum
5	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)			
a.	Lead Beyond 150 m but upto 500 m (30 % of net filling)	1	2721.60	Cum
b.	Lead Beyond 500 m but upto 1 km (25% of net filling)	1	2268.00	Cum
c.	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	1	4082.40	Cum
6	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.	1	1188.16	Cum

S.No.	Items	No.	Quantity	Unit
7	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.			
		1	10113.60	Cum

S.No.	Items	No.	Quantity	Unit
	DETAILS OF QUANTITIES FOR EARTH WORK FOR DHAMANI SUB DY.			
1	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.			
	Separate sheet attached	1	***25475.50***	***Sqm***
2	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I. **(Total Excavation) Separate sheet attached.**			
a.	100% of Total Cutting for ordinary soil	1	7701.500	Cum
3	Extra for wet earth all complete as per specifications and direction of E/I.			
	(40% of Total Cutting)	1	3080.6	Cum
4	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.			
	Excavated earth to be used for filling	1	15719.350	Cum
5	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)			
a.	Lead Beyond 150 m but upto 500 m (30 % of net filling)	1	4715.81	Cum
b.	Lead Beyond 500 m but upto 1 km (25% of net filling)	1	3929.84	Cum
c.	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	1	7073.71	Cum
6	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.	1	3821.33	Cum

S.No.	Items	No.	Quantity	Unit
7	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.			
		1	23420.85	Cum

NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND						
ABSTRACT OF QUANTITY OF EARTHWORK FOR CHAIN NAWADA SUB DY.						
Sl. No.	**Reference Clause no.**	**Particular**	**Quantity**	**Unit**	**Rate (in Rs.)**	**Amount in Rs.**
1	**WRD 5.1.3**	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	96403.30	Sqm	**11.80**	1137982.144
2	**WRD 5.1.8**	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I.				
		100% of Total Cutting for ordinary soil	59459.30	Cum	**156.50**	9305380.45
3	**5.1.22**	*Extra for wet earth all complete as per specifications and direction of E/I.*	23783.72	Cum	**17.22**	409496.535
4	**5.1.25**	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.	76664.45	Cum	**165.12**	12658524.29
5	**5.1.46**	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)				
A.	**5.1.46.1**	Lead Beyond 150 m but upto 500 m (30 % of net filling)	22999.34	Cum	**174.89**	4022353.70
B.	**5.1.46.2**	Lead Beyond 500 m but upto 1 km (25% of net filling)	19166.11	Cum	**217.92**	4176679.24
C.	**5.1.46.4**	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	34499.00	Cum	**319.14**	11010011.66
6	**5.1.21**	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.				
			14460.50	Cum	**196.10**	2835703.07

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
7	**WRD 5.1.39**	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.	76664.45	Cum	**61.88**	4744175.92
TOTAL COST OF EARTHWORK (in Rs.)						**50300307.00**
TOTAL COST OF EARTHWORK (in Rs. Lakhs)						**503.003**

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
		ABSTRACT OF QUANTITY OF EARTHWORK FOR PARANPUR MINOR				
1	**WRD 5.1.3**	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	7832.90	Sqm	**11.80**	92462.60587
2	**WRD 5.1.8**	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I.				
		100% of Total Cutting for ordinary soil	1126.75	Cum	**156.50**	176336.375
3	**5.1.22**	*Extra for wet earth all complete as per specifications and direction of E/I.*	450.70	Cum	**17.22**	7759.933616
4	**5.1.25**	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.	13435.23	Cum	**165.12**	2218370.08
5	**5.1.46**	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)				
A.	**5.1.46.1**	Lead Beyond 150 m but upto 500 m (30 % of net filling)	4030.57	Cum	**174.89**	704905.95
B.	**5.1.46.2**	Lead Beyond 500 m but upto 1 km (25% of net filling)	3358.81	Cum	**217.92**	731951.06
C.	**5.1.46.4**	Lead Beyond 1.5 km but upto 2 km 45% of net filling)	6045.85	Cum	**319.14**	1929472.97
6	**5.1.21**	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.				
			6368.61	Cum	**196.10**	1248884.91

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
7	**WRD 5.1.39**	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.	14561.98	Cum	**61.88**	901129.16
TOTAL COST OF EARTHWORK (in Rs.)						**8011273.04**
TOTAL COST OF EARTHWORK (in Rs. Lakhs)						**80.113**

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
ABSTRACT OF QUANTITY OF EARTHWORK FOR SALAIYA MINOR						
1	**WRD 5.1.3**	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	4757.70	Sqm	**11.80**	56161.74597
2	**WRD 5.1.8**	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I.				
		100% of Total Cutting for ordinary soil	1041.60	Cum	**156.50**	163010.4
3	**5.1.22**	*Extra for wet earth all complete as per specifications and direction of E/I.*	416.64	Cum	**17.22**	7173.505085
4	**5.1.25**	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.	9072.00	Cum	**165.12**	1497931.99
5	**5.1.46**	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)				
A.	**5.1.46.1**	Lead Beyond 150 m but upto 500 m (30 % of net filling)	2721.60	Cum	**174.89**	475980.62
B.	**5.1.46.2**	Lead Beyond 500 m but upto 1 km (25% of net filling)	2268.00	Cum	**217.92**	494242.56
C.	**5.1.46.4**	Lead Beyond 1.5 km but upto 2 km 45% of net filling)	4082.40	Cum	**319.14**	1302857.14
6	**5.1.21**	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.				
			1188.16	Cum	**196.10**	232997.20

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
7	**WRD 5.1.39**	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.	10113.60	Cum	**61.88**	625853.28
TOTAL COST OF EARTHWORK (in Rs.)						**4856208.44**
TOTAL COST OF EARTHWORK (in Rs. Lakhs)						**48.562**

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
ABSTRACT OF QUANTITY OF EARTHWORK FOR DHAMANI SUB DY.						
1	**WRD 5.1.3**	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	25475.50	Sqm	**11.80**	300722.7356
2	**WRD 5.1.8**	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I.				
		100% of Total Cutting for ordinary soil	7701.50	Cum	**156.50**	1205284.75
3	**5.1.22**	*Extra for wet earth all complete as per specifications and direction of E/I.*	3080.60	Cum	**17.22**	53040.27401
4	**5.1.25**	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.	15719.35	Cum	**165.12**	2595515.57
5	**5.1.46**	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)				
A.	**5.1.46.1**	Lead Beyond 150 m but upto 500 m (30 % of net filling)	4715.81	Cum	**174.89**	824747.14
B.	**5.1.46.2**	Lead Beyond 500 m but upto 1 km (25% of net filling)	3929.84	Cum	**217.92**	856390.19
C.	**5.1.46.4**	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	7073.71	Cum	**319.14**	2257503.01
6	**5.1.21**	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.				
			3821.33	Cum	**196.10**	749361.83

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
7	**WRD 5.1.39**	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.	23420.85	Cum	**61.88**	1449337.11
TOTAL COST OF EARTHWORK (in Rs.)						**10291902.61**
TOTAL COST OF EARTHWORK (in Rs. Lakhs)						**102.919**

DETAIL QUANTITIES OF HEAD REGULATOR GATE OF PARANPUR MINOR				
Calculation procedure of Gate's weight for estimation purpose				
1	**Weight of 1 Vertical lift gate including embedded parts**	**0.1332x(L^2XHxh)^0.659**		
	(L) is length = clear vent width in m + 0.50m.	2.000	0.500	**2.50**
	(H) is height of gate in m = clear vent height in m+ 0.20m.	1.200	0.200	**1.40**
	(h) is head of water above sill of gate in m	1.200	0.3	**1.500**
	Weight of lift gate including embedded parts	**0.73**		**T**
2	**Capacity of screw hoist in tone including 25%reserve capacity (Hoist capacity shall be rounded off to next 1 tonne)**	**2.50 xWt of gate**		
		2.5	0.73	1
	Weight of screw hoist with all accessories	300 kg per tonne capacity of hoist		
		300	1	300.00
	Weight of screw hoist with all accessories	**0.30**		**T**
3	**Weight of hoist bridge:**			
(i)	Columns with bracings/Anchors/Stiffeners	400 kg per meter height		
		1.500	400	600
	Columns with bracings/Anchors/Stiffeners	**0.6**		**T**
(ii)	Beams with cross beams/stiffeners	400 kg per meter span		
		1.5	400	600
	Beams with cross beams/stiffeners	**0.6**		**T**
(iii)	Railing/ Chequered plate/Ladder etc	10% of wt. of columns/beams		
		1.2	10%	0.12
	Railing/ Chequered plate/Ladder etc	**0.12**		**T**
Total Weight of One Gate		**2.35**		**T**

DETAIL QUANTITIES OF HEAD REGULATOR GATE OF SALAIYA MR.				
Calculation procedure of Gate's weight for estimation purpose				
1	**Weight of 1 Vertical lift gate including embedded parts**	**0.1332x(L^2XHxh)^0.659**		
	(L) is length = clear vent width in m + 0.50m.	1.500	0.500	**2.00**
	(H) is height of gate in m = clear vent height in m+ 0.20m.	1.200	0.200	**1.40**
	(h) is head of water above sill of gate in m	1.200	0.3	**1.500**
	Weight of lift gate including embedded parts	**0.54**		**T**
2	**Capacity of screw hoist in tone including 25%reserve capacity (Hoist capacity shall be rounded off to next 1 tonne)**	**2.50 xWt of gate**		
		2.5	0.54	1
	Weight of screw hoist with all accessories	300 kg per tonne capacity of hoist		
		300	1	300.00
	Weight of screw hoist with all accessories	**0.30**		**T**
3	**Weight of hoist bridge:**			
(i)	Columns with bracings/Anchors/Stiffeners	400 kg per meter height		
		1.500	400	600
	Columns with bracings/Anchors/Stiffeners	**0.6**		**T**
(ii)	Beams with cross beams/stiffeners	400 kg per meter span		
		1.5	400	600
	Beams with cross beams/stiffeners	**0.6**		**T**
(iii)	Railing/ Chequered plate/Ladder etc	10% of wt. of columns/beams		
		1.2	10%	0.12
	Railing/ Chequered plate/Ladder etc	**0.12**		**T**
Total Weight of One Gate		**2.16**		**T**

DETAIL QUANTITIES OF HEAD REGULATOR GATE OF DHAMNI SUB DY				
Calculation procedure of Gate's weight for estimation purpose				
1	**Weight of 1 Vertical lift gate including embedded parts**	**0.1332x(L^2XHxh)^0.659**		
	(L) is length = clear vent width in m + 0.50m.	1.900	0.500	**2.40**
	(H) is height of gate in m = clear vent height in m+ 0.20m.	1.500	0.200	**1.70**
	(h) is head of water above sill of gate in m	1.500	0.3	**1.800**
	Weight of lift gate including embedded parts	**0.88**		**T**
2	**Capacity of screw hoist in tone including 25%reserve capacity (Hoist**	**2.50 xWt of gate**		
		2.5	0.88	1
	Weight of screw hoist with all accessories	300 kg per tonne capacity of hoist		
		300	1	300.00
	Weight of screw hoist with all accessories	**0.30**		**T**
3	**Weight of hoist bridge:**			
(i)	Columns with bracings/Anchors/Stiffeners	400 kg per meter height		
		1.800	400	720
	Columns with bracings/Anchors/Stiffeners	**0.72**		**T**
(ii)	Beams with cross beams/stiffeners	400 kg per meter span		
		1.8	400	720
	Beams with cross beams/stiffeners	**0.72**		**T**
(iii)	Railing/ Chequered plate/Ladder etc	10% of wt. of columns/beams		
		1.44	10%	0.144
	Railing/ Chequered plate/Ladder etc	**0.144**		**T**
Total Weight of One Gate		**2.77**		**T**
Total Weight of Two Gates		**5.53**		**T**

NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND ANALYSIS OF RATE OF HEAD REGULATOR GATE			
1	Cost of material **(A)** (Structural Steel WRD M-181)	Rs.	55116.67
2	Wastage **5%** =	Rs.	2755.83
3	Cost of miscellaneous material like electrodes,oxygen, acetylene nut bolt, rope	Rs.	35825.84
	Total 1+2+3= ***(B)*** =	Rs.	93698.34
4	Labour charge 30%(B) =	Rs.	28109.50
5	Overhead charge + Contractor profit **@15% A**	Rs.	8267.50
6	Workshop and energy charge ,**12 % of (B)**	Rs.	11243.80
7	Transportation and erection charge ,**15 % of B**	Rs.	14054.75
	Total = B+4+5+6+7 = ***C***	Rs.	155373.89
8	Other incidental charge , **3 % = of C**	Rs.	4661.22
	Total C+8 = D	Rs.	**160035.11**

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND								
ABSTRACT OF COST HR FOR PARANPUR MR OFFTAKING FROM RD-9+320 KM (L.) AT CHAIN NAWADA SUB DY								
S. No.	**Item of Works**	**Qty.**	**Unit**	**Rate (As per WRD SOR 2025 & PL MARCH 2025)**	**Amount (Rs)**	**Cement (MT)**	**Coarse Sand (Cum)**	**Coarse Aggregate (Cum)**
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	153.416	Cum	**195.20**	29946.82			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	19.49	Cum	**6381.70**	124359.73	6.31	8.77	17.54
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	92.71	Cum	**6914.20**	641048.64	38.24	39.87	79.73
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	19.30	Cum	**8151.40**	157331.91	10.94	7.53	15.25

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	2.61	MT	**73574.90**	192085.00			
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	2.35	MT	**160035.11**	375548.10			
7	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	308.53	Sqm	**578.60**	178517.87			
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	12.77	Sqm	**680.10**	8687.60			
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry. (WRD M-002)	3.78	Cum	**694.61**	2625.63			
10	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	3.78	Cum	**1237.00**	4675.86			
11	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)	1.32	Cum	**1377.70**	1818.56			
12	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	1.32	Cum	**516.50**	681.78			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	Cum	**5588.70**	11177.40			
14	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications. (3.18 PWD NH SOR CHHATISGARH 2025)	4.20	Sqm	**66.00**	277.20			
15	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. (RCD 15.22 - (ii))	10.50	RM	**499.80**	5247.90			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
16	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	28.70	Sqm	**149.30**	4284.86			
17	**Carriage of materials**							
	Coarse Sand (60 Km lead)	56.164	Cum	**1075.00**	60376.25			
	Coarse Aggregates (100 Km lead)	113.841	Cum	**1398.00**	159149.60			
	Cement (30 km lead)	55.502	MT	**742.00**	41182.79			
	Boulder (60 Km lead)	3.78	Cum	**1159.00**	4381.02			
	Steel (30 Km lead)	4.96	MT	**742.00**	3678.39			
TOTAL (In Rs.)					**2007082.92**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	56.16	Cum	**584.64**	32835.69	3283.57		
	Coarse Aggregate	113.84	Cum	**944.26**	107495.43	10749.54		
	Boulders	3.78	Cum	**694.61**	2625.63	262.56		
	Total					14295.67		
	For 1 nos. HR, Total Seigniorage charges					**14295.67**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST HR FOR SALAIYA MR OFFTAKING FROM RD-11+070 KM (L.) AT CHAIN NAWADA SUB DY								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	129.118	Cum	**195.20**	25203.91			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	18.13	Cum	**6381.70**	115703.84	5.87	8.16	16.32
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	76.02	Cum	**6914.20**	525589.19	31.36	32.69	65.37
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	17.21	Cum	**8151.40**	140252.95	9.76	6.71	13.59

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	2.12	MT	**73574.90**	155876.50			
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	2.16	MT	**160035.11**	345917.05			
7	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	263.62	Sqm	**578.60**	152532.29			
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	12.77	Sqm	**680.10**	8687.60			
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry. (WRD M-002)	2.43	Cum	**694.61**	1687.90			
10	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	2.43	Cum	**1237.00**	3005.91			
11	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)	0.99	Cum	**1377.70**	1363.92			
12	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.99	Cum	**516.50**	511.34			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	Cum	**5588.70**	11177.40			
14	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications. (3.18 PWD NH SOR CHHATISGARH 2025)	4.20	Sqm	**66.00**	277.20			
15	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. (RCD 15.22 - (ii))	10.50	RM	**499.80**	5247.90			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
16	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	24.55	Sqm	**149.30**	3665.74			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
17	**Carriage of materials**							
	Coarse Sand (60 Km lead)	47.556	Cum	**1075.00**	51122.63			
	Coarse Aggregates (100 Km lead)	96.274	Cum	**1398.00**	134590.95			
	Cement (30 km lead)	46.987	MT	**742.00**	34864.11			
	Boulder (60 Km lead)	2.43	Cum	**1159.00**	2816.37			
	Steel (30 Km lead)	4.28	MT	**742.00**	3175.85			
	TOTAL (In Rs.)				**1723270.54**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	47.56	Cum	**584.64**	27803.10	2780.31		
	Coarse Aggregate	96.27	Cum	**944.26**	90907.62	9090.76		
	Boulders	2.43	Cum	**694.61**	1687.90	168.79		
	Total					12039.86		
	For 1 nos. HR, Total Seigniorage charges					**12039.86**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST HR FOR DHAMNI SUB DY OFFTAKING FROM RD-13+800 KM (L.) AT CHAIN NAWADA SUB DY								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	193.568	Cum	**195.20**	37784.53			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	26.96	Cum	**6381.70**	172026.42	8.73	12.13	24.26
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	112.81	Cum	**6914.20**	780009.80	46.54	48.51	97.02
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	27.25	Cum	**8151.40**	222132.18	15.45	10.63	21.53

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	3.19	MT	**73574.90**	234911.00			
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	5.53	MT	**160035.11**	885473.19			
7	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	365.36	Sqm	**578.60**	211397.99			
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	12.77	Sqm	**680.10**	8687.60			
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry. (WRD M-002)	8.64	Cum	**694.61**	6001.43			
10	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	8.64	Cum	**1237.00**	10687.68			
11	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)	2.51	Cum	**1377.70**	3455.27			
12	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	2.51	Cum	**516.50**	1295.38			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	Cum	**5588.70**	11177.40			
14	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications. (3.18 PWD NH SOR CHHATISGARH 2025)	4.20	Sqm	**66.00**	277.20			
15	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. (RCD 15.22 - (ii))	10.50	RM	**499.80**	5247.90			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
16	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	31.82	Sqm	**149.30**	4750.87			
17	**Carriage of materials**							
	Coarse Sand (60 Km lead)	71.268	Cum	**1075.00**	76612.65			
	Coarse Aggregates (100 Km lead)	145.316	Cum	**1398.00**	203151.31			
	Cement (30 km lead)	70.720	MT	**742.00**	52474.44			
	Boulder (60 Km lead)	8.64	Cum	**1159.00**	10013.76			
	Steel (30 Km lead)	8.73	MT	**742.00**	6474.55			
TOTAL (In Rs.)					**2944042.54**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	71.27	Cum	**584.64**	41665.88	4166.59		
	Coarse Aggregate	145.32	Cum	**944.26**	137215.77	13721.58		
	Boulders	8.64	Cum	**694.61**	6001.43	600.14		
	Total					18488.31		
	For 1 nos. HR, Total Seigniorage charges					**18488.31**		

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND							
DETAILS OF QUANTITIES OF HR FOR PARANPUR MR OFFTAKING FROM RD-9+320 KM (L.) AT CHAIN NAWADA SUB DY							
S.No.	**Items**	**No.**	**Length**	**Width**	**Height**	**Quantity**	**Unit**
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section A-A	*2*	*1.15*	*1.64*	*3.140*	*11.844*	*Cum*
	Section B-B	*2*	*5.25*	*1.73*	*2.490*	*45.231*	*Cum*
	Section C-C	*2*	*0.50*	*1.55*	*2.490*	*3.860*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.08*	*1.27*	*3.140*	*12.278*	*Cum*
	Left Bank Sec a to d	1	3.31	2.71	2.050	*18.338*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.50*	*1.10*	*2.690*	*2.959*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.68*	*1.94*	*2.690*	*27.984*	*Cum*
	Floor						
	U/S key	*1*	*1.35*	*3.44*	*0.850*	*3.947*	*Cum*
	Floor	*1*	*3.535*	*3.44*	*0.650*	*7.904*	*Cum*
		1	*0.318*	*2*	*0.450*	*0.286*	*Cum*
		1	*0.618*	*2*	*0.350*	*0.433*	*Cum*
		1	*0.09*	*2*	*0.000*	*0.180*	*Cum*
		1	*3.097*	*2*	*0.950*	*5.884*	*Cum*
		1	*0.9*	*2*	*0.200*	*0.360*	*Cum*
		2	*0.135*	*2*	*0.200*	*0.108*	*Cum*
		1	*1.367*	*2*	*0.650*	*1.777*	*Cum*
		1	*0.835*	*2*	*1.091*	*1.822*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*1*	*2.000*	*2.000*	*0.600*	*2.400*	*Cum*
	Toe Wall Base D/S Portion	*1*	*2.000*	*0.850*	*1.200*	*2.040*	*Cum*
	Boulder Pitching (D/S Portion)	*1*	*3.000*	*1.400*	*0.900*	*3.780*	*Cum*
						153.42	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor						
		1	*0.624*	*3.985*	*0.150*	*0.37*	*Cum*
		1	*1.655*	*2.545*	*0.150*	*0.63*	*Cum*
		1	*1.374*	*2.000*	*0.150*	*0.41*	*Cum*
		1	*0.670*	*2.000*	*0.150*	*0.20*	*Cum*
		1	*3.238*	*2.000*	*0.150*	*0.97*	*Cum*
		1	*0.948*	*2.000*	*0.150*	*0.28*	*Cum*
		1	*0.100*	*2.000*	*0.150*	*0.03*	*Cum*
		1	*1.052*	*2.000*	*0.150*	*0.32*	*Cum*
		1	*0.692*	*2.000*	*0.150*	*0.21*	*Cum*
	PCC Below Abutment						
	Section A-A	*2*	*1.150*	*1.640*	*0.300*	*1.13*	*Cum*
	Section B-B	*2*	*5.250*	*1.730*	*0.300*	*5.45*	*Cum*
	Section C-C	*2*	*0.500*	*1.550*	*0.300*	*0.47*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.079*	*1.270*	*0.300*	*1.17*	*Cum*
	Left Bank Sec a to d	*1*	*3.307*	*2.705*	*0.150*	*1.34*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.500*	*1.100*	*0.300*	*0.33*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.675*	*1.945*	*0.300*	*3.12*	*Cum*
	Toe Wall Base D/S Portion	*1*	*2.000*	*0.850*	*0.300*	*0.51*	*Cum*
	Toe Wall Stem D/S Portion	*1*	*2.000*	*0.450*	*0.900*	*0.81*	*Cum*
	Toe Wall Base (For Brick Pitching)	*1*	*3.000*	*0.600*	*0.150*	*0.27*	*Cum*
	Toe Wall Stem (For Brick Pitching)	*1*	*3.000*	*0.300*	*0.900*	*0.81*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*6*	*0.600*	*0.600*	*0.300*	*0.65*	*Cum*
	TOTAL					**19.49**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Abutment						
	Section A-A	*2*	*1.15*	*0.82*	*0.50*	*0.94*	*Cum*
		2	*1.15*	*1.03*	*0.70*	*1.66*	*Cum*
		2	*1.15*	*1.24*	*1.64*	*4.68*	*Cum*
	Section B-B	*2*	*5.25*	*1.08*	*0.85*	*9.59*	*Cum*
		2	*5.25*	*1.33*	*1.34*	*18.71*	*Cum*
	Section C-C	*2*	*0.50*	*0.99*	*0.55*	*0.54*	*Cum*
		2	*0.50*	*1.15*	*1.64*	*1.89*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.08*	*0.45*	*0.50*	*0.69*	*Cum*
		1	*3.08*	*0.66*	*0.70*	*1.42*	*Cum*
		1	*3.08*	*0.87*	*1.64*	*4.39*	*Cum*
	Left Bank						
	Section a-a	*1*		*2.58*	*0.50*	*1.29*	*Sqm*
		1		*2.43*	*0.20*	*0.49*	*Sqm*
		1		*1.38*	*1.20*	*1.66*	*Sqm*
						3.43	***Sqm***
	Section b-b	*1*		*2.58*	*0.50*	*1.29*	*Sqm*
		1		*2.43*	*0.20*	*0.49*	*Sqm*
		1		*1.29*	*1.20*	*1.54*	*Sqm*
						3.32	***Sqm***
	Section c-c	*1*		*2.58*	*0.50*	*1.29*	*Sqm*
		1		*2.43*	*0.20*	*0.49*	*Sqm*
		1		*1.10*	*1.20*	*1.32*	*Sqm*
						3.10	***Sqm***
	Section d-d	*1*		*2.58*	*0.50*	*1.29*	*Sqm*
		1		*2.43*	*0.20*	*0.49*	*Sqm*
		1		*0.48*	*1.20*	*0.58*	*Sqm*
						2.35	***Sqm***
	Bottom Key	*1*	*3.31*	*1.35*	*0.70*	*3.13*	*Cum*
	Top Stem Area	*1*	*3.31*	*3.05*		*10.09*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.50*	*0.70*	*1.34*	*0.94*	*Cum*
		2	*0.50*	*0.53*	*0.55*	*0.29*	*Cum*
		2	*0.50*	*0.35*	*0.50*	*0.18*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.68*	*1.54*	*1.34*	*11.07*	*Cum*
		2	*2.68*	*1.24*	*0.55*	*3.64*	*Cum*
		2	*2.68*	*0.74*	*0.50*	*1.98*	*Cum*
	TOTAL					**75.83**	**Cum**
	Floor						
	U/S key	*1*	*1.35*	*3.44*	*0.70*	*3.25*	*Cum*
	Floor	*1*	*3.54*	*3.44*	*0.50*	*6.08*	*Cum*
		1	*0.32*	*2.00*	*0.30*	*0.19*	*Cum*
		1	*0.62*	*2.00*	*0.20*	*0.25*	*Cum*
		1	*0.09*	*2.00*		*0.18*	*Cum*
		1	*3.10*	*2.00*	*0.50*	*3.10*	*Cum*
		1	*0.90*	*2.00*	*0.20*	*0.36*	*Cum*
		2	*0.14*	*2.00*		*0.54*	*Cum*
		1	*1.37*	*2.00*	*0.50*	*1.37*	*Cum*
	D/S key	*1*	*0.84*	*2.00*	*0.94*	*1.57*	*Cum*
	TOTAL					**92.71**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Floor	*1*	*3.53*	*3.44*	*0.20*	*2.43*	*Cum*
		1	*0.67*	*2.00*	*0.20*	*0.27*	*Cum*
		1	*3.08*	*2.00*	*0.20*	*1.23*	*Cum*
		1	*0.95*	*2.00*	*0.20*	*0.38*	*Cum*
		1	*1.37*	*2.00*	*0.20*	*0.55*	*Cum*
	Top Slab	*1*	*5.25*	*2.80*	*0.33*	*4.80*	*Cum*
	75mm Th. Wearing coat on top slab	*1*	*4.25*	*2.80*	*0.08*	*0.89*	*Cum*
	Dirt wall	*2*	*5.75*	*0.82*	*0.50*	*4.72*	*Cum*
		2	*5.75*	*0.40*	*0.43*	*1.96*	*Cum*
	Parapet	*2*	*3.64*	*0.45*	*0.18*	*0.57*	*Cum*
		2	*3.64*	*0.35*	*0.25*	*0.64*	*Cum*
		2	*3.64*	*0.22*	*0.55*	*0.87*	*Cum*
	TOTAL					**19.30**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
5	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Dia of Bars	**Length**	**Nos.**		**Weight per m**	**Quantity**	**Unit**
	Slab Per Span						
a1	*16*	*3.260*	*29*		*1.578*	*149.197*	*Kg*
a2	*10*	*5.650*	*14*		*0.616*	*48.762*	*Kg*
a3	*10*	*5.150*	*2*		*0.616*	*6.350*	*Kg*
a4	*10*	*3.180*	*18*		*0.616*	*35.286*	*Kg*
a5	*10*	*5.550*	*10*		*0.616*	*34.214*	*Kg*
	Dirt Wall						
d1	*12*	*4.460*	*26*		*0.888*	*102.938*	*Kg*
d2	*12*	*5.550*	*14*		*0.888*	*68.975*	*Kg*
	Crash Barrier						
x1	*12*	*2.501*	*46*		*0.888*	*102.127*	*Kg*
x2	*16*	*1.265*	*46*		*1.578*	*91.832*	*Kg*
x3	*10*	*2.700*	*24*		*0.616*	*39.947*	*Kg*
	Floor R/F						
	U/S Key						
	12	*6.955*	*9*		*0.888*	*55.566*	*Kg*
	12	*2.700*	*26*		*0.888*	*62.317*	*Kg*
	floor raft						
	12	*4.549*	*9*		*0.888*	*36.343*	*Kg*
	12	*7.569*	*18*		*0.888*	*120.942*	*Kg*
	12	*2.700*	*70*		*0.888*	*167.776*	*Kg*
	0.25 % Skin Reinforcement for Transition walls	*75.83*	*0.25%*	*0.19*	*7850*	*1488.17*	*Kg*
	TOTAL Weight of steel (in kg)					2610.74	Kg
	TOTAL Weight of Steel (in Tonne)					**2.61**	**MT**
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	1		2.35		**2.35**	**MT**
	*Separate sheet attached						
7	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section A-A	*4*	*1.15*		*0.50*	*2.30*	*Sqm*
		4		*0.82*	*0.50*	*1.64*	*Sqm*
		4	*1.15*		*0.70*	*3.22*	*Sqm*
		4		*1.03*	*0.70*	*2.88*	*Sqm*
		4	*1.15*		*1.64*	*7.54*	*Sqm*
		4		*1.24*	*1.64*	*8.13*	*Sqm*
	Section B-B	*4*	*5.25*		*0.85*	*17.85*	*Sqm*
		4		*1.08*	*0.85*	*3.66*	*Sqm*
		4	*5.25*		*1.34*	*28.14*	*Sqm*
		4		*1.33*	*1.34*	*7.13*	*Sqm*
	Section C-C	*4*	*0.50*		*0.55*	*1.10*	*Sqm*
		4		*0.99*	*0.55*	*2.17*	*Sqm*
		4	*0.50*		*1.64*	*3.28*	*Sqm*
		4		*1.15*	*1.64*	*7.54*	*Sqm*
	U/S Transition wall						
	Right Bank (Section D-D)	*2*	*3.08*		*0.50*	*3.08*	*Sqm*
		2		*0.45*	*0.50*	*0.45*	*Sqm*
		2	*3.08*		*0.70*	*4.31*	*Sqm*
		2		*0.66*	*0.70*	*0.92*	*Sqm*
		2	*3.08*		*1.64*	*10.10*	*Sqm*
		2		*0.87*	*1.64*	*2.85*	*Sqm*
	Left Bank						
	Bottom Key	*2*	*3.31*		*0.70*	*4.63*	*Sqm*
		2		*1.35*	*0.70*	*1.89*	*Sqm*
	Section a-a	*2*	*1.10*		*0.50*	*1.10*	*Sqm*
		2		*2.58*	*0.50*	*2.58*	*Sqm*
		2	*1.10*		*0.20*	*0.44*	*Sqm*
		2		*2.43*	*0.20*	*0.97*	*Sqm*
		2	*1.10*		*1.20*	*2.65*	*Sqm*
		2		*1.38*	*1.20*	*3.31*	*Sqm*
	Section b-b	*2*	*1.10*		*0.50*	*1.10*	*Sqm*
		2		*2.58*	*0.50*	*2.58*	*Sqm*
		2	*1.10*		*0.20*	*0.44*	*Sqm*
		2		*2.43*	*0.20*	*0.97*	*Sqm*
		2	*1.10*		*1.20*	*2.65*	*Sqm*
		2		*1.29*	*1.20*	*3.09*	*Sqm*
	Section c-c	*2*	*1.10*		*0.50*	*1.10*	*Sqm*
		2		*2.58*	*0.50*	*2.58*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	1.10		0.20	0.44	Sqm
		2		2.43	0.20	0.97	Sqm
		2	1.10		1.20	2.65	Sqm
		2		1.10	1.20	2.65	Sqm
	Section d-d	2	1.10		0.50	1.10	Sqm
		2		2.58	0.50	2.58	Sqm
		2	1.10		0.20	0.44	Sqm
		2		2.43	0.20	0.97	Sqm
		2	1.10		1.20	2.65	Sqm
		2		0.48	1.20	1.15	Sqm
	D/S Transition wall						
	Sec 4-4	4	0.50		1.34	2.68	Sqm
		4		0.70	1.34	3.75	Sqm
		4	0.50		0.55	1.10	Sqm
		4		0.53	0.55	1.16	Sqm
		4	0.50		0.50	1.00	Sqm
		4		0.35	0.50	0.70	Sqm
	Avg. of Sec 1-1 & 3-3	4	2.68		1.34	14.34	Sqm
		4		1.54	1.34	8.28	Sqm
		4	2.68		0.55	5.89	Sqm
		4		1.24	0.55	2.72	Sqm
		4	2.68		0.50	5.35	Sqm
		4		0.74	0.50	1.48	Sqm
	Floor						
	U/S key	2	1.35		0.70	1.89	Sqm
		2		3.44	0.70	4.82	Sqm
	Floor	2	3.54		0.50	3.54	Sqm
		2		3.44	0.50	3.44	Sqm
		2	0.32		0.30	0.19	Sqm
		2		2.00	0.30	1.20	Sqm
		2	0.62		0.20	0.25	Sqm
		2		2.00	0.20	0.80	Sqm
		2	0.09		0.00	0.18	Sqm
		2		2.00	0.00	4.00	Sqm
		2	3.10		0.50	3.10	Sqm
		2		2.00	0.50	2.00	Sqm
		2	0.90		0.20	0.36	Sqm
		2		2.00	0.20	0.80	Sqm
		4	0.14			0.54	Sqm
		4		2.00		8.00	Sqm
		2	1.37		0.50	1.37	Sqm
		2		2.00	0.50	2.00	Sqm
	D/S key	2	0.84		0.94	1.57	Sqm
		2		2.00	0.94	3.76	Sqm
	Toe Wall Base D/S Portion	2	2.00		0.30	1.20	Sqm
		2		0.85	0.30	0.51	Sqm
	Toe Wall Stem D/S Portion	2	2.00		0.90	3.60	Sqm
		2		0.45	0.90	0.81	Sqm
	Top Slab	2	5.25		0.33	3.43	Sqm
		2		2.80	0.33	1.83	Sqm
	Dirt wall	4	5.75		0.50	11.50	Sqm

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		4		*0.82*	*0.50*	*1.64*	*Sqm*
		4	*5.75*		*0.43*	*9.78*	*Sqm*
		4		*0.40*	*0.43*	*0.68*	*Sqm*
	Parapet	*4*	*3.64*		*0.18*	*2.55*	*Sqm*
		4		*0.45*	*0.18*	*0.31*	*Sqm*
		4	*3.64*		*0.25*	*3.64*	*Sqm*
		4		*0.35*	*0.25*	*0.35*	*Sqm*
		4	*3.64*		*0.55*	*8.01*	*Sqm*
		4		*0.22*	*0.55*	*0.48*	*Sqm*
	TOTAL					**308.53**	**Sqm**
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*3.00*	*2.13*		*12.77*	*Sqm*
	TOTAL					**12.77**	**Sqm**
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.**(WRD M-002)**						
	Boulder Apron in D/S Portion	*1*	*3.00*	*1.40*	*0.90*	*3.78*	***Cum***
	TOTAL					**3.78**	**Cum**
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)						
	In D/S Portion below C.C. Blocks	*1*	*2.20*	*2.00*	*0.15*	*0.66*	*Cum*
	In D/S Portion below Stone Chips	*1*	*2.20*	*2.00*	*0.15*	*0.66*	*Cum*
	TOTAL					**1.32**	**Cum**
11	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	U/S transition	*2*	*1.80*	*0.48*		*1.73*	*Sqm*
	On Abutment Top	*2*	*4.82*	*0.45*		*1.62*	*Sqm*
	TOTAL					**3.35**	**Sqm**
12	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2	1			**2.00**	**No.**
13	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications**. (3.18 PWD NH SOR CHHATISGARH 2025)**	2	5.25	0.40		**4.20**	**Sqm**
14	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. **(RCD 15.22 - (ii))**	2	5.25			**10.50**	**RM**
15	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compa.cted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Abutment						
	Section A-A	2	*1.15*	*1.08*		*2.491*	*Cum*
	Section B-B	2	*5.25*	*1.41*		*14.837*	*Cum*
	Section C-C	2	*0.50*	*1.18*		*1.177*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	1	*3.08*	*0.93*		*2.849*	*Cum*
	D/S Transition wall						
	Sec 4-4	2	*0.50*	*0.75*		*0.749*	*Cum*
	Avg. of Sec 1-1 & 3-3	2	*2.68*	*1.23*		*6.597*	*Cum*
	TOTAL					**28.70**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF HR FOR SALAIYA OFFTAKING FROM RD-11+070 KM (L.) AT CHAIN NAWADA SUB DY						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section A-A	*2*	*1.00*	*1.64*	*2.800*	*9.184*	*Cum*
	Section B-B	*2*	*5.25*	*1.73*	*2.050*	*37.238*	*Cum*
	Section C-C	*2*	*0.41*	*1.55*	*2.050*	*2.580*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.09*	*1.27*	*2.700*	*10.601*	*Cum*
	Left Bank Sec a to d	1	3.30	2.70	2.046	*18.219*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.50*	*1.10*	*2.250*	*2.475*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.68*	*1.94*	*2.250*	*23.407*	*Cum*
	Floor						
	U/S key	*1*	*1.35*	*3.44*	*0.850*	*3.947*	*Cum*
	Floor	*1*	*3.528*	*3.44*	*0.650*	*7.889*	*Cum*
		1	*0.318*	*1.5*	*0.450*	*0.215*	*Cum*
		1	*0.618*	*1.5*	*0.350*	*0.324*	*Cum*
		1	*0.0927*	*1.5*	*0.000*	*0.139*	*Cum*
		1	*3.079*	*1.5*	*0.950*	*4.388*	*Cum*
		1	*0.9*	*1.5*	*0.200*	*0.270*	*Cum*
		2	*0.135*	*1.5*	*0.200*	*0.081*	*Cum*
		1	*1.123*	*1.5*	*0.650*	*1.095*	*Cum*
		1	*0.725*	*1.5*	*0.650*	*0.707*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*1*	*2.000*	*2.000*	*0.600*	*2.400*	*Cum*
	Toe Wall Base D/S Portion	*1*	*1.500*	*0.850*	*1.200*	*1.530*	*Cum*
	Boulder Pitching (D/S Portion)	*1*	*3.000*	*0.900*	*0.900*	*2.430*	*Cum*
						129.12	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor						
		1	*0.624*	*3.463*	*0.150*	*0.32*	*Cum*
		1	*1.650*	*2.040*	*0.150*	*0.50*	*Cum*
		1	*1.374*	*1.500*	*0.150*	*0.31*	*Cum*
		1	*0.670*	*1.500*	*0.150*	*0.15*	*Cum*
		1	*3.238*	*1.500*	*0.150*	*0.73*	*Cum*
		1	*0.948*	*1.500*	*0.150*	*0.21*	*Cum*
		1	*0.075*	*1.500*	*0.150*	*0.02*	*Cum*
		1	*0.559*	*1.500*	*0.150*	*0.13*	*Cum*
		1	*0.692*	*1.500*	*0.150*	*0.16*	*Cum*
	PCC Below Abutment						
	Section A-A	*2*	*1.000*	*1.640*	*0.300*	*0.98*	*Cum*
	Section B-B	*2*	*5.250*	*1.730*	*0.300*	*5.45*	*Cum*
	Section C-C	*2*	*0.406*	*1.550*	*0.300*	*0.38*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.092*	*1.270*	*0.300*	*1.18*	*Cum*
	Left Bank Sec a to d	*1*	*3.298*	*2.700*	*0.150*	*1.34*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.500*	*1.100*	*0.300*	*0.33*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.675*	*1.945*	*0.300*	*3.12*	*Cum*
	Toe Wall Base D/S Portion	*1*	*1.500*	*0.850*	*0.300*	*0.38*	*Cum*
	Toe Wall Stem D/S Portion	*1*	*1.500*	*0.450*	*0.900*	*0.61*	*Cum*
	Toe Wall Base (For Brick Pitching)	*1*	*3.000*	*0.600*	*0.150*	*0.27*	*Cum*
	Toe Wall Stem (For Brick Pitching)	*1*	*3.000*	*0.300*	*0.900*	*0.81*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*7*	*0.600*	*0.600*	*0.300*	*0.76*	*Cum*
	TOTAL					**18.13**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Section A-A	*2*	*1.00*	*0.82*	*0.50*	*0.82*	*Cum*
		2	*1.00*	*1.03*	*0.70*	*1.44*	*Cum*
		2	*1.00*	*1.24*	*1.30*	*3.22*	*Cum*
	Section B-B	*2*	*5.25*	*1.08*	*0.85*	*9.59*	*Cum*
		2	*5.25*	*1.33*	*0.90*	*12.57*	*Cum*
	Section C-C	*2*	*0.41*	*0.99*	*0.55*	*0.44*	*Cum*
		2	*0.41*	*1.15*	*1.20*	*1.12*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.09*	*0.45*	*0.50*	*0.70*	*Cum*
		1	*3.09*	*0.66*	*0.70*	*1.43*	*Cum*
		1	*3.09*	*0.87*	*1.20*	*3.23*	*Cum*
	Left Bank						
	Section a-a	*1*		2.575	*0.50*	*1.29*	*Sqm*
		1		*2.43*	*0.20*	*0.49*	*Sqm*
		1		*1.38*	*1.20*	*1.65*	*Sqm*
						3.42	***Sqm***
	Section b-b	*1*		*2.58*	*0.50*	*1.29*	*Sqm*
		1		*2.43*	*0.20*	*0.49*	*Sqm*
		1		*1.29*	*1.20*	*1.54*	*Sqm*
						3.31	***Sqm***
	Section c-c	*1*		*2.58*	*0.50*	*1.29*	*Sqm*
		1		*2.43*	*0.20*	*0.49*	*Sqm*
		1		*1.10*	*1.20*	*1.32*	*Sqm*
						3.09	***Sqm***
	Section d-d	*1*		*2.58*	*0.50*	*1.29*	*Sqm*
		1		*2.43*	*0.20*	*0.49*	*Sqm*
		1		*0.48*	*1.20*	*0.57*	*Sqm*
						2.35	***Sqm***
	Bottom Key	*1*	*3.30*	*1.35*	*0.70*	*3.12*	*Cum*
	Top Stem Area	*1*	*3.30*	*3.04*		*10.03*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.50*	*0.70*	*0.90*	*0.63*	*Cum*
		2	*0.50*	*0.53*	*0.55*	*0.29*	*Cum*
		2	*0.50*	*0.35*	*0.50*	*0.18*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.68*	*1.54*	*0.90*	*7.44*	*Cum*
		2	*2.68*	*1.24*	*0.55*	*3.64*	*Cum*
		2	*2.68*	*0.74*	*0.50*	*1.98*	*Cum*
	TOTAL					**61.86**	**Cum**
	Floor						
	U/S key	*1*	*1.35*	*3.44*	*0.70*	*3.25*	*Cum*
	Floor	*1*	*3.53*	*3.44*	*0.50*	*6.07*	*Cum*
		1	*0.32*	*1.50*	*0.30*	*0.14*	*Cum*
		1	*0.62*	*1.50*	*0.20*	*0.19*	*Cum*
		1	*0.09*	*1.50*		*0.14*	*Cum*
		1	*3.08*	*1.50*	*0.50*	*2.31*	*Cum*
		1	*0.90*	*1.50*	*0.20*	*0.27*	*Cum*
		2	*0.14*	*1.50*		*0.41*	*Cum*
		1	*1.12*	*1.50*	*0.50*	*0.84*	*Cum*
	D/S key	*1*	*0.73*	*1.50*	*0.50*	*0.54*	*Cum*
	TOTAL					**76.02**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Floor	*1*	*3.53*	*3.44*	*0.20*	*2.43*	*Cum*
		1	*0.67*	*1.50*	*0.20*	*0.20*	*Cum*
		1	*3.08*	*1.50*	*0.20*	*0.92*	*Cum*
		1	*0.95*	*1.50*	*0.20*	*0.28*	*Cum*
		1	*1.12*	*1.50*	*0.20*	*0.34*	*Cum*
	Top Slab	*1*	*5.25*	*2.30*	*0.33*	*3.94*	*Cum*
	75mm Th. Wearing coat on top slab	*1*	*4.25*	*2.30*	*0.08*	*0.73*	*Cum*
	Dirt wall	*2*	*5.66*	*0.82*	*0.50*	*4.64*	*Cum*
		2	*5.66*	*0.40*	*0.43*	*1.92*	*Cum*
	Parapet	*2*	*3.14*	*0.45*	*0.18*	*0.49*	*Cum*
		2	*3.14*	*0.35*	*0.25*	*0.55*	*Cum*
		2	*3.14*	*0.22*	*0.55*	*0.75*	*Cum*
	TOTAL					**17.21**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
5	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Dia of Bars	**Length**	**Nos.**		**Weight per m**	**Quantity**	**Unit**
	Slab Per Span						
a1	*16*	*2.760*	*29*		*1.578*	*126.314*	*Kg*
a2	*10*	*5.650*	*12*		*0.616*	*41.796*	*Kg*
a3	*10*	*5.150*	*2*		*0.616*	*6.350*	*Kg*
a4	*10*	*2.680*	*18*		*0.616*	*29.738*	*Kg*
a5	*10*	*5.550*	*9*		*0.616*	*30.792*	*Kg*
	Dirt Wall						
d1	*12*	*4.460*	*26*		*0.888*	*102.938*	*Kg*
d2	*12*	*5.550*	*14*		*0.888*	*68.975*	*Kg*
	Crash Barrier						
x1	*12*	*2.501*	*38*		*0.888*	*84.366*	*Kg*
x2	*16*	*1.265*	*38*		*1.578*	*75.861*	*Kg*
x3	*10*	*2.200*	*24*		*0.616*	*32.549*	*Kg*
	Floor R/F						
	U/S Key						
	12	*6.943*	*6*		*0.888*	*36.980*	*Kg*
	12	*2.200*	*25*		*0.888*	*48.824*	*Kg*
	floor raft						
	12	*3.394*	*6*		*0.888*	*18.077*	*Kg*
	12	*7.325*	*12*		*0.888*	*78.029*	*Kg*
	12	*2.200*	*63*		*0.888*	*123.036*	*Kg*
	0.25 % Skin Reinforcement for Transition walls	*61.86*	*0.25%*	*0.15*	*7850*	*1213.99*	*Kg*
	TOTAL Weight of steel (in kg)					2118.61	Kg
	TOTAL Weight of Steel (in Tonne)					**2.12**	**MT**
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	1	2.16	0.00		**2.16**	**MT**
	*Separate sheet attached						
7	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section A-A	*4*	*1.00*		*0.50*	*2.00*	*Sqm*
		4		*0.82*	*0.50*	*1.64*	*Sqm*
		4	*1.00*		*0.70*	*2.80*	*Sqm*
		4		*1.03*	*0.70*	*2.88*	*Sqm*
		4	*1.00*		*1.30*	*5.20*	*Sqm*
		4		*1.24*	*1.30*	*6.45*	*Sqm*
	Section B-B	*4*	*5.25*		*0.85*	*17.85*	*Sqm*
		4		*1.08*	*0.85*	*3.66*	*Sqm*
		4	*5.25*		*0.90*	*18.90*	*Sqm*
		4		*1.33*	*0.90*	*4.79*	*Sqm*
	Section C-C	*4*	*0.41*		*0.55*	*0.89*	*Sqm*
		4		*0.99*	*0.55*	*2.17*	*Sqm*
		4	*0.41*		*1.20*	*1.95*	*Sqm*
		4		*1.15*	*1.20*	*5.52*	*Sqm*
	U/S Transition wall						
	Right Bank (Section D-D)	*2*	*3.09*		*0.50*	*3.09*	*Sqm*
		2		*0.45*	*0.50*	*0.45*	*Sqm*
		2	*3.09*		*0.70*	*4.33*	*Sqm*
		2		*0.66*	*0.70*	*0.92*	*Sqm*
		2	*3.09*		*1.20*	*7.42*	*Sqm*
		2		*0.87*	*1.20*	*2.09*	*Sqm*
	Left Bank						
	Bottom Key	*2*	*3.30*		*0.70*	*4.62*	*Sqm*
		2		*1.35*	*0.70*	*1.89*	*Sqm*
	Section a-a	*2*	*1.10*		*0.50*	*1.10*	*Sqm*
		2		*2.58*	*0.50*	*2.58*	*Sqm*
		2	*1.10*		*0.20*	*0.44*	*Sqm*
		2		*2.43*	*0.20*	*0.97*	*Sqm*
		2	*1.10*		*1.20*	*2.63*	*Sqm*
		2		*1.38*	*1.20*	*3.29*	*Sqm*
	Section b-b	*2*	*1.10*		*0.50*	*1.10*	*Sqm*
		2		*2.58*	*0.50*	*2.58*	*Sqm*
		2	*1.10*		*0.20*	*0.44*	*Sqm*
		2		*2.43*	*0.20*	*0.97*	*Sqm*
		2	*1.10*		*1.20*	*2.63*	*Sqm*
		2		*1.29*	*1.20*	*3.07*	*Sqm*
	Section c-c	*2*	*1.10*		*0.50*	*1.10*	*Sqm*
		2		*2.58*	*0.50*	*2.58*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	1.10		0.20	0.44	Sqm
		2		2.43	0.20	0.97	Sqm
		2	1.10		1.20	2.63	Sqm
		2		1.10	1.20	2.63	Sqm
	Section d-d	2	1.10		0.50	1.10	Sqm
		2		2.58	0.50	2.58	Sqm
		2	1.10		0.20	0.44	Sqm
		2		2.43	0.20	0.97	Sqm
		2	1.10		1.20	2.63	Sqm
		2		0.48	1.20	1.15	Sqm
	D/S Transition wall						
	Sec 4-4	4	0.50		0.90	1.80	Sqm
		4		0.70	0.90	2.52	Sqm
		4	0.50		0.55	1.10	Sqm
		4		0.53	0.55	1.16	Sqm
		4	0.50		0.50	1.00	Sqm
		4		0.35	0.50	0.70	Sqm
	Avg. of Sec 1-1 & 3-3	4	2.68		0.90	9.63	Sqm
		4		1.54	0.90	5.56	Sqm
		4	2.68		0.55	5.89	Sqm
		4		1.24	0.55	2.72	Sqm
		4	2.68		0.50	5.35	Sqm
		4		0.74	0.50	1.48	Sqm
	Floor						
	U/S key	2	1.35		0.70	1.89	Sqm
		2		3.44	0.70	4.82	Sqm
	Floor	2	3.53		0.50	3.53	Sqm
		2		3.44	0.50	3.44	Sqm
		2	0.32		0.30	0.19	Sqm
		2		1.50	0.30	0.90	Sqm
		2	0.62		0.20	0.25	Sqm
		2		1.50	0.20	0.60	Sqm
		2	0.09		0.00	0.19	Sqm
		2		1.50	0.00	3.00	Sqm
		2	3.08		0.50	3.08	Sqm
		2		1.50	0.50	1.50	Sqm
		2	0.90		0.20	0.36	Sqm
		2		1.50	0.20	0.60	Sqm
		4	0.14			0.54	Sqm
		4		1.50		6.00	Sqm
		2	1.12		0.50	1.12	Sqm
		2		1.50	0.50	1.50	Sqm
	D/S key	2	0.73		0.50	0.73	Sqm
		2		1.50	0.50	1.50	Sqm
	Toe Wall Base D/S Portion	2	1.50		0.30	0.90	Sqm
		2		0.85	0.30	0.51	Sqm
	Toe Wall Stem D/S Portion	2	1.50		0.90	2.70	Sqm
		2		0.45	0.90	0.81	Sqm
	Top Slab	2	5.25		0.33	3.43	Sqm
		2		2.30	0.33	1.50	Sqm
	Dirt wall	4	5.66		0.50	11.31	Sqm
		4		0.82	0.50	1.64	Sqm
		4	5.66		0.43	9.62	Sqm
		4		0.40	0.43	0.68	Sqm
	Parapet	4	3.14		0.18	2.20	Sqm
		4		0.45	0.18	0.31	Sqm
		4	3.14		0.25	3.14	Sqm
		4		0.35	0.25	0.35	Sqm
		4	3.14		0.55	6.91	Sqm
		4		0.22	0.55	0.48	Sqm
	TOTAL					**263.62**	**Sqm**
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	2	3.00	2.13		12.77	Sqm
	TOTAL					**12.77**	**Sqm**
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.**(WRD M-002)**						
	Boulder Apron in D/S Portion	1	3.00	0.90	0.90	2.43	***Cum***
	TOTAL					**2.43**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)						
	In D/S Portion below C.C. Blocks	*1*	*2.20*	*1.50*	*0.15*	*0.50*	*Cum*
	In D/S Portion below Stone Chips	*1*	*2.20*	*1.50*	*0.15*	*0.50*	*Cum*
	TOTAL					**0.99**	**Cum**
11	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	U/S transition	*2*	*1.79*	*0.48*		*1.72*	*Sqm*
	On Abutment Top	*2*	*5.05*	*0.45*		*1.61*	*Sqm*
	TOTAL					**3.33**	**Sqm**
12	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2	1			**2.00**	**No.**
13	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications**. (3.18 PWD NH SOR CHHATISGARH 2025)**	2	5.25	0.40		**4.20**	**Sqm**
14	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. **(RCD 15.22 - (ii))**	2	5.25			**10.50**	**RM**
15	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compa.cted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Abutment						
	Section A-A	2	*1.00*	*0.89*		*1.777*	*Cum*
	Section B-B	2	*5.25*	*1.23*		*12.863*	*Cum*
	Section C-C	2	*0.41*	*1.00*		*0.814*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	1	*3.09*	*0.83*		*2.577*	*Cum*
	D/S Transition wall						
	Sec 4-4	2	*0.50*	*0.66*		*0.661*	*Cum*
	Avg. of Sec 1-1 & 3-3	2	*2.68*	*1.10*		*5.861*	*Cum*
	TOTAL					**24.55**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF HR FOR DHAMNI SUB DY OFFTAKING FROM RD-13+800 KM (L.) AT CHAIN NAWADA SUB DY						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section A-A	*2*	*1.00*	*1.81*	*3.186*	*11.546*	*Cum*
	Section B-B	*2*	*5.25*	*1.90*	*2.540*	*50.780*	*Cum*
	Section C-C	*2*	*0.47*	*1.72*	*2.540*	*4.125*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.03*	*1.44*	*3.186*	*13.904*	*Cum*
	Left Bank Sec a to d	1	3.98	3.10	2.336	*28.840*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.53*	*1.10*	*2.740*	*3.171*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.89*	*2.19*	*2.740*	*34.699*	*Cum*
	Floor						
	U/S key	*1*	*6.029*	*1.5945*	*0.850*	*8.171*	*Cum*
	Floor	*1*	*3.963*	*1.5945*	*0.650*	*4.107*	*Cum*
		1	*0.318*	*3.8*	*0.450*	*0.544*	*Cum*
		1	*0.618*	*3.8*	*0.350*	*0.822*	*Cum*
		1	*0.1225*	*3.8*	*0.000*	*0.466*	*Cum*
		1	*2.928*	*3.8*	*1.000*	*11.126*	*Cum*
		1	*0.968*	*3.8*	*0.200*	*0.736*	*Cum*
		2	*0.184*	*3.8*	*0.200*	*0.279*	*Cum*
		1	*1.188*	*3.8*	*0.650*	*2.934*	*Cum*
		1	*0.7525*	*3.8*	*0.840*	*2.402*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*1*	*2.000*	*2.000*	*0.600*	*2.400*	*Cum*
	Toe Wall Base D/S Portion	*1*	*3.800*	*0.850*	*1.200*	*3.876*	*Cum*
	Boulder Pitching (D/S Portion)	*1*	*3.000*	*3.200*	*0.900*	*8.640*	*Cum*
						193.57	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor						
		1	*0.624*	*7.258*	*0.150*	*0.68*	*Cum*
		1	*2.052*	*5.029*	*0.150*	*1.55*	*Cum*
		1	*1.374*	*3.800*	*0.150*	*0.78*	*Cum*
		1	*0.782*	*3.800*	*0.150*	*0.45*	*Cum*
		1	*2.988*	*3.800*	*0.150*	*1.70*	*Cum*
		1	*1.106*	*3.800*	*0.150*	*0.63*	*Cum*
		1	*0.041*	*3.800*	*0.150*	*0.02*	*Cum*
		1	*0.781*	*3.800*	*0.150*	*0.45*	*Cum*
		1	*0.692*	*3.800*	*0.150*	*0.39*	*Cum*
	PCC Below Abutment						
	Section A-A	*2*	*1.000*	*1.812*	*0.300*	*1.09*	*Cum*
	Section B-B	*2*	*5.250*	*1.904*	*0.300*	*6.00*	*Cum*
	Section C-C	*2*	*0.471*	*1.724*	*0.300*	*0.49*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.027*	*1.442*	*0.300*	*1.31*	*Cum*
	Left Bank Sec a to d	*1*	*3.980*	*3.102*	*0.150*	*1.85*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.526*	*1.100*	*0.300*	*0.35*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.886*	*2.194*	*0.300*	*3.80*	*Cum*
	Toe Wall Base D/S Portion	*1*	*3.800*	*0.850*	*0.300*	*0.97*	*Cum*
	Toe Wall Stem D/S Portion	*1*	*3.800*	*0.450*	*0.900*	*1.54*	*Cum*
	Toe Wall Base (For Brick Pitching)	*1*	*3.000*	*0.600*	*0.150*	*0.27*	*Cum*
	Toe Wall Stem (For Brick Pitching)	*1*	*3.000*	*0.300*	*0.900*	*0.81*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*17*	*0.600*	*0.600*	*0.300*	*1.84*	*Cum*
	TOTAL					**26.96**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Section A-A	*2*	*1.00*	*0.82*	*0.50*	*0.82*	*Cum*
		2	*1.00*	*1.12*	*0.99*	*2.20*	*Cum*
		2	*1.00*	*1.41*	*1.40*	*3.95*	*Cum*
	Section B-B	*2*	*5.25*	*1.16*	*1.14*	*13.91*	*Cum*
		2	*5.25*	*1.50*	*1.10*	*17.37*	*Cum*
	Section C-C	*2*	*0.47*	*1.07*	*0.84*	*0.85*	*Cum*
		2	*0.47*	*1.32*	*1.40*	*1.75*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.03*	*0.45*	*0.50*	*0.68*	*Cum*
		1	*3.03*	*0.75*	*0.99*	*2.23*	*Cum*
		1	*3.03*	*1.04*	*1.40*	*4.42*	*Cum*
	Left Bank						
	Section a-a	*1*		3.009	*0.50*	*1.50*	*Sqm*
		1		*2.86*	*0.20*	*0.57*	*Sqm*
		1		*1.38*	*1.49*	*2.05*	*Sqm*
						4.12	***Sqm***
	Section b-b	*1*		*3.01*	*0.50*	*1.50*	*Sqm*
		1		*2.86*	*0.20*	*0.57*	*Sqm*
		1		*1.48*	*1.49*	*2.19*	*Sqm*
						4.27	***Sqm***
	Section c-c	*1*		*3.01*	*0.50*	*1.50*	*Sqm*
		1		*2.86*	*0.20*	*0.57*	*Sqm*
		1		*1.18*	*1.49*	*1.76*	*Sqm*
						3.83	***Sqm***
	Section d-d	*1*		*3.01*	*0.50*	*1.50*	*Sqm*
		1		*2.86*	*0.20*	*0.57*	*Sqm*
		1		*0.48*	*1.49*	*0.71*	*Sqm*
						2.79	***Sqm***
	Bottom Key	*1*	*3.98*	*1.56*	*0.70*	*4.36*	*Cum*
	Top Stem Area	*1*	*3.98*	*3.75*		*14.94*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.53*	*0.70*	*1.10*	*0.81*	*Cum*
		2	*0.53*	*0.53*	*0.84*	*0.46*	*Cum*
		2	*0.53*	*0.35*	*0.50*	*0.18*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.89*	*1.79*	*1.10*	*11.39*	*Cum*
		2	*2.89*	*1.37*	*0.84*	*6.64*	*Cum*
		2	*2.89*	*0.76*	*0.50*	*2.18*	*Cum*
	TOTAL					**89.14**	**Cum**
	Floor						
	U/S key	*1*	*6.03*	*1.59*	*0.70*	*6.73*	*Cum*
	Floor	*1*	*3.96*	*1.59*	*0.50*	*3.16*	*Cum*
		1	*0.32*	*3.80*	*0.30*	*0.36*	*Cum*
		1	*0.62*	*3.80*	*0.20*	*0.47*	*Cum*
		1	*0.12*	*3.80*		*0.47*	*Cum*
		1	*2.93*	*3.80*	*0.55*	*6.12*	*Cum*
		1	*0.97*	*3.80*	*0.20*	*0.74*	*Cum*
		2	*0.18*	*3.80*		*1.40*	*Cum*
		1	*1.19*	*3.80*	*0.50*	*2.26*	*Cum*
	D/S key	*1*	*0.75*	*3.80*	*0.69*	*1.97*	*Cum*
	TOTAL					**112.81**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Floor	*1*	*3.96*	*1.59*	*0.20*	*1.26*	*Cum*
		1	*0.67*	*3.80*	*0.20*	*0.51*	*Cum*
		1	*3.08*	*3.80*	*0.20*	*2.34*	*Cum*
		1	*0.95*	*3.80*	*0.20*	*0.72*	*Cum*
		1	*1.19*	*3.80*	*0.20*	*0.90*	*Cum*
	Top Slab	*1*	*5.25*	*4.60*	*0.43*	*10.30*	*Cum*
	75mm Th. Wearing coat on top slab	*1*	*4.25*	*4.60*	*0.08*	*1.47*	*Cum*
	Dirt wall	*2*	*5.72*	*0.82*	*0.50*	*4.69*	*Cum*
		2	*5.72*	*0.40*	*0.43*	*1.95*	*Cum*
	Parapet	*2*	*5.44*	*0.45*	*0.18*	*0.85*	*Cum*
		2	*5.44*	*0.35*	*0.25*	*0.96*	*Cum*
		2	*5.44*	*0.22*	*0.55*	*1.31*	*Cum*
	TOTAL					**27.25**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
5	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Dia of Bars	**Length**	**Nos.**		**Weight per m**	**Quantity**	**Unit**
	Slab Per Span						
a1	*16*	*5.260*	*33*		*1.578*	*273.933*	*Kg*
a2	*10*	*5.730*	*37*		*0.616*	*130.696*	*Kg*
a3	*10*	*5.150*	*2*		*0.616*	*6.350*	*Kg*
a4	*10*	*5.120*	*23*		*0.616*	*72.594*	*Kg*
a5	*10*	*5.532*	*21*		*0.616*	*71.615*	*Kg*
	Dirt Wall						
d1	*12*	*4.700*	*26*		*0.888*	*108.477*	*Kg*
d2	*12*	*5.550*	*14*		*0.888*	*68.975*	*Kg*
	Crash Barrier						
x1	*12*	*2.601*	*76*		*0.888*	*175.478*	*Kg*
x2	*16*	*1.365*	*76*		*1.578*	*163.716*	*Kg*
x3	*10*	*4.500*	*24*		*0.616*	*66.578*	*Kg*
	Floor R/F						
	U/S Key						
	12	*6.943*	*6*		*0.888*	*36.980*	*Kg*
	12	*2.200*	*25*		*0.888*	*48.824*	*Kg*
	floor raft						
	12	*3.394*	*6*		*0.888*	*18.077*	*Kg*
	12	*7.325*	*12*		*0.888*	*78.029*	*Kg*
	12	*2.200*	*63*		*0.888*	*123.036*	*Kg*
	0.25 % Skin Reinforcement for Transition walls	*89.14*	*0.25%*	*0.22*	*7850*	*1749.46*	*Kg*
	TOTAL Weight of steel (in kg)					3192.81	Kg
	TOTAL Weight of Steel (in Tonne)					**3.19**	**MT**
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	1	5.53			**5.53**	**MT**
	*Separate sheet attached						
7	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section A-A	*4*	*1.00*		*0.50*	*2.00*	*Sqm*
		4		*0.82*	*0.50*	*1.64*	*Sqm*
		4	*1.00*		*0.99*	*3.94*	*Sqm*
		4		*1.12*	*0.99*	*4.40*	*Sqm*
		4	*1.00*		*1.40*	*5.60*	*Sqm*
		4		*1.41*	*1.40*	*7.91*	*Sqm*
	Section B-B	*4*	*5.25*		*1.14*	*23.94*	*Sqm*
		4		*1.16*	*1.14*	*5.30*	*Sqm*
		4	*5.25*		*1.10*	*23.10*	*Sqm*
		4		*1.50*	*1.10*	*6.62*	*Sqm*
	Section C-C	*4*	*0.47*		*0.84*	*1.58*	*Sqm*
		4		*1.07*	*0.84*	*3.60*	*Sqm*
		4	*0.47*		*1.40*	*2.64*	*Sqm*
		4		*1.32*	*1.40*	*7.41*	*Sqm*
	U/S Transition wall						
	Right Bank (Section D-D)	*2*	*3.03*		*0.50*	*3.03*	*Sqm*
		2		*0.45*	*0.50*	*0.45*	*Sqm*
		2	*3.03*		*0.99*	*5.97*	*Sqm*
		2		*0.75*	*0.99*	*1.47*	*Sqm*
		2	*3.03*		*1.40*	*8.47*	*Sqm*
		2		*1.04*	*1.40*	*2.92*	*Sqm*
	Left Bank						
	Bottom Key	*2*	*3.98*		*0.70*	*5.57*	*Sqm*
		2		*1.56*	*0.70*	*2.19*	*Sqm*
	Section a-a	*2*	*1.33*		*0.50*	*1.33*	*Sqm*
		2		*3.01*	*0.50*	*3.01*	*Sqm*
		2	*1.33*		*0.20*	*0.53*	*Sqm*
		2		*2.86*	*0.20*	*1.14*	*Sqm*
		2	*1.33*		*1.49*	*3.94*	*Sqm*
		2		*1.38*	*1.49*	*4.09*	*Sqm*
	Section b-b	*2*	*1.33*		*0.50*	*1.33*	*Sqm*
		2		*3.01*	*0.50*	*3.01*	*Sqm*
		2	*1.33*		*0.20*	*0.53*	*Sqm*
		2		*2.86*	*0.20*	*1.14*	*Sqm*
		2	*1.33*		*1.49*	*3.94*	*Sqm*
		2		*1.48*	*1.49*	*4.39*	*Sqm*
	Section c-c	*2*	*1.33*		*0.50*	*1.33*	*Sqm*
		2		*3.01*	*0.50*	*3.01*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	*1.33*		*0.20*	*0.53*	*Sqm*
		2		*2.86*	*0.20*	*1.14*	*Sqm*
		2	*1.33*		*1.49*	*3.94*	*Sqm*
		2		*1.18*	*1.49*	*3.52*	*Sqm*
	Section d-d	*2*	*1.33*		*0.50*	*1.33*	*Sqm*
		2		*3.01*	*0.50*	*3.01*	*Sqm*
		2	*1.33*		*0.20*	*0.53*	*Sqm*
		2		*2.86*	*0.20*	*1.14*	*Sqm*
		2	*1.33*		*1.49*	*3.94*	*Sqm*
		2		*0.48*	*1.49*	*1.43*	*Sqm*
	D/S Transition wall						
	Sec 4-4	*4*	*0.53*		*1.10*	*2.31*	*Sqm*
		4		*0.70*	*1.10*	*3.08*	*Sqm*
		4	*0.53*		*0.84*	*1.77*	*Sqm*
		4		*0.53*	*0.84*	*1.76*	*Sqm*
		4	*0.53*		*0.50*	*1.05*	*Sqm*
		4		*0.35*	*0.50*	*0.70*	*Sqm*
	Avg. of Sec 1-1 & 3-3	*4*	*2.89*		*1.10*	*12.70*	*Sqm*
		4		*1.79*	*1.10*	*7.89*	*Sqm*
		4	*2.89*		*0.84*	*9.70*	*Sqm*
		4		*1.37*	*0.84*	*4.60*	*Sqm*
		4	*2.89*		*0.50*	*5.77*	*Sqm*
		4		*0.76*	*0.50*	*1.51*	*Sqm*
	Floor						
	U/S key	*2*	*6.03*		*0.70*	*8.44*	*Sqm*
		2		*1.59*	*0.70*	*2.23*	*Sqm*
	Floor	*2*	*3.96*		*0.50*	*3.96*	*Sqm*
		2		*1.59*	*0.50*	*1.59*	*Sqm*
		2	*0.32*		*0.30*	*0.19*	*Sqm*
		2		*3.80*	*0.30*	*2.28*	*Sqm*
		2	*0.62*		*0.20*	*0.25*	*Sqm*
		2		*3.80*	*0.20*	*1.52*	*Sqm*
		2	*0.12*		*0.00*	*0.25*	*Sqm*
		2		*3.80*	*0.00*	*7.60*	*Sqm*
		2	*2.93*		*0.55*	*3.22*	*Sqm*
		2		*3.80*	*0.55*	*4.18*	*Sqm*
		2	*0.97*		*0.20*	*0.39*	*Sqm*
		2		*3.80*	*0.20*	*1.52*	*Sqm*
		4	*0.18*			*0.74*	*Sqm*
		4		*3.80*		*15.20*	*Sqm*
		2	*1.19*		*0.50*	*1.19*	*Sqm*
		2		*3.80*	*0.50*	*3.80*	*Sqm*
	D/S key	*2*	*0.75*		*0.69*	*1.04*	*Sqm*
		2		*3.80*	*0.69*	*5.24*	*Sqm*
	Toe Wall Base D/S Portion	*2*	*3.80*		*0.30*	*2.28*	*Sqm*
		2		*0.85*	*0.30*	*0.51*	*Sqm*
	Toe Wall Stem D/S Portion	*2*	*3.80*		*0.90*	*6.84*	*Sqm*
		2		*0.45*	*0.90*	*0.81*	*Sqm*
	Top Slab	*2*	*5.25*		*0.43*	*4.48*	*Sqm*
		2		*4.60*	*0.43*	*3.92*	*Sqm*
	Dirt wall	*4*	*5.72*		*0.50*	*11.44*	*Sqm*
		4		*0.82*	*0.50*	*1.64*	*Sqm*
		4	*5.72*		*0.43*	*9.73*	*Sqm*
		4		*0.40*	*0.43*	*0.68*	*Sqm*
	Parapet	*4*	*5.44*		*0.18*	*3.81*	*Sqm*
		4		*0.45*	*0.18*	*0.31*	*Sqm*
		4	*5.44*		*0.25*	*5.44*	*Sqm*
		4		*0.35*	*0.25*	*0.35*	*Sqm*
		4	*5.44*		*0.55*	*11.97*	*Sqm*
		4		*0.22*	*0.55*	*0.48*	*Sqm*
	TOTAL					**365.36**	**Sqm**
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*3.00*	*2.13*		*12.77*	*Sqm*
	TOTAL					**12.77**	**Sqm**
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.**(WRD M-002)**						
	Boulder Apron in D/S Portion	*1*	*3.00*	*3.20*	*0.90*	*8.64*	***Cum***
	TOTAL					**8.64**	**Cum**
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)						

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	In D/S Portion below C.C. Blocks	*1*	*2.20*	*3.80*	*0.15*	*1.25*	*Cum*
	In D/S Portion below Stone Chips	*1*	*2.20*	*3.80*	*0.15*	*1.25*	*Cum*
	TOTAL					**2.51**	**Cum**
11	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	U/S transition	*2*	*2.23*	*0.48*		*2.14*	*Sqm*
	On Abutment Top	*2*	*5.34*	*0.45*		*2.01*	*Sqm*
	TOTAL					**4.14**	**Sqm**
12	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2	1			**2.00**	**No.**
13	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications**. (3.18 PWD NH SOR CHHATISGARH 2025)**	2	5.25	0.40		**4.20**	**Sqm**
14	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. **(RCD 15.22 - (ii))**	2	5.25			**10.50**	**RM**
15	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compa.cted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Abutment						
	Section A-A	2	*1.00*	*1.27*		*2.548*	*Cum*
	Section B-B	2	*5.25*	*1.48*		*15.538*	*Cum*
	Section C-C	2	*0.47*	*1.49*		*1.405*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	1	*3.03*	*1.17*		*3.526*	*Cum*
	D/S Transition wall						
	Sec 4-4	2	*0.53*	*0.81*		*0.851*	*Cum*
	Avg. of Sec 1-1 & 3-3	2	*2.89*	*1.38*		*7.954*	*Cum*
	TOTAL					**31.82**	**Cum**

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND								
ABSTRACT OF QUANTITIES OF SHARDA TYPE FALL FOR CHAIN NAWADA SUB DY.								
S. No.	**Item of Works**	**Qty.**	**Unit**	**Rate (As per WRD SOR 2025 & PL MARCH 2025)**	**Amount (Rs)**	**Cement (MT)**	**Coarse Sand (Cum)**	**Coarse Aggregate (Cum)**
SHARDA TYPE FALL OF HEIGHT 0.762 METER AT CH. 9.150 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	169.385	Cum	**195.20**	33063.91			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	24.00	Cum	**6381.70**	153150.82	7.78	10.80	21.60
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	114.88	Cum	**6914.20**	794286.71	47.39	49.40	98.79

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	1.38	Cum	**8151.40**	11289.40	0.79	0.54	1.09
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	2.71	MT	**73574.90**	199047.14			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	309.36	Sqm	**578.60**	178993.64			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	32.19	Sqm	**680.10**	21895.48			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	4.24	Cum	**694.61**	2946.01			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	4.24	Cum	**1237.00**	5246.43			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	4.24	Cum	**1377.70**	5843.17			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	4.24	Cum	**516.50**	2190.61			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	15.82	Sqm	**63.20**	999.78			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	37.70	Cum	**149.30**	5628.22			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	60.737	Cum	**1075.00**	65292.06			
	Coarse Aggregates (100 Km lead)	121.487	Cum	**1398.00**	169839.46			
	Cement (30 km lead)	55.948	MT	**742.00**	41513.25			
	Boulder (60 Km lead)	4.24	Cum	**1159.00**	4915.61			
	Brick (15 km lead)	1931.00	No.	**3.18**	6140.58			
	Steel (30 Km lead)	2.71	MT	**742.00**	2007.38			
TOTAL (In Rs.)					**1715467.07**			
TOTAL (In Rs.)					**1715467.07**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	60.74	Cum	**584.64**	35509.16	3550.92		
	Coarse Aggregate	121.49	Cum	**944.26**	114715.74	11471.57		
	Boulders	4.24	Cum	**694.61**	2946.01	294.60		
	Total					15317.09		
	For 1 nos. fall, Total Seigniorage charges					**15317.09**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 0.762 METER AT CH. 9.330 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	139.829	Cum	**195.20**	27294.66			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	21.16	Cum	**6381.70**	135024.00	6.86	9.52	19.04
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	95.32	Cum	**6914.20**	659055.59	39.32	40.99	81.97
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	1.26	Cum	**8151.40**	10251.45	0.71	0.49	0.99

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	2.24	MT	**73574.90**	165158.41			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	273.01	Sqm	**578.60**	157960.79			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	25.15	Sqm	**680.10**	17105.54			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	3.14	Cum	**694.61**	2177.60			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	3.14	Cum	**1237.00**	3878.00			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	3.14	Cum	**1377.70**	4319.09			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	3.14	Cum	**516.50**	1619.23			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	14.59	Sqm	**63.20**	922.25			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	31.44	Cum	**149.30**	4694.11			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	50.999	Cum	**1075.00**	54823.72			
	Coarse Aggregates (100 Km lead)	102.010	Cum	**1398.00**	142610.24			
	Cement (30 km lead)	46.887	MT	**742.00**	34790.46			
	Boulder (60 Km lead)	3.14	Cum	**1159.00**	3633.47			
	Brick (15 km lead)	1509.00	No.	**3.18**	4798.62			
	Steel (30 Km lead)	2.24	MT	**742.00**	1665.62			
	TOTAL (In Rs.)				**1442960.23**			
	TOTAL (In Rs.)				**1442960.23**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	51.00	Cum	**584.64**	29815.94	2981.59		
	Coarse Aggregate	102.01	Cum	**944.26**	96324.14	9632.41		
	Boulders	3.14	Cum	**694.61**	2177.60	217.76		
	Total					12831.77		
	For 1 nos. fall, Total Seigniorage charges					**12831.77**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 1.520 METER AT CH. 12.900 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	298.976	Cum	**195.20**	58360.10			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	25.07	Cum	**6381.70**	159988.75	8.12	11.28	22.56
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	165.36	Cum	**6914.20**	1143298.32	68.21	71.10	142.21
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	1.36	Cum	**8151.40**	11096.95	0.77	0.53	1.08

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	3.89	MT	**73574.90**	286508.97			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	378.26	Sqm	**578.60**	218863.76			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	24.73	Sqm	**680.10**	16821.25			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	2.68	Cum	**694.61**	1862.42			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	2.68	Cum	**1237.00**	3316.71			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	2.68	Cum	**1377.70**	3693.96			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	2.68	Cum	**516.50**	1384.87			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	17.41	Sqm	**63.20**	1100.29			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	84.96	Cum	**149.30**	12684.54			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	82.915	Cum	**1075.00**	89133.73			
	Coarse Aggregates (100 Km lead)	165.844	Cum	**1398.00**	231849.63			
	Cement (30 km lead)	77.104	MT	**742.00**	57210.82			
	Boulder (60 Km lead)	2.68	Cum	**1159.00**	3107.57			
	Brick (15 km lead)	1484.00	No.	**3.18**	4719.12			
	Steel (30 Km lead)	3.89	MT	**742.00**	2889.43			
TOTAL (In Rs.)					**2319068.59**			
TOTAL (In Rs.)					**2319068.59**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	82.92	Cum	**584.64**	48475.48	4847.55		
	Coarse Aggregate	165.84	Cum	**944.26**	156599.67	15659.97		
	Boulders	2.68	Cum	**694.61**	1862.42	186.24		
	Total					20693.76		
	For 1 nos. fall, Total Seigniorage charges					**20693.76**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 0.914 METER AT CH. 13.325 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	152.035	Cum	**195.20**	29677.28			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	21.15	Cum	**6381.70**	134981.74	6.85	9.52	19.04
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	101.83	Cum	**6914.20**	704060.32	42.00	43.79	87.57
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	1.25	Cum	**8151.40**	10197.52	0.71	0.49	0.99

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	2.40	MT	**73574.90**	176436.53			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	280.77	Sqm	**578.60**	162454.63			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	24.73	Sqm	**680.10**	16821.25			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	2.68	Cum	**694.61**	1862.42			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	2.68	Cum	**1237.00**	3316.71			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	2.68	Cum	**1377.70**	3693.96			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	2.68	Cum	**516.50**	1384.87			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	15.20	Sqm	**63.20**	960.82			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	35.36	Cum	**149.30**	5279.46			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	53.792	Cum	**1075.00**	57826.54			
	Coarse Aggregates (100 Km lead)	107.597	Cum	**1398.00**	150420.28			
	Cement (30 km lead)	49.566	MT	**742.00**	36778.34			
	Boulder (60 Km lead)	2.68	Cum	**1159.00**	3107.57			
	Brick (15 km lead)	1484.00	No.	**3.18**	4719.12			
	Steel (30 Km lead)	2.40	MT	**742.00**	1779.36			
TOTAL (In Rs.)					**1516936.10**			
TOTAL (In Rs.)					**1516936.10**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	53.79	Cum	**584.64**	31449.03	3144.90		
	Coarse Aggregate	107.60	Cum	**944.26**	101599.32	10159.93		
	Boulders	2.68	Cum	**694.61**	1862.42	186.24		
	Total					13491.08		
	For 1 nos. fall, Total Seigniorage charges					**13491.08**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF QUANTITIES OF SHARDA TYPE FALL FOR PARANPUR MR.								
SHARDA TYPE FALL OF HEIGHT 0.762 METER AT CH. 0.200 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	77.076	Cum	**195.20**	15045.25			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	15.83	Cum	**6381.70**	100997.79	5.13	7.12	14.24
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	61.96	Cum	**6914.20**	428437.44	25.56	26.64	53.29
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	10.43	Cum	**8151.40**	85033.57	5.91	4.07	8.24

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	2.02	MT	**73574.90**	148387.89			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	215.29	Sqm	**578.60**	124564.40			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	7.50	Sqm	**680.10**	5098.71			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.74	Cum	**694.61**	510.54			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.74	Cum	**1237.00**	909.20			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.74	Cum	**1377.70**	1012.61			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.74	Cum	**516.50**	379.63			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	5.25	Sqm	**63.20**	331.89			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	4.00	No.	**5588.70**	22354.80			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	8.98	Cum	**149.30**	1341.45			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	37.835	Cum	**1075.00**	40672.68			
	Coarse Aggregates (100 Km lead)	75.774	Cum	**1398.00**	105932.65			
	Cement (30 km lead)	36.603	MT	**742.00**	27159.42			
	Boulder (60 Km lead)	0.74	Cum	**1159.00**	851.87			
	Brick (15 km lead)	449.00	No.	**3.18**	1427.82			
	Steel (30 Km lead)	2.02	MT	**742.00**	1496.49			
	TOTAL (In Rs.)				**1111946.08**			
	TOTAL (In Rs.)				**1111946.08**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	37.84	Cum	**584.64**	22119.89	2211.99		
	Coarse Aggregate	75.77	Cum	**944.26**	71550.76	7155.08		
	Boulders	0.74	Cum	**694.61**	510.54	51.05		
	Total					9418.12		
	For 1 nos. fall, Total Seigniorage charges					**9418.12**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH. 0.400 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	135.180	Cum	**195.20**	26387.21			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	13.64	Cum	**6381.70**	87074.32	4.42	6.14	12.28
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	87.99	Cum	**6914.20**	608359.15	36.29	37.83	75.67
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	10.55	Cum	**8151.40**	85993.76	5.98	4.11	8.33

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	2.63	MT	**73574.90**	193476.02			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	261.57	Sqm	**578.60**	151345.03			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	7.50	Sqm	**680.10**	5098.71			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.74	Cum	**694.61**	510.54			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.74	Cum	**1237.00**	909.20			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.74	Cum	**1377.70**	1012.61			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.74	Cum	**516.50**	379.63			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	7.01	Sqm	**63.20**	442.87			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	4.00	No.	**5588.70**	22354.80			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	15.41	Cum	**149.30**	2301.34			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	48.089	Cum	**1075.00**	51695.33			
	Coarse Aggregates (100 Km lead)	96.283	Cum	**1398.00**	134603.42			
	Cement (30 km lead)	46.697	MT	**742.00**	34649.16			
	Boulder (60 Km lead)	0.74	Cum	**1159.00**	851.87			
	Brick (15 km lead)	449.00	No.	**3.18**	1427.82			
	Steel (30 Km lead)	2.63	MT	**742.00**	1951.20			
TOTAL (In Rs.)					**1410823.97**			
TOTAL (In Rs.)					**1410823.97**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	48.09	Cum	**584.64**	28114.56	2811.46		
	Coarse Aggregate	96.28	Cum	**944.26**	90916.04	9091.60		
	Boulders	0.74	Cum	**694.61**	510.54	51.05		
	Total					11954.11		
	For 1 nos. fall, Total Seigniorage charges					**11954.11**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH. 0.550 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	164.938	Cum	**195.20**	32195.91			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	13.64	Cum	**6381.70**	87074.32	4.42	6.14	12.28
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	87.99	Cum	**6914.20**	608359.15	36.29	37.83	75.67
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	10.55	Cum	**8151.40**	85993.76	5.98	4.11	8.33

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	2.63	MT	**73574.90**	193476.02			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	264.87	Sqm	**578.60**	153254.41			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	7.50	Sqm	**680.10**	5098.71			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.74	Cum	**694.61**	510.54			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.74	Cum	**1237.00**	909.20			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.74	Cum	**1377.70**	1012.61			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.74	Cum	**516.50**	379.63			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	7.01	Sqm	**63.20**	442.87			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	4.00	No.	**5588.70**	22354.80			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	25.69	Cum	**149.30**	3836.07			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	48.089	Cum	**1075.00**	51695.33			
	Coarse Aggregates (100 Km lead)	96.283	Cum	**1398.00**	134603.42			
	Cement (30 km lead)	46.697	MT	**742.00**	34649.16			
	Boulder (60 Km lead)	0.74	Cum	**1159.00**	851.87			
	Brick (15 km lead)	449.00	No.	**3.18**	1427.82			
	Steel (30 Km lead)	2.63	MT	**742.00**	1951.20			
TOTAL (In Rs.)					**1420076.79**			
TOTAL (In Rs.)					**1420076.79**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	48.09	Cum	**584.64**	28114.56	2811.46		
	Coarse Aggregate	96.28	Cum	**944.26**	90916.04	9091.60		
	Boulders	0.74	Cum	**694.61**	510.54	51.05		
	Total					11954.11		
	For 1 nos. fall, Total Seigniorage charges					**11954.11**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 0.914 METER AT CH. 0.950 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	115.703	Cum	**195.20**	22585.19			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	15.32	Cum	**6381.70**	97738.10	4.96	6.89	13.78
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	62.53	Cum	**6914.20**	432379.31	25.80	26.89	53.78
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	9.52	Cum	**8151.40**	77611.15	5.40	3.71	7.52

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	1.95	MT	**73574.90**	143484.20			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	215.07	Sqm	**578.60**	124440.63			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	7.05	Sqm	**680.10**	4796.41			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.53	Cum	**694.61**	364.67			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.53	Cum	**1237.00**	649.43			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.53	Cum	**1377.70**	723.29			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.53	Cum	**516.50**	271.16			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	4.83	Sqm	**63.20**	305.39			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	4.00	No.	**5588.70**	22354.80			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	15.74	Cum	**149.30**	2350.22			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	37.495	Cum	**1075.00**	40307.37			
	Coarse Aggregates (100 Km lead)	75.086	Cum	**1398.00**	104969.76			
	Cement (30 km lead)	36.156	MT	**742.00**	26828.03			
	Boulder (60 Km lead)	0.53	Cum	**1159.00**	608.48			
	Brick (15 km lead)	423.00	No.	**3.18**	1345.14			
	Steel (30 Km lead)	1.95	MT	**742.00**	1447.03			
TOTAL (In Rs.)					**1105559.74**			
TOTAL (In Rs.)					**1105559.74**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	37.50	Cum	**584.64**	21921.21	2192.12		
	Coarse Aggregate	75.09	Cum	**944.26**	70900.39	7090.04		
	Boulders	0.53	Cum	**694.61**	364.67	36.47		
	Total					9318.63		
	For 1 nos. fall, Total Seigniorage charges					**9318.63**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH. 1.050 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	142.681	Cum	**195.20**	27851.37			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	12.45	Cum	**6381.70**	79477.54	4.04	5.60	11.21
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	79.92	Cum	**6914.20**	552579.76	32.97	34.37	68.73
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	9.63	Cum	**8151.40**	78507.15	5.46	3.76	7.61

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	2.36	MT	**73574.90**	173606.26			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	248.96	Sqm	**578.60**	144045.87			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	7.18	Sqm	**680.10**	4882.10			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.53	Cum	**694.61**	364.67			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.53	Cum	**1237.00**	649.43			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.53	Cum	**1377.70**	723.29			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.53	Cum	**516.50**	271.16			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	6.79	Sqm	**63.20**	429.16			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	4.00	No.	**5588.70**	22354.80			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	18.73	Cum	**149.30**	2796.32			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	43.726	Cum	**1075.00**	47005.27			
	Coarse Aggregates (100 Km lead)	87.548	Cum	**1398.00**	122392.08			
	Cement (30 km lead)	42.463	MT	**742.00**	31507.36			
	Boulder (60 Km lead)	0.53	Cum	**1159.00**	608.48			
	Brick (15 km lead)	430.00	No.	**3.18**	1367.40			
	Steel (30 Km lead)	2.36	MT	**742.00**	1750.81			
TOTAL (In Rs.)					**1293170.28**			
TOTAL (In Rs.)					**1293170.28**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	43.73	Cum	**584.64**	25563.87	2556.39		
	Coarse Aggregate	87.55	Cum	**944.26**	82668.06	8266.81		
	Boulders	0.53	Cum	**694.61**	364.67	36.47		
	Total					10859.66		
	For 1 nos. fall, Total Seigniorage charges					**10859.66**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 1.524 METER AT CH. 1.150 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	191.042	Cum	**195.20**	37291.40			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	13.14	Cum	**6381.70**	83854.20	4.26	5.91	11.83
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	105.45	Cum	**6914.20**	729127.17	43.50	45.35	90.69
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	9.69	Cum	**8151.40**	79020.32	5.50	3.78	7.66

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	2.96	MT	**73574.90**	217848.80			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	299.28	Sqm	**578.60**	173160.69			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	7.18	Sqm	**680.10**	4882.10			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.53	Cum	**694.61**	364.67			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.53	Cum	**1237.00**	649.43			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.53	Cum	**1377.70**	723.29			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.53	Cum	**516.50**	271.16			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	7.33	Sqm	**63.20**	463.23			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	4.00	No.	**5588.70**	22354.80			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	24.97	Cum	**149.30**	3727.81			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	55.039	Cum	**1075.00**	59166.54			
	Coarse Aggregates (100 Km lead)	110.174	Cum	**1398.00**	154023.56			
	Cement (30 km lead)	53.253	MT	**742.00**	39514.05			
	Boulder (60 Km lead)	0.53	Cum	**1159.00**	608.48			
	Brick (15 km lead)	430.00	No.	**3.18**	1367.40			
	Steel (30 Km lead)	2.96	MT	**742.00**	2197.00			
	TOTAL (In Rs.)				**1610616.09**			
	TOTAL (In Rs.)				**1610616.09**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	55.04	Cum	**584.64**	32177.79	3217.78		
	Coarse Aggregate	110.17	Cum	**944.26**	104033.11	10403.31		
	Boulders	0.53	Cum	**694.61**	364.67	36.47		
	Total					13657.56		
	For 1 nos. fall, Total Seigniorage charges					**13657.56**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 1.828 METER AT CH.1.950 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	72.954	Cum	**195.20**	14240.65			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	11.35	Cum	**6381.70**	72404.59	3.68	5.11	10.21
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	61.63	Cum	**6914.20**	426133.33	25.42	26.50	53.00
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.78	Cum	**8151.40**	6362.74	0.44	0.30	0.62

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	1.45	MT	**73574.90**	106788.42			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	200.52	Sqm	**578.60**	116021.01			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	7.18	Sqm	**680.10**	4882.10			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.53	Cum	**694.61**	364.67			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.53	Cum	**1237.00**	649.43			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.53	Cum	**1377.70**	723.29			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.53	Cum	**516.50**	271.16			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	11.29	Sqm	**63.20**	713.62			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	28.23	Cum	**149.30**	4214.95			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	31.912	Cum	**1075.00**	34304.93			
	Coarse Aggregates (100 Km lead)	63.831	Cum	**1398.00**	89235.65			
	Cement (30 km lead)	29.542	MT	**742.00**	21919.88			
	Boulder (60 Km lead)	0.53	Cum	**1159.00**	608.48			
	Brick (15 km lead)	430.00	No.	**3.18**	1367.40			
	Steel (30 Km lead)	1.45	MT	**742.00**	1076.96			
TOTAL (In Rs.)					**913460.67**			
TOTAL (In Rs.)					**913460.67**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	31.91	Cum	**584.64**	18656.78	1865.68		
	Coarse Aggregate	63.83	Cum	**944.26**	60273.00	6027.30		
	Boulders	0.53	Cum	**694.61**	364.67	36.47		
	Total					7929.44		
	For 1 nos. fall, Total Seigniorage charges					**7929.44**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 0.457 METER AT CH.2.100 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	43.874	Cum	**195.20**	8564.18			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	8.43	Cum	**6381.70**	53813.92	2.73	3.79	7.59
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	29.27	Cum	**6914.20**	202404.93	12.08	12.59	25.18
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.56	Cum	**8151.40**	4552.15	0.32	0.22	0.44

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	0.69	MT	**73574.90**	50722.39			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	123.48	Sqm	**578.60**	71447.94			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	6.86	Sqm	**680.10**	4667.87			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.42	Cum	**694.61**	291.74			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.42	Cum	**1237.00**	519.54			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.42	Cum	**1377.70**	578.63			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.42	Cum	**516.50**	216.93			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	8.65	Sqm	**63.20**	546.62			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	4.00	No.	**5588.70**	22354.80			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	10.66	Cum	**149.30**	1591.58			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	16.600	Cum	**1075.00**	17845.19			
	Coarse Aggregates (100 Km lead)	33.206	Cum	**1398.00**	46421.89			
	Cement (30 km lead)	15.124	MT	**742.00**	11222.18			
	Boulder (60 Km lead)	0.42	Cum	**1159.00**	486.78			
	Brick (15 km lead)	411.00	No.	**3.18**	1306.98			
	Steel (30 Km lead)	0.69	MT	**742.00**	511.53			
TOTAL (In Rs.)					**500067.75**			
TOTAL (In Rs.)					**500067.75**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	16.60	Cum	**584.64**	9705.12	970.51		
	Coarse Aggregate	33.21	Cum	**944.26**	31355.03	3135.50		
	Boulders	0.42	Cum	**694.61**	291.74	29.17		
	Total					4135.19		
	For 1 nos. fall, Total Seigniorage charges					**4135.19**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 1.828 METER AT CH. 2.215 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	188.985	Cum	**195.20**	36889.91			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	11.62	Cum	**6381.70**	74156.75	3.76	5.23	10.46
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	107.90	Cum	**6914.20**	746055.48	44.51	46.40	92.80
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	8.56	Cum	**8151.40**	69763.63	4.85	3.34	6.76

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	2.94	MT	**73574.90**	216657.88			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	312.81	Sqm	**578.60**	180994.06			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	5.51	Sqm	**680.10**	3743.95			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.23	Cum	**694.61**	156.29			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.23	Cum	**1237.00**	278.33			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.23	Cum	**1377.70**	309.98			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.23	Cum	**516.50**	116.21			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	7.16	Sqm	**63.20**	452.37			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	4.00	No.	**5588.70**	22354.80			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	27.74	Cum	**149.30**	4142.22			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	54.965	Cum	**1075.00**	59087.09			
	Coarse Aggregates (100 Km lead)	110.015	Cum	**1398.00**	153801.05			
	Cement (30 km lead)	53.127	MT	**742.00**	39420.35			
	Boulder (60 Km lead)	0.23	Cum	**1159.00**	260.78			
	Brick (15 km lead)	330.00	No.	**3.18**	1049.40			
	Steel (30 Km lead)	2.94	MT	**742.00**	2184.99			
TOTAL (In Rs.)					**1611875.51**			
TOTAL (In Rs.)					**1611875.51**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	54.96	Cum	**584.64**	32134.58	3213.46		
	Coarse Aggregate	110.02	Cum	**944.26**	103882.82	10388.28		
	Boulders	0.23	Cum	**694.61**	156.29	15.63		
	Total					13617.37		
	For 1 nos. fall, Total Seigniorage charges					**13617.37**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 2.134 METER AT CH.2.525 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	116.673	Cum	**195.20**	22774.64			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	11.44	Cum	**6381.70**	73035.53	3.71	5.15	10.30
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	86.38	Cum	**6914.20**	597278.78	35.63	37.15	74.29
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.81	Cum	**8151.40**	6598.97	0.46	0.32	0.64

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	2.03	MT	**73574.90**	149677.23			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	271.74	Sqm	**578.60**	157227.08			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	5.51	Sqm	**680.10**	3743.95			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.23	Cum	**694.61**	156.29			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.23	Cum	**1237.00**	278.33			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.23	Cum	**1377.70**	309.98			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.23	Cum	**516.50**	116.21			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	13.22	Sqm	**63.20**	835.57			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	4.00	No.	**5588.70**	22354.80			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	31.45	Cum	**149.30**	4694.83			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	42.611	Cum	**1075.00**	45806.87			
	Coarse Aggregates (100 Km lead)	85.230	Cum	**1398.00**	119151.78			
	Cement (30 km lead)	39.801	MT	**742.00**	29532.04			
	Boulder (60 Km lead)	0.23	Cum	**1159.00**	260.78			
	Brick (15 km lead)	330.00	No.	**3.18**	1049.40			
	Steel (30 Km lead)	2.03	MT	**742.00**	1509.49			
TOTAL (In Rs.)					**1236392.53**			
TOTAL (In Rs.)					**1236392.53**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	42.61	Cum	**584.64**	24912.12	2491.21		
	Coarse Aggregate	85.23	Cum	**944.26**	80479.44	8047.94		
	Boulders	0.23	Cum	**694.61**	156.29	15.63		
	Total					10554.78		
	For 1 nos. fall, Total Seigniorage charges					**10554.78**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 1.524 METER AT CH.2.810 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	41.360	Cum	**195.20**	8073.48			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	4.06	Cum	**6381.70**	25882.57	1.31	1.83	3.65
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	31.67	Cum	**6914.20**	218965.54	13.06	13.62	27.24
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.47	Cum	**8151.40**	3795.17	0.26	0.18	0.37

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	0.75	MT	**73574.90**	54872.46			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	127.66	Sqm	**578.60**	73863.29			
7	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	7.39	Sqm	**63.20**	467.16			
8	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			
9	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	10.35	Cum	**149.30**	1545.16			
10	**Carriage of materials**							
	Coarse Sand (60 Km lead)	15.624	Cum	**1075.00**	16796.14			
	Coarse Aggregates (100 Km lead)	31.253	Cum	**1398.00**	43692.10			
	Cement (30 km lead)	14.641	MT	**742.00**	10863.99			
	Boulder (60 Km lead)	0.00	Cum	**1159.00**	0.00			
	Brick (15 km lead)	443.00	No.	**3.18**	1408.74			
	Steel (30 Km lead)	0.75	MT	**742.00**	553.39			
TOTAL (In Rs.)					**471956.59**			
TOTAL (In Rs.)					**471956.59**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	15.62	Cum	**584.64**	9134.60	913.46		
	Coarse Aggregate	31.25	Cum	**944.26**	29511.24	2951.12		
	Boulders	0.00	Cum	**694.61**	0.00	0.00		
	Total					3864.58		
	For 1 nos. fall, Total Seigniorage charges					**3864.58**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 1.829 METER AT CH. 2.870 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	176.765	Cum	**195.20**	34504.56			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	6.21	Cum	**6381.70**	39609.35	2.01	2.79	5.59
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	79.34	Cum	**6914.20**	548541.05	32.73	34.11	68.23
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	7.73	Cum	**8151.40**	63034.21	4.38	3.02	6.11

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	2.16	MT	**73574.90**	158795.51			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	248.78	Sqm	**578.60**	143946.12			
7	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	4.17	Sqm	**63.20**	263.58			
8	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	4.00	No.	**5588.70**	22354.80			
9	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	18.00	Cum	**149.30**	2687.78			
10	**Carriage of materials**							
	Coarse Sand (60 Km lead)	39.923	Cum	**1075.00**	42917.33			
	Coarse Aggregates (100 Km lead)	79.924	Cum	**1398.00**	111733.09			
	Cement (30 km lead)	39.121	MT	**742.00**	29028.09			
	Boulder (60 Km lead)	0.00	Cum	**1159.00**	0.00			
	Brick (15 km lead)	250.00	No.	**3.18**	795.00			
	Steel (30 Km lead)	2.16	MT	**742.00**	1601.45			
TOTAL (In Rs.)					**1199811.89**			
TOTAL (In Rs.)					**1199811.89**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	39.92	Cum	**584.64**	23340.64	2334.06		
	Coarse Aggregate	79.92	Cum	**944.26**	75468.59	7546.86		
	Boulders	0.00	Cum	**694.61**	0.00	0.00		
	Total					9880.92		
	For 1 nos. fall, Total Seigniorage charges					**9880.92**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF QUANTITIES OF SHARDA TYPE FALL FOR SALAIYA MR.								
SHARDA TYPE FALL OF HEIGHT 2.134 METER AT CH. 0.030 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	136.112	Cum	**195.20**	26569.15			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	14.04	Cum	**6381.70**	89598.08	4.55	6.32	12.64
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	106.95	Cum	**6914.20**	739463.16	44.12	45.99	91.98
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.92	Cum	**8151.40**	7495.46	0.52	0.36	0.73

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	2.52	MT	**73574.90**	185308.44			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	286.77	Sqm	**578.60**	165926.94			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	8.57	Sqm	**680.10**	5827.10			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.54	Cum	**694.61**	375.09			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.54	Cum	**1237.00**	667.98			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.54	Cum	**1377.70**	743.96			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.54	Cum	**516.50**	278.91			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	13.89	Sqm	**63.20**	877.89			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	42.08	Cum	**149.30**	6282.75			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	52.664	Cum	**1075.00**	56614.22			
	Coarse Aggregates (100 Km lead)	105.338	Cum	**1398.00**	147262.50			
	Cement (30 km lead)	49.187	MT	**742.00**	36496.41			
	Boulder (60 Km lead)	0.54	Cum	**1159.00**	625.86			
	Brick (15 km lead)	514.00	No.	**3.18**	1634.52			
	Steel (30 Km lead)	2.52	MT	**742.00**	1868.83			
	TOTAL (In Rs.)				**1485094.62**			
	TOTAL (In Rs.)				**1485094.62**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	52.66	Cum	**584.64**	30789.71	3078.97		
	Coarse Aggregate	105.34	Cum	**944.26**	99466.44	9946.64		
	Boulders	0.54	Cum	**694.61**	375.09	37.51		
	Total					13063.12		
	For 1 nos. fall, Total Seigniorage charges					**13063.12**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 0.914 METER AT CH. 0.300 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	88.073	Cum	**195.20**	17191.93			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	9.65	Cum	**6381.70**	61562.87	3.13	4.34	8.68
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	40.45	Cum	**6914.20**	279704.66	16.69	17.40	34.79
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.62	Cum	**8151.40**	5037.81	0.35	0.24	0.49

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	0.95	MT	**73574.90**	70093.60			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	151.50	Sqm	**578.60**	87659.07			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	7.50	Sqm	**680.10**	5098.71			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.47	Cum	**694.61**	328.20			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.47	Cum	**1237.00**	584.48			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.47	Cum	**1377.70**	650.96			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.47	Cum	**516.50**	244.05			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	9.21	Sqm	**63.20**	582.11			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	42.03	Cum	**149.30**	6275.61			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	21.977	Cum	**1075.00**	23625.44			
	Coarse Aggregates (100 Km lead)	43.960	Cum	**1398.00**	61456.77			
	Cement (30 km lead)	20.163	MT	**742.00**	14961.03			
	Boulder (60 Km lead)	0.47	Cum	**1159.00**	547.63			
	Brick (15 km lead)	449.00	No.	**3.18**	1427.82			
	Steel (30 Km lead)	0.95	MT	**742.00**	706.89			
	TOTAL (In Rs.)				**648917.04**			
	TOTAL (In Rs.)				**648917.04**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	21.98	Cum	**584.64**	12848.72	1284.87		
	Coarse Aggregate	43.96	Cum	**944.26**	41510.13	4151.01		
	Boulders	0.47	Cum	**694.61**	328.20	32.82		
	Total					5468.71		
	For 1 nos. fall, Total Seigniorage charges					**5468.71**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 0.914 METER AT CH. 1.500 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	45.506	Cum	**195.20**	8882.73			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	7.69	Cum	**6381.70**	49046.91	2.49	3.46	6.92
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	33.86	Cum	**6914.20**	234117.21	13.97	14.56	29.12
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.53	Cum	**8151.40**	4347.47	0.30	0.21	0.42

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	0.80	MT	**73574.90**	58669.45			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	138.76	Sqm	**578.60**	80285.33			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	5.51	Sqm	**680.10**	3743.95			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.07	Cum	**694.61**	46.89			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.07	Cum	**1237.00**	83.50			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.07	Cum	**1377.70**	92.99			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.07	Cum	**516.50**	34.86			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	9.09	Sqm	**63.20**	574.60			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	12.63	Cum	**149.30**	1885.80			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	18.226	Cum	**1075.00**	19593.44			
	Coarse Aggregates (100 Km lead)	36.458	Cum	**1398.00**	50968.62			
	Cement (30 km lead)	16.760	MT	**742.00**	12435.86			
	Boulder (60 Km lead)	0.07	Cum	**1159.00**	78.23			
	Brick (15 km lead)	330.00	No.	**3.18**	1049.40			
	Steel (30 Km lead)	0.80	MT	**742.00**	591.68			
	TOTAL (In Rs.)				**537706.31**			
	TOTAL (In Rs.)				**537706.31**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	18.23	Cum	**584.64**	10655.91	1065.59		
	Coarse Aggregate	36.46	Cum	**944.26**	34426.06	3442.61		
	Boulders	0.07	Cum	**694.61**	46.89	4.69		
	Total					4512.89		
	For 1 nos. fall, Total Seigniorage charges					**4512.89**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF QUANTITIES OF SHARDA TYPE FALL FOR DHAMANI SUB-DY.								
SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH.3.300 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	120.633	Cum	**195.20**	23547.58			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	17.66	Cum	**6381.70**	112681.57	5.72	7.95	15.89
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	93.43	Cum	**6914.20**	646022.70	38.54	40.18	80.35
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	1.02	Cum	**8151.40**	8322.25	0.58	0.40	0.81

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	1.02	MT	**73574.90**	75117.03			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	256.12	Sqm	**578.60**	148190.47			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	12.96	Sqm	**680.10**	8814.10			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	2.03	Cum	**694.61**	1406.59			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	2.03	Cum	**1237.00**	2504.93			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	2.03	Cum	**1377.70**	2789.84			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	2.03	Cum	**516.50**	1045.91			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	12.50	Sqm	**63.20**	789.95			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	64.10	Cum	**149.30**	9570.82			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	48.521	Cum	**1075.00**	52159.56			
	Coarse Aggregates (100 Km lead)	97.051	Cum	**1398.00**	135677.65			
	Cement (30 km lead)	44.841	MT	**742.00**	33272.28			
	Boulder (60 Km lead)	2.03	Cum	**1159.00**	2346.98			
	Brick (15 km lead)	777.00	No.	**3.18**	2470.86			
	Steel (30 Km lead)	1.02	MT	**742.00**	757.55			
	TOTAL (In Rs.)				**1278666.03**			
	TOTAL (In Rs.)				**1278666.03**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	48.52	Cum	**584.64**	28367.04	2836.70		
	Coarse Aggregate	97.05	Cum	**944.26**	91641.61	9164.16		
	Boulders	2.03	Cum	**694.61**	1406.59	140.66		
	Total					12141.52		
	For 1 nos. fall, Total Seigniorage charges					**12141.52**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 1.524 METER AT CH.3.800 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	142.230	Cum	**195.20**	27763.24			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	19.35	Cum	**6381.70**	123464.10	6.27	8.71	17.41
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	117.54	Cum	**6914.20**	812677.54	48.48	50.54	101.08
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	1.16	Cum	**8151.40**	9476.98	0.66	0.45	0.92

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	2.77	MT	**73574.90**	203655.86			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	303.56	Sqm	**578.60**	175639.54			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	12.96	Sqm	**680.10**	8814.10			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	2.03	Cum	**694.61**	1406.59			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	2.03	Cum	**1237.00**	2504.93			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	2.03	Cum	**1377.70**	2789.84			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	2.03	Cum	**516.50**	1045.91			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	13.85	Sqm	**63.20**	875.16			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	83.59	Cum	**149.30**	12480.72			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	59.700	Cum	**1075.00**	64178.03			
	Coarse Aggregates (100 Km lead)	119.413	Cum	**1398.00**	166938.84			
	Cement (30 km lead)	55.412	MT	**742.00**	41115.48			
	Boulder (60 Km lead)	2.03	Cum	**1159.00**	2346.98			
	Brick (15 km lead)	777.00	No.	**3.18**	2470.86			
	Steel (30 Km lead)	2.77	MT	**742.00**	2053.86			
	TOTAL (In Rs.)				**1672875.95**			
	TOTAL (In Rs.)				**1672875.95**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	59.70	Cum	**584.64**	34903.30	3490.33		
	Coarse Aggregate	119.41	Cum	**944.26**	112756.56	11275.66		
	Boulders	2.03	Cum	**694.61**	1406.59	140.66		
	Total					14906.64		
	For 1 nos. fall, Total Seigniorage charges					**14906.64**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 1.524 METER AT CH.3.950 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	162.977	Cum	**195.20**	31813.15			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	19.35	Cum	**6381.70**	123464.10	6.27	8.71	17.41
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	117.54	Cum	**6914.20**	812677.54	48.48	50.54	101.08
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	1.16	Cum	**8151.40**	9476.98	0.66	0.45	0.92

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	2.77	MT	**73574.90**	203655.86			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	303.56	Sqm	**578.60**	175639.54			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	12.96	Sqm	**680.10**	8814.10			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	2.03	Cum	**694.61**	1406.59			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	2.03	Cum	**1237.00**	2504.93			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	2.03	Cum	**1377.70**	2789.84			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	2.03	Cum	**516.50**	1045.91			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	13.85	Sqm	**63.20**	875.16			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	83.59	Cum	**149.30**	12480.72			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	59.700	Cum	**1075.00**	64178.03			
	Coarse Aggregates (100 Km lead)	119.413	Cum	**1398.00**	166938.84			
	Cement (30 km lead)	55.412	MT	**742.00**	41115.48			
	Boulder (60 Km lead)	2.03	Cum	**1159.00**	2346.98			
	Brick (15 km lead)	777.00	No.	**3.18**	2470.86			
	Steel (30 Km lead)	2.77	MT	**742.00**	2053.86			
	TOTAL (In Rs.)				**1632102.02**			
	TOTAL (In Rs.)				**1632102.02**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	59.70	Cum	**584.64**	34903.30	3490.33		
	Coarse Aggregate	119.41	Cum	**944.26**	112756.56	11275.66		
	Boulders	2.03	Cum	**694.61**	1406.59	140.66		
	Total					14906.64		
	For 1 nos. fall, Total Seigniorage charges					**14906.64**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 0.915 METER AT CH 4.595 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	159.120	Cum	**195.20**	31060.32			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	15.74	Cum	**6381.70**	100431.33	5.10	7.08	14.16
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	72.27	Cum	**6914.20**	499703.86	29.81	31.08	62.15
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.91	Cum	**8151.40**	7423.56	0.52	0.36	0.72

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	1.70	MT	**73574.90**	125225.09			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	217.91	Sqm	**578.60**	126080.80			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	12.96	Sqm	**680.10**	8814.10			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	2.03	Cum	**694.61**	1406.59			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	2.03	Cum	**1237.00**	2504.93			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	2.03	Cum	**1377.70**	2789.84			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	2.03	Cum	**516.50**	1045.91			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	10.79	Sqm	**63.20**	681.88			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	50.67	Cum	**149.30**	7565.19			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	38.514	Cum	**1075.00**	41402.57			
	Coarse Aggregates (100 Km lead)	77.037	Cum	**1398.00**	107697.92			
	Cement (30 km lead)	35.428	MT	**742.00**	26287.23			
	Boulder (60 Km lead)	2.03	Cum	**1159.00**	2346.98			
	Brick (15 km lead)	777.00	No.	**3.18**	2470.86			
	Steel (30 Km lead)	1.70	MT	**742.00**	1262.89			
	TOTAL (In Rs.)				**1107379.24**			
	TOTAL (In Rs.)				**1107379.24**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	38.51	Cum	**584.64**	22516.83	2251.68		
	Coarse Aggregate	77.04	Cum	**944.26**	72743.09	7274.31		
	Boulders	2.03	Cum	**694.61**	1406.59	140.66		
	Total					9666.65		
	For 1 nos. fall, Total Seigniorage charges					**9666.65**		

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND							
DETAILS OF QUANTITIES OF SHARDA TYPE FALL FOR CHAIN NAWADA SUB-DY.							
S.No.	**Items**	**No.**	**Length**	**Width**	**Height**	**Quantity**	**Unit**
SHARDA TYPE FALL OF HEIGHT 0.762 METER AT CH. 9.150 KM							
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.24*	*1.928*	*1.958*	*9.392*	*Cum*
	Section 2-2	*2*	*3.75*	*1.470*	*1.958*	*21.587*	*Cum*
	Section 3-3	*2*	*1.70*	*1.350*	*1.758*	*8.069*	*Cum*
	Section 5-5	*2*	*6.25*	*2.078*	*1.958*	*50.875*	*Cum*
	Section 6-6	*2*	*3.45*	*1.350*	*1.758*	*16.376*	*Cum*
	U/S Key Floor	*1*	*0.60*	*4.950*	*0.750*	*2.228*	*Cum*
	U/S Floor	*1*	*2.25*	*4.950*	*1.712*	*19.067*	*Cum*
	D/S Floor	*1*	*3.75*	*4.950*	*0.950*	*17.634*	*Cum*
		1	*2.00*	*4.950*	*0.750*	*7.425*	*Cum*
	D/S Key Floor	*1*	*0.70*	*4.950*	*1.150*	*3.985*	*Cum*
	Toe Wall D/S Portion	*1*	*14.55*	*0.750*	*0.900*	*9.821*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*3.25*	*0.600*	*0.750*	*2.925*	*Cum*
						169.38	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*4.950*	*0.150*	*0.40*	*Cum*
		1	*0.67*	*4.950*	*0.150*	*0.50*	*Cum*
		1	*5.33*	*4.950*	*0.150*	*3.95*	*Cum*
		1	*0.43*	*4.950*	*0.150*	*0.32*	*Cum*
		1	*0.49*	*4.950*	*0.150*	*0.36*	*Cum*
		1	*1.12*	*4.950*	*0.150*	*0.83*	*Cum*
		1	*0.54*	*4.950*	*0.150*	*0.40*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.24*	*1.928*	*0.150*	*0.72*	*Cum*
	Section 2-2	*2*	*3.75*	*1.470*	*0.150*	*1.65*	*Cum*
	Section 3-3	*2*	*1.70*	*1.350*	*0.150*	*0.69*	*Cum*
	Section 5-5	*2*	*6.25*	*2.078*	*0.150*	*3.90*	*Cum*
	Section 6-6	*2*	*3.45*	*1.350*	*0.150*	*1.40*	*Cum*
	Toe Wall D/S Portion	*1*	*14.55*	*0.750*	*0.300*	*3.27*	*Cum*
	Toe Wall D/S Portion	*1*	*14.25*	*0.450*	*0.600*	*3.85*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*3.25*	*0.600*	*0.150*	*0.59*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*3.25*	*0.300*	*0.600*	*1.17*	*Cum*
	TOTAL					**24.00**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.02*	*0.450*	*0.450*	*0.41*	*Cum*
		2	*1.02*	*1.039*	*1.962*	*4.15*	*Cum*
		2	*1.02*	*1.778*	*0.600*	*2.17*	*Cum*
	Section 2-2	*2*	*3.75*	*0.450*	*0.450*	*1.52*	*Cum*
		2	*3.75*	*0.810*	*1.200*	*7.29*	*Cum*
		2	*3.75*	*1.320*	*0.600*	*5.94*	*Cum*
	Section 3-3	*2*	*1.25*	*0.450*	*0.450*	*0.51*	*Cum*
		2	*1.25*	*0.750*	*1.000*	*1.88*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	1.25	1.200	0.500	1.50	Cum
	Section 5-5	2	6.28	0.450	0.450	2.54	Cum
		2	6.28	1.039	1.962	25.59	Cum
		2	6.28	1.778	0.600	13.40	Cum
	Section 6-6	2	4.13	0.450	0.450	1.67	Cum
		2	4.13	0.750	1.000	6.19	Cum
		2	4.13	1.200	0.500	4.95	Cum
	Floor	1	0.60	4.950	0.600	1.78	Cum
		1	6.00	4.950	0.600	17.82	Cum
		1	0.26	4.950	0.300	0.38	Cum
		1	0.20	4.950	0.400	0.40	Cum
		1	1.80	4.950	0.500	4.46	Cum
		1	0.70	4.950	1.000	3.47	Cum
	Crest	1	1.02	4.950	1.362	6.87	Cum
	TOTAL					**114.88**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	1	0.80	4.950	0.150	0.59	Cum
	Coping over Abutment Top						
	On Abutment Top (Left Side)	1	17.58	0.450	0.050	0.40	Cum
	On Abutment Top (Right Side)	1	17.58	0.450	0.050	0.40	Cum
	TOTAL					**1.38**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**114.88**	**0.00**	**0.345**	**7850.0**	**2705.37**	**Kg**
	Total Weight in Metric Tonne					**2.71**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	4	1.02		0.450	1.83	Sqm
		4		0.450	0.450	0.81	Sqm
		4	1.02		1.962	8.00	Sqm
		4		1.039	1.962	8.15	Sqm
		4	1.02		0.600	2.45	Sqm
		4		1.778	0.600	4.27	Sqm
	Section 2-2	4	3.75		0.450	6.75	Sqm
		4		0.450	0.450	0.81	Sqm
		4	3.75		1.200	18.00	Sqm
		4		0.810	1.200	3.89	Sqm
		4	3.75		0.600	9.00	Sqm
		4		1.320	0.600	3.17	Sqm
	Section 3-3	4	1.25		0.450	2.25	Sqm
		4		0.450	0.450	0.81	Sqm
		4	1.25		1.000	5.00	Sqm
		4		0.750	1.000	3.00	Sqm
		4	1.25		0.500	2.50	Sqm
		4		1.200	0.500	2.40	Sqm
	Section 5-5	4	6.28		0.450	11.30	Sqm
		4		0.450	0.450	0.81	Sqm
		4	6.28		1.962	49.29	Sqm
		4		1.039	1.962	8.15	Sqm
		4	6.28		0.600	15.07	Sqm
		4		1.778	0.600	4.27	Sqm
	Section 6-6	4	4.13		0.450	7.43	Sqm
		4		0.450	0.450	0.81	Sqm

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		4	*4.13*		*1.000*	*16.50*	*Sqm*
		4		*0.750*	*1.000*	*3.00*	*Sqm*
		4	*4.13*		*0.500*	*8.25*	*Sqm*
		4		*1.200*	*0.500*	*2.40*	*Sqm*
	Floor	*2*	*0.60*		*0.600*	*0.72*	*Sqm*
		2		*4.950*	*0.600*	*5.94*	*Sqm*
		2	*6.00*		*0.600*	*7.20*	*Sqm*
		2		*4.950*	*0.600*	*5.94*	*Sqm*
		2	*0.26*		*0.300*	*0.15*	*Sqm*
		2		*4.950*	*0.300*	*2.97*	*Sqm*
		2	*0.20*		*0.400*	*0.16*	*Sqm*
		2		*4.950*	*0.400*	*3.96*	*Sqm*
		2	*1.80*		*0.500*	*1.80*	*Sqm*
		2		*4.950*	*0.500*	*4.95*	*Sqm*
		2	*0.70*		*1.000*	*1.40*	*Sqm*
		2		*4.950*	*1.000*	*9.90*	*Sqm*
	Crest	*2*	*1.02*		*1.362*	*2.77*	*Sqm*
		2		*4.950*	*1.362*	*13.48*	*Sqm*
	Toe Wall D/S Portion	*2*	*14.55*		*0.300*	*8.73*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*14.25*		*0.600*	*17.10*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*3.25*		*0.150*	*1.95*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*3.25*		*0.600*	*7.80*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**309.36**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*3.25*	*4.953*		*32.19*	*Sqm*
	TOTAL					**32.19**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*3.25*	*4.350*	*0.300*	**4.24**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*3.25*	*4.350*	*0.150*	**4.24**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*17.58*	*0.450*		*7.91*	*Sqm*
	On Abutment Top (Right Side)	*1*	*17.58*	*0.450*		*7.91*	*Sqm*
	TOTAL					**15.82**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1	5.707			5.71	Cum
	Abutment						
	Section 1-1	2	*1.24*	*0.890*		*2.214*	*Cum*
	Section 2-2	2	*3.75*	*0.890*		*6.671*	*Cum*
	Section 3-3	2	*1.70*	*0.682*		*2.319*	*Cum*
	Section 5-5	2	*6.25*	*0.890*		*11.129*	*Cum*
	Section 6-6	2	*3.45*	*0.682*		*4.707*	*Cum*
	D/S protection	2					
	Toe wall	2	*14.55*	*0.150*	*0.600*	*4.365*	*Cum*
		2	*3.25*	0.150	*0.600*	*0.585*	*Cum*
	TOTAL					**37.70**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 0.762 METER AT CH. 9.330 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.24*	*1.867*	*1.801*	*8.329*	*Cum*
	Section 2-2	*2*	*3.25*	*1.410*	*1.801*	*16.506*	*Cum*
	Section 3-3	*2*	*1.70*	*1.290*	*1.601*	*7.022*	*Cum*
	Section 5-5	*2*	*5.77*	*2.017*	*1.801*	*41.917*	*Cum*
	Section 6-6	*2*	*3.16*	*1.290*	*1.601*	*13.053*	*Cum*
	U/S Key Floor	*1*	*0.64*	*4.400*	*0.900*	*2.525*	*Cum*
	U/S Floor	*1*	*2.25*	*4.400*	*1.662*	*16.454*	*Cum*
	D/S Floor	*1*	*3.25*	*4.400*	*0.900*	*12.870*	*Cum*
		1	*2.00*	*4.400*	*0.700*	*6.160*	*Cum*
	D/S Key Floor	*1*	*0.70*	*4.400*	*1.150*	*3.542*	*Cum*
	Toe Wall D/S Portion	*1*	*13.30*	*0.750*	*0.900*	*8.978*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*2.75*	*0.600*	*0.750*	*2.475*	*Cum*
						139.83	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*4.400*	*0.150*	*0.36*	*Cum*
		1	*0.84*	*4.400*	*0.150*	*0.55*	*Cum*
		1	*4.80*	*4.400*	*0.150*	*3.17*	*Cum*
		1	*0.35*	*4.400*	*0.150*	*0.23*	*Cum*
		1	*0.49*	*4.400*	*0.150*	*0.32*	*Cum*
		1	*1.12*	*4.400*	*0.150*	*0.74*	*Cum*
		1	*0.54*	*4.400*	*0.150*	*0.36*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.24*	*1.867*	*0.150*	*0.69*	*Cum*
	Section 2-2	*2*	*3.25*	*1.410*	*0.150*	*1.37*	*Cum*
	Section 3-3	*2*	*1.70*	*1.290*	*0.150*	*0.66*	*Cum*
	Section 5-5	*2*	*5.77*	*2.017*	*0.150*	*3.49*	*Cum*
	Section 6-6	*2*	*3.16*	*1.290*	*0.150*	*1.22*	*Cum*
	Toe Wall D/S Portion	*1*	*13.30*	*0.750*	*0.300*	*2.99*	*Cum*
	Toe Wall D/S Portion	*1*	*13.00*	*0.450*	*0.600*	*3.51*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*2.75*	*0.600*	*0.150*	*0.50*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*2.75*	*0.300*	*0.600*	*0.99*	*Cum*
	TOTAL					**21.16**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.01*	*0.450*	*0.450*	*0.41*	*Cum*
		2	*1.01*	*1.009*	*1.862*	*3.81*	*Cum*
		2	*1.01*	*1.717*	*0.550*	*1.91*	*Cum*
	Section 2-2	*2*	*3.25*	*0.450*	*0.450*	*1.32*	*Cum*
		2	*3.25*	*0.780*	*1.100*	*5.58*	*Cum*
		2	*3.25*	*1.260*	*0.550*	*4.50*	*Cum*
	Section 3-3	*2*	*1.28*	*0.450*	*0.450*	*0.52*	*Cum*
		2	*1.28*	*0.720*	*0.900*	*1.66*	*Cum*
		2	*1.28*	*1.140*	*0.500*	*1.46*	*Cum*
	Section 5-5	*2*	*5.73*	*0.450*	*0.450*	*2.32*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	5.73	1.009	1.862	21.50	Cum
		2	5.73	1.717	0.550	10.81	Cum
	Section 6-6	2	3.73	0.450	0.450	1.51	Cum
		2	3.73	0.720	0.900	4.83	Cum
		2	3.73	1.140	0.500	4.25	Cum
	Floor	1	0.64	4.400	0.750	2.10	Cum
		1	5.50	4.400	0.550	13.31	Cum
		1	0.28	4.400	0.250	0.31	Cum
		1	0.20	4.400	0.400	0.35	Cum
		1	1.80	4.400	0.500	3.96	Cum
		1	0.70	4.400	1.000	3.08	Cum
	Crest	1	1.01	4.400	1.307	5.81	Cum
	TOTAL					**95.32**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	1	0.80	4.400	0.150	0.53	Cum
	Coping over Abutment Top						
	On Abutment Top (Left Side)	1	16.21	0.450	0.050	0.36	Cum
	On Abutment Top (Right Side)	1	16.21	0.450	0.050	0.36	Cum
	TOTAL					**1.26**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**95.32**	**0.00**	**0.286**	**7850.0**	**2244.77**	**Kg**
	Total Weight in Metric Tonne					**2.24**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	4	1.01		0.450	1.82	Sqm
		4		0.450	0.450	0.81	Sqm
		4	1.01		1.862	7.55	Sqm
		4		1.009	1.862	7.51	Sqm
		4	1.01		0.550	2.23	Sqm
		4		1.717	0.550	3.78	Sqm
	Section 2-2	4	3.25		0.450	5.85	Sqm
		4		0.450	0.450	0.81	Sqm
		4	3.25		1.100	14.30	Sqm
		4		0.780	1.100	3.43	Sqm
		4	3.25		0.550	7.15	Sqm
		4		1.260	0.550	2.77	Sqm
	Section 3-3	4	1.28		0.450	2.30	Sqm
		4		0.450	0.450	0.81	Sqm
		4	1.28		0.900	4.61	Sqm
		4		0.720	0.900	2.59	Sqm
		4	1.28		0.500	2.56	Sqm
		4		1.140	0.500	2.28	Sqm
	Section 5-5	4	5.73		0.450	10.31	Sqm
		4		0.450	0.450	0.81	Sqm
		4	5.73		1.862	42.64	Sqm
		4		1.009	1.862	7.51	Sqm
		4	5.73		0.550	12.60	Sqm
		4		1.717	0.550	3.78	Sqm
	Section 6-6	4	3.73		0.450	6.71	Sqm
		4		0.450	0.450	0.81	Sqm
		4	3.73		0.900	13.43	Sqm
		4		0.720	0.900	2.59	Sqm

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		4	*3.73*		*0.500*	*7.46*	*Sqm*
		4		*1.140*	*0.500*	*2.28*	*Sqm*
	Floor	*2*	*0.64*		*0.750*	*0.96*	*Sqm*
		2		*4.400*	*0.750*	*6.60*	*Sqm*
		2	*5.50*		*0.550*	*6.05*	*Sqm*
		2		*4.400*	*0.550*	*4.84*	*Sqm*
		2	*0.28*		*0.250*	*0.14*	*Sqm*
		2		*4.400*	*0.250*	*2.20*	*Sqm*
		2	*0.20*		*0.400*	*0.16*	*Sqm*
		2		*4.400*	*0.400*	*3.52*	*Sqm*
		2	*1.80*		*0.500*	*1.80*	*Sqm*
		2		*4.400*	*0.500*	*4.40*	*Sqm*
		2	*0.70*		*1.000*	*1.40*	*Sqm*
		2		*4.400*	*1.000*	*8.80*	*Sqm*
	Crest	*2*	*1.01*		*1.307*	*2.64*	*Sqm*
		2		*4.400*	*1.307*	*11.50*	*Sqm*
	Toe Wall D/S Portion	*2*	*13.30*		*0.300*	*7.98*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*13.00*		*0.600*	*15.60*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*2.75*		*0.150*	*1.65*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*2.75*		*0.600*	*6.60*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**273.01**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*2.75*	*4.573*		*25.15*	*Sqm*
	TOTAL					**25.15**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*2.75*	*3.800*	*0.300*	**3.14**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*2.75*	*3.800*	*0.150*	**3.14**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*16.21*	*0.450*		*7.30*	*Sqm*
	On Abutment Top (Right Side)	*1*	*16.21*	*0.450*		*7.30*	*Sqm*
	TOTAL					**14.59**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1	5.290			5.29	**Cum**
	Abutment						
	Section 1-1	2	*1.24*	*0.777*		*1.925*	*Cum*
	Section 2-2	2	*3.25*	*0.777*		*5.051*	*Cum*
	Section 3-3	2	*1.70*	*0.589*		*2.003*	*Cum*
	Section 5-5	2	*5.77*	*0.777*		*8.966*	*Cum*
	Section 6-6	2	*3.16*	*0.589*		*3.722*	*Cum*
	D/S protection	2					
	Toe wall	2	*13.30*	*0.150*	*0.600*	*3.990*	*Cum*
		2	*2.75*	0.150	*0.600*	*0.495*	*Cum*
	TOTAL					**31.44**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 1.520 METER AT CH. 12.900 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.16*	*2.340*	*3.481*	*18.955*	*Cum*
	Section 2-2	*2*	*5.00*	*1.428*	*3.481*	*49.709*	*Cum*
	Section 3-3	*2*	*2.95*	*1.278*	*3.281*	*24.739*	*Cum*
	Section 5-5	*2*	*5.57*	*2.490*	*3.481*	*96.601*	*Cum*
	Section 6-6	*2*	*3.10*	*1.278*	*3.281*	*26.014*	*Cum*
	U/S Key Floor	*1*	*0.55*	*3.850*	*1.150*	*2.435*	*Cum*
	U/S Floor	*1*	*3.75*	*3.850*	*2.520*	*36.383*	*Cum*
	D/S Floor	*1*	*5.00*	*3.850*	*0.950*	*18.288*	*Cum*
		1	*3.25*	*3.850*	*0.750*	*9.384*	*Cum*
	D/S Key Floor	*1*	*0.84*	*3.850*	*1.700*	*5.481*	*Cum*
	Toe Wall D/S Portion	*1*	*12.61*	*0.750*	*0.900*	*8.512*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*2.75*	*0.600*	*0.750*	*2.475*	*Cum*
						298.98	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*3.850*	*0.150*	*0.31*	*Cum*
		1	*1.01*	*3.850*	*0.150*	*0.58*	*Cum*
		1	*0.88*	*3.850*	*0.150*	*0.51*	*Cum*
		1	*0.42*	*3.850*	*0.150*	*0.24*	*Cum*
		1	*6.73*	*3.850*	*0.150*	*3.89*	*Cum*
		1	*0.64*	*3.850*	*0.150*	*0.37*	*Cum*
		1	*1.33*	*3.850*	*0.150*	*0.77*	*Cum*
		1	*1.73*	*3.850*	*0.150*	*1.00*	*Cum*
		1	*0.54*	*3.850*	*0.150*	*0.31*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.16*	*2.340*	*0.150*	*0.82*	*Cum*
	Section 2-2	*2*	*5.00*	*1.428*	*0.150*	*2.14*	*Cum*
	Section 3-3	*2*	*2.95*	*1.278*	*0.150*	*1.13*	*Cum*
	Section 5-5	*2*	*5.57*	*2.490*	*0.150*	*4.16*	*Cum*
	Section 6-6	*2*	*3.10*	*1.278*	*0.150*	*1.19*	*Cum*
	Toe Wall D/S Portion	*1*	*12.61*	*0.750*	*0.300*	*2.84*	*Cum*
	Toe Wall D/S Portion	*1*	*12.31*	*0.450*	*0.600*	*3.32*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*2.75*	*0.600*	*0.150*	*0.50*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*2.75*	*0.300*	*0.600*	*0.99*	*Cum*
	TOTAL					**25.07**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.44*	*0.450*	*0.450*	*0.58*	*Cum*
		2	*1.44*	*1.245*	*2.650*	*9.50*	*Cum*
		2	*1.44*	*2.190*	*0.900*	*5.67*	*Cum*
	Section 2-2	*2*	*5.00*	*0.450*	*0.450*	*2.03*	*Cum*
		2	*5.00*	*0.789*	*1.130*	*8.92*	*Cum*
		2	*5.00*	*1.278*	*0.900*	*11.50*	*Cum*
	Section 3-3	*2*	*2.54*	*0.450*	*0.450*	*1.03*	*Cum*
		2	*2.54*	*0.714*	*0.880*	*3.19*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	2.54	1.128	0.700	4.00	Cum
	Section 5-5	2	5.53	0.450	0.450	2.24	Cum
		2	5.53	1.245	2.650	36.48	Cum
		2	5.53	2.190	0.600	14.53	Cum
	Section 6-6	2	3.67	0.450	0.450	1.48	Cum
		2	3.67	0.714	0.880	4.61	Cum
		2	3.67	1.128	0.700	5.79	Cum
	Floor	1	0.55	3.850	1.000	2.12	Cum
		1	8.75	3.850	0.600	20.21	Cum
		1	6.67	3.850	0.300	7.70	Cum
		1	0.32	3.850	0.450	0.55	Cum
		1	0.25	3.850	0.575	0.55	Cum
		1	3.00	3.850	0.700	8.09	Cum
		1	0.84	3.850	1.550	5.00	Cum
	Crest	1	1.18	3.850	2.105	9.60	Cum
	TOTAL					**165.36**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	1	0.85	3.850	0.150	0.49	Cum
	Coping over Abutment Top						
	On Abutment Top (Left Side)	1	19.34	0.450	0.050	0.44	Cum
	On Abutment Top (Right Side)	1	19.34	0.450	0.050	0.44	Cum
	TOTAL					**1.36**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**165.36**	**0.00**	**0.496**	**7850.0**	**3894.11**	**Kg**
	Total Weight in Metric Tonne					**3.89**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	4	1.44		0.450	2.59	Sqm
		4		0.450	0.450	0.81	Sqm
		4	1.44		2.650	15.26	Sqm
		4		1.245	2.650	13.20	Sqm
		4	1.44		0.900	5.18	Sqm
		4		2.190	0.900	7.88	Sqm
	Section 2-2	4	5.00		0.450	9.00	Sqm
		4		0.450	0.450	0.81	Sqm
		4	5.00		1.130	22.60	Sqm
		4		0.789	1.130	3.57	Sqm
		4	5.00		0.900	18.00	Sqm
		4		1.278	0.900	4.60	Sqm
	Section 3-3	4	2.54		0.450	4.56	Sqm
		4		0.450	0.450	0.81	Sqm
		4	2.54		0.880	8.93	Sqm
		4		0.714	0.880	2.51	Sqm
		4	2.54		0.700	7.10	Sqm
		4		1.128	0.700	3.16	Sqm
	Section 5-5	4	5.53		0.450	9.95	Sqm
		4		0.450	0.450	0.81	Sqm
		4	5.53		2.650	58.60	Sqm
		4		1.245	2.650	13.20	Sqm
		4	5.53		0.600	13.27	Sqm
		4		2.190	0.600	5.26	Sqm
	Section 6-6	4	3.67		0.450	6.60	Sqm

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.67*		*0.880*	*12.90*	*Sqm*
		4		*0.714*	*0.880*	*2.51*	*Sqm*
		4	*3.67*		*0.700*	*10.26*	*Sqm*
		4		*1.128*	*0.700*	*3.16*	*Sqm*
	Floor	*2*	*0.55*		*1.000*	*1.10*	*Sqm*
		2		*3.850*	*1.000*	*7.70*	*Sqm*
		2	*8.75*		*0.600*	*10.50*	*Sqm*
		2		*3.850*	*0.600*	*4.62*	*Sqm*
		2	*0.32*		*0.450*	*0.28*	*Sqm*
		2		*3.850*	*0.450*	*3.47*	*Sqm*
		2	*0.25*		*0.575*	*0.29*	*Sqm*
		2		*3.850*	*0.575*	*4.43*	*Sqm*
		2	*3.00*		*0.700*	*4.20*	*Sqm*
		2		*3.850*	*0.700*	*5.39*	*Sqm*
		2	*0.84*		*1.550*	*2.60*	*Sqm*
		2		*3.850*	*1.550*	*11.94*	*Sqm*
	Crest	*2*	*1.18*		*2.105*	*4.98*	*Sqm*
		2		*3.850*	*2.105*	*16.21*	*Sqm*
	Toe Wall D/S Portion	*2*	*12.61*		*0.300*	*7.57*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*12.31*		*0.600*	*14.77*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*2.75*		*0.150*	*1.65*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*2.75*		*0.600*	*6.60*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**378.26**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*2.75*	*4.497*		*24.73*	*Sqm*
	TOTAL					**24.73**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*2.75*	*3.250*	*0.300*	**2.68**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*2.75*	*3.250*	*0.150*	**2.68**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*19.34*	*0.450*		*8.70*	*Sqm*
	On Abutment Top (Right Side)	*1*	*19.34*	*0.450*		*8.70*	*Sqm*
	TOTAL					**17.41**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1	26.031			26.03	**Cum**
	Abutment						
	Section 1-1	2	*1.16*	*2.645*		*6.155*	*Cum*
	Section 2-2	2	*5.00*	*0.723*		*7.230*	*Cum*
	Section 3-3	2	*2.95*	*1.015*		*5.990*	*Cum*
	Section 5-5	2	*5.57*	*2.600*		*28.977*	*Cum*
	Section 6-6	2	*3.10*	*1.015*		*6.299*	*Cum*
	D/S protection	2					
	Toe wall	2	*12.61*	*0.150*	*0.600*	*3.783*	*Cum*
		2	*2.75*	0.150	*0.600*	*0.495*	*Cum*
	TOTAL					**84.96**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 0.914 METER AT CH. 13.325 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.32*	*1.946*	*1.955*	*10.036*	*Cum*
	Section 2-2	*2*	*3.75*	*1.398*	*1.955*	*20.498*	*Cum*
	Section 3-3	*2*	*1.95*	*1.278*	*1.755*	*8.747*	*Cum*
	Section 5-5	*2*	*5.65*	*2.096*	*1.955*	*46.337*	*Cum*
	Section 6-6	*2*	*3.10*	*1.278*	*1.755*	*13.915*	*Cum*
	U/S Key Floor	*1*	*0.52*	*3.850*	*0.850*	*1.702*	*Cum*
	U/S Floor	*1*	*2.50*	*3.850*	*1.914*	*18.422*	*Cum*
	D/S Floor	*1*	*3.75*	*3.850*	*0.850*	*12.272*	*Cum*
		1	*2.25*	*3.850*	*0.650*	*5.631*	*Cum*
	D/S Key Floor	*1*	*0.73*	*3.850*	*1.250*	*3.489*	*Cum*
	Toe Wall D/S Portion	*1*	*12.61*	*0.750*	*0.900*	*8.512*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*2.75*	*0.600*	*0.750*	*2.475*	*Cum*
						152.04	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*3.850*	*0.150*	*0.31*	*Cum*
		1	*0.78*	*3.850*	*0.150*	*0.45*	*Cum*
		1	*0.08*	*3.850*	*0.150*	*0.05*	*Cum*
		1	*0.21*	*3.850*	*0.150*	*0.12*	*Cum*
		1	*5.25*	*3.850*	*0.150*	*3.03*	*Cum*
		1	*0.50*	*3.850*	*0.150*	*0.29*	*Cum*
		1	*0.69*	*3.850*	*0.150*	*0.40*	*Cum*
		1	*1.23*	*3.850*	*0.150*	*0.71*	*Cum*
		1	*0.54*	*3.850*	*0.150*	*0.31*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.32*	*1.946*	*0.150*	*0.77*	*Cum*
	Section 2-2	*2*	*3.75*	*1.398*	*0.150*	*1.57*	*Cum*
	Section 3-3	*2*	*1.95*	*1.278*	*0.150*	*0.75*	*Cum*
	Section 5-5	*2*	*5.65*	*2.096*	*0.150*	*3.56*	*Cum*
	Section 6-6	*2*	*3.10*	*1.278*	*0.150*	*1.19*	*Cum*
	Toe Wall D/S Portion	*1*	*12.61*	*0.750*	*0.300*	*2.84*	*Cum*
	Toe Wall D/S Portion	*1*	*12.31*	*0.450*	*0.600*	*3.32*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*2.75*	*0.600*	*0.150*	*0.50*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*2.75*	*0.300*	*0.600*	*0.99*	*Cum*
	TOTAL					**21.15**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.09*	*0.450*	*0.450*	*0.44*	*Cum*
		2	*1.09*	*1.048*	*1.994*	*4.57*	*Cum*
		2	*1.09*	*1.796*	*0.650*	*2.55*	*Cum*
	Section 2-2	*2*	*3.75*	*0.450*	*0.450*	*1.52*	*Cum*
		2	*3.75*	*0.774*	*1.080*	*6.27*	*Cum*
		2	*3.75*	*1.248*	*0.650*	*6.08*	*Cum*
	Section 3-3	*2*	*1.54*	*0.450*	*0.450*	*0.62*	*Cum*
		2	*1.54*	*0.714*	*0.880*	*1.93*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	1.54	1.128	0.500	1.73	Cum
	Section 5-5	2	5.61	0.450	0.450	2.27	Cum
		2	5.61	1.048	1.994	23.45	Cum
		2	5.61	1.796	0.500	10.08	Cum
	Section 6-6	2	3.67	0.450	0.450	1.48	Cum
		2	3.67	0.714	0.880	4.61	Cum
		2	3.67	1.128	0.500	4.14	Cum
	Floor	1	0.52	3.850	0.700	1.40	Cum
		1	6.25	3.850	0.500	12.03	Cum
		1	5.14	3.850	0.150	2.97	Cum
		1	0.23	3.850	0.350	0.31	Cum
		1	0.20	3.850	0.400	0.31	Cum
		1	2.05	3.850	0.500	3.95	Cum
		1	0.73	3.850	1.100	3.07	Cum
	Crest	1	1.08	3.850	1.449	6.04	Cum
	TOTAL					**101.83**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	1	0.85	3.850	0.150	0.49	Cum
	Coping over Abutment Top						
	On Abutment Top (Left Side)	1	16.89	0.450	0.050	0.38	Cum
	On Abutment Top (Right Side)	1	16.89	0.450	0.050	0.38	Cum
	TOTAL					**1.25**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**101.83**	**0.00**	**0.305**	**7850.0**	**2398.05**	**Kg**
	Total Weight in Metric Tonne					**2.40**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	4	1.09		0.450	1.97	Sqm
		4		0.450	0.450	0.81	Sqm
		4	1.09		1.994	8.73	Sqm
		4		1.048	1.994	8.36	Sqm
		4	1.09		0.650	2.84	Sqm
		4		1.796	0.650	4.67	Sqm
	Section 2-2	4	3.75		0.450	6.75	Sqm
		4		0.450	0.450	0.81	Sqm
		4	3.75		1.080	16.20	Sqm
		4		0.774	1.080	3.34	Sqm
		4	3.75		0.650	9.75	Sqm
		4		1.248	0.650	3.24	Sqm
	Section 3-3	4	1.54		0.450	2.76	Sqm
		4		0.450	0.450	0.81	Sqm
		4	1.54		0.880	5.41	Sqm
		4		0.714	0.880	2.51	Sqm
		4	1.54		0.500	3.07	Sqm
		4		1.128	0.500	2.26	Sqm
	Section 5-5	4	5.61		0.450	10.10	Sqm
		4		0.450	0.450	0.81	Sqm
		4	5.61		1.994	44.75	Sqm
		4		1.048	1.994	8.36	Sqm
		4	5.61		0.500	11.22	Sqm
		4		1.796	0.500	3.59	Sqm
	Section 6-6	4	3.67		0.450	6.60	Sqm

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.67*		*0.880*	*12.90*	*Sqm*
		4		*0.714*	*0.880*	*2.51*	*Sqm*
		4	*3.67*		*0.500*	*7.33*	*Sqm*
		4		*1.128*	*0.500*	*2.26*	*Sqm*
	Floor	*2*	*0.52*		*0.700*	*0.73*	*Sqm*
		2		*3.850*	*0.700*	*5.39*	*Sqm*
		2	*6.25*		*0.500*	*6.25*	*Sqm*
		2		*3.850*	*0.500*	*3.85*	*Sqm*
		2	*0.23*		*0.350*	*0.16*	*Sqm*
		2		*3.850*	*0.350*	*2.70*	*Sqm*
		2	*0.20*		*0.400*	*0.16*	*Sqm*
		2		*3.850*	*0.400*	*3.08*	*Sqm*
		2	*2.05*		*0.500*	*2.05*	*Sqm*
		2		*3.850*	*0.500*	*3.85*	*Sqm*
		2	*0.73*		*1.100*	*1.60*	*Sqm*
		2		*3.850*	*1.100*	*8.47*	*Sqm*
	Crest	*2*	*1.08*		*1.449*	*3.14*	*Sqm*
		2		*3.850*	*1.449*	*11.16*	*Sqm*
	Toe Wall D/S Portion	*2*	*12.61*		*0.300*	*7.57*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*12.31*		*0.600*	*14.77*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*2.75*		*0.150*	*1.65*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*2.75*		*0.600*	*6.60*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**280.77**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*2.75*	*4.497*		*24.73*	*Sqm*
	TOTAL					**24.73**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*2.75*	*3.250*	*0.300*	**2.68**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*2.75*	*3.250*	*0.150*	**2.68**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*16.89*	*0.450*		*7.60*	*Sqm*
	On Abutment Top (Right Side)	*1*	*16.89*	*0.450*		*7.60*	*Sqm*
	TOTAL					**15.20**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1	6.846			6.85	Cum
	Abutment						
	Section 1-1	2	*1.32*	*0.845*		*2.228*	*Cum*
	Section 2-2	2	*3.75*	*0.841*		*6.308*	*Cum*
	Section 3-3	2	*1.95*	*0.634*		*2.473*	*Cum*
	Section 5-5	2	*5.65*	*0.822*		*9.295*	*Cum*
	Section 6-6	2	*3.10*	*0.634*		*3.933*	*Cum*
	D/S protection	2					
	Toe wall	2	*12.61*	*0.150*	*0.600*	*3.783*	*Cum*
		2	*2.75*	0.150	*0.600*	*0.495*	*Cum*
	TOTAL					**35.36**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF SHARDA TYPE FALL FOR PARANPUR MR.						
	SHARDA TYPE FALL OF HEIGHT 0.762 METER AT CH. 0.200 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.12*	*1.657*	*0.904*	*3.352*	*Cum*
	Section 2-2	*2*	*2.75*	*1.720*	*0.904*	*8.552*	*Cum*
	Section 3-3	*2*	*4.10*	*1.600*	*0.704*	*9.236*	*Cum*
	Section 5-5	*2*	*2.53*	*1.807*	*0.904*	*8.249*	*Cum*
	Section 6-6	*2*	*0.68*	*1.080*	*0.704*	*1.026*	*Cum*
	U/S Key Floor	*1*	*0.82*	*5.500*	*0.450*	*2.030*	*Cum*
	U/S Floor	*1*	*2.00*	*5.500*	*1.612*	*17.732*	*Cum*
	D/S Floor	*1*	*2.75*	*5.500*	*0.850*	*12.856*	*Cum*
		1	*4.40*	*2.000*	*0.650*	*5.720*	*Cum*
	D/S Key Floor	*1*	*0.63*	*5.500*	*0.850*	*2.922*	*Cum*
	Toe Wall D/S Portion	*1*	*6.25*	*0.750*	*0.900*	*4.219*	*Cum*
	Boulder Pitching (D/S Portion)	*1*	*1.75*	*0.900*	*0.750*	*1.181*	*Cum*
						77.08	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*2.000*	*0.150*	*0.16*	*Cum*
		1	*0.78*	*2.000*	*0.150*	*0.23*	*Cum*
		1	*4.13*	*2.000*	*0.150*	*1.24*	*Cum*
		1	*0.28*	*2.000*	*0.150*	*0.08*	*Cum*
		1	*3.04*	*2.000*	*0.150*	*0.91*	*Cum*
		1	*0.78*	*2.000*	*0.150*	*0.23*	*Cum*
		1	*0.54*	*2.000*	*0.150*	*0.16*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.12*	*1.657*	*0.150*	*0.56*	*Cum*
	Section 2-2	*2*	*2.75*	*1.720*	*0.300*	*2.84*	*Cum*
	Section 3-3	*2*	*4.10*	*1.600*	*0.300*	*3.94*	*Cum*
	Section 5-5	*2*	*2.53*	*1.807*	*0.150*	*1.37*	*Cum*
	Section 6-6	*2*	*0.68*	*1.080*	*0.150*	*0.22*	*Cum*
	Toe Wall D/S Portion	*1*	*6.25*	*0.750*	*0.300*	*1.41*	*Cum*
	Toe Wall D/S Portion	*1*	*5.95*	*0.450*	*0.600*	*1.61*	*Cum*
	Toe Wall for resting Brick Edging	*1*	*1.75*	*0.900*	*0.150*	*0.24*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.75*	*0.300*	*0.600*	*0.63*	*Cum*
	TOTAL					**15.83**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*0.89*	*0.450*	*0.450*	*0.36*	*Cum*
		2	*0.89*	*0.904*	*1.512*	*2.44*	*Cum*
		2	*0.89*	*1.507*	*0.500*	*1.35*	*Cum*
	Section 2-2	*2*	*2.75*	*0.820*	*0.500*	*2.26*	*Cum*
		2	*2.75*	*1.045*	*0.750*	*4.31*	*Cum*
		2	*2.75*	*1.420*	*1.000*	*7.81*	*Cum*
	Section 3-3	*2*	*3.79*	*0.820*	*0.500*	*3.10*	*Cum*
		2	*3.79*	*0.985*	*0.550*	*4.10*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	3.79	1.300	1.200	11.81	Cum
	Section 5-5	2	2.48	0.450	0.450	1.00	Cum
		2	2.48	0.904	1.512	6.78	Cum
		2	2.48	1.507	0.500	3.74	Cum
	Section 6-6	2	1.33	0.450	0.450	0.54	Cum
		2	1.33	0.615	0.550	0.90	Cum
		2	1.33	0.930	0.500	1.23	Cum
	deduction for M 25 grade of concrete	2	0.82	5.500	0.300	-2.71	Cum
	Floor	1	0.63	2.000	0.700	0.88	Cum
		1	4.75	2.000	0.500	4.75	Cum
		1	0.31	2.000	0.200	0.12	Cum
		1	0.20	2.000	0.400	0.16	Cum
		1	4.20	2.000	0.500	4.20	Cum
		1	0.63	2.000	0.700	0.88	Cum
	Crest	1	0.88	2.000	1.117	1.96	Cum
	TOTAL					**61.96**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	1	0.70	2.000	0.150	0.21	Cum
	Coping over Abutment Top						
	On Abutment Top (Left Side)	1	5.84	0.450	0.050	0.13	Cum
	On Abutment Top (Right Side)	1	5.84	0.450	0.050	0.13	Cum
	Slab Bridge						
	Slab	1	2.80	5.500	0.328	5.05	Cum
	Wearing coat	1	2.80	4.500	0.070	0.88	Cum
	Dirt wall	2	0.40	5.500	0.300	1.32	Cum
	300 mm thick pedastal	2	0.82	5.500	0.300	2.71	Cum
	TOTAL					**10.43**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Dia of Bars	***No.***	***Length***		***Weight per m***	**Quantity**	**Unit**
a1	16	31	3.26		1.578	159.5	Kg
a2	10	14	5.90		0.616	50.9	Kg
a3	10	2	5.40		0.616	6.7	Kg
a4	10	19	3.18		0.616	37.2	Kg
a5	10	10	5.80		0.616	35.8	Kg
x1	12	48	2.50		0.888	106.6	Kg
x2	16	48	1.37		1.578	103.4	Kg
x3	12	24	2.70		0.888	57.5	Kg
	Taking Skin reinforcement @0.3% of M-20	**61.96**	**0.003**	**0.186**	**7850.0**	**1459.3**	**Kg**
	Total Reinforcement Steel (in kg)					2016.8	Kg
	Total Weight in Metric Tonne					**2.02**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	4	0.89		0.450	1.61	Sqm
		4		0.450	0.450	0.81	Sqm
		4	0.89		1.512	5.41	Sqm
		4		0.904	1.512	5.46	Sqm
		4	0.89		0.500	1.79	Sqm
		4		1.507	0.500	3.01	Sqm
	Section 2-2	4	2.75		0.500	5.50	Sqm
		4		0.820	0.500	1.64	Sqm

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		4	*2.75*		*0.750*	*8.25*	*Sqm*
		4		*1.045*	*0.750*	*3.14*	*Sqm*
		4	*2.75*		*1.000*	*11.00*	*Sqm*
		4		*1.420*	*1.000*	*5.68*	*Sqm*
	Section 3-3	*4*	*3.79*		*0.500*	*7.57*	*Sqm*
		4		*0.820*	*0.500*	*1.64*	*Sqm*
		4	*3.79*		*0.550*	*8.33*	*Sqm*
		4		*0.985*	*0.550*	*2.17*	*Sqm*
		4	*3.79*		*1.200*	*18.17*	*Sqm*
		4		*1.300*	*1.200*	*6.24*	*Sqm*
	Section 5-5	*4*	*2.48*		*0.450*	*4.46*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.48*		*1.512*	*15.00*	*Sqm*
		4		*0.904*	*1.512*	*5.46*	*Sqm*
		4	*2.48*		*0.500*	*4.96*	*Sqm*
		4		*1.507*	*0.500*	*3.01*	*Sqm*
	Section 6-6	*4*	*1.33*		*0.450*	*2.39*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.33*		*0.550*	*2.92*	*Sqm*
		4		*0.615*	*0.550*	*1.35*	*Sqm*
		4	*1.33*		*0.500*	*2.65*	*Sqm*
		4		*0.930*	*0.500*	*1.86*	*Sqm*
	Floor	*2*	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*2.000*	*0.700*	*2.80*	*Sqm*
		2	*4.75*		*0.500*	*4.75*	*Sqm*
		2		*2.000*	*0.500*	*2.00*	*Sqm*
		2	*0.31*		*0.200*	*0.12*	*Sqm*
		2		*2.000*	*0.200*	*0.80*	*Sqm*
		2	*0.20*		*0.400*	*0.16*	*Sqm*
		2		*2.000*	*0.400*	*1.60*	*Sqm*
		2	*4.20*		*0.500*	*4.20*	*Sqm*
		2		*2.000*	*0.500*	*2.00*	*Sqm*
		2	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*2.000*	*0.700*	*2.80*	*Sqm*
	Crest	*2*	*0.88*		*1.117*	*1.96*	*Sqm*
		2		*2.000*	*1.117*	*4.47*	*Sqm*
	Bridge Slab	*2*	*2.80*		*0.33*	*1.84*	*Sqm*
		2		*5.50*	*0.33*	*3.61*	*Sqm*
		1	*2.80*	*5.50*		*15.40*	*Sqm*
	Dirt Wall	*2*	*0.40*		*0.30*	*0.24*	*Sqm*
		2		5.50	0.30	*3.30*	*Sqm*
	Toe Wall D/S Portion	*2*	*6.25*		*0.300*	*3.75*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.95*		*0.600*	*7.14*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.150*	*1.05*	*Sqm*
		4		*0.900*	*0.150*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.600*	*4.20*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**215.29**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.75*	*2.142*		*7.50*	*Sqm*
	TOTAL					**7.50**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.75*	*1.400*	*0.300*	**0.74**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	*1.75*	*1.400*	*0.150*	**0.74**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*5.84*	*0.450*		*2.63*	*Sqm*
	On Abutment Top (Right Side)	*1*	*5.84*	*0.450*		*2.63*	*Sqm*
	TOTAL					**5.25**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	4.00			**4.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	U/S Floor	1		2.624		2.62	Cum
	Abutment						
	Section 1-1	2	1.12	*0.171*		*0.383*	*Cum*
	Section 2-2	2	2.75	*0.171*		*0.941*	*Cum*
	Section 3-3	2	4.10	*0.092*		*0.755*	*Cum*
	Section 5-5	2	2.53	*0.171*		*0.864*	*Cum*
	Section 6-6	2	0.68	*0.910*		*1.229*	*Cum*
	D/S protection	2					
	Toe wall	2	*6.25*	*0.150*	*0.600*	*1.875*	*Cum*
		2	*1.75*	0.150	*0.600*	*0.315*	*Cum*
	TOTAL					**8.98**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH. 0.400 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.31*	*1.932*	*1.645*	*8.327*	*Cum*
	Section 2-2	*2*	*3.50*	*1.720*	*1.645*	*19.806*	*Cum*
	Section 3-3	*2*	*4.05*	*1.600*	*1.445*	*18.727*	*Cum*
	Section 5-5	*2*	*2.47*	*2.082*	*1.645*	*16.902*	*Cum*
	Section 6-6	*2*	*0.68*	*1.080*	*1.445*	*2.107*	*Cum*
	U/S Key Floor	*1*	*0.82*	*5.500*	*0.450*	*2.030*	*Cum*
	U/S Floor	*1*	*2.50*	*5.500*	*2.270*	*31.213*	*Cum*
	D/S Floor	*1*	*3.50*	*5.500*	*1.050*	*20.213*	*Cum*
		1	*1.00*	*2.000*	*0.700*	*1.400*	*Cum*
		1	*3.35*	*2.000*	*0.650*	*4.355*	*Cum*
	D/S Key Floor	*1*	*0.71*	*5.500*	*1.200*	*4.703*	*Cum*
	Toe Wall D/S Portion	*1*	*6.25*	*0.750*	*0.900*	*4.219*	*Cum*
	Boulder Pitching (D/S Portion)	*1*	*1.75*	*0.900*	*0.750*	*1.181*	*Cum*
						135.18	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*2.000*	*0.150*	*0.16*	*Cum*
		1	*0.89*	*2.000*	*0.150*	*0.27*	*Cum*
		1	*5.20*	*2.000*	*0.150*	*1.56*	*Cum*
		1	*0.49*	*2.000*	*0.150*	*0.15*	*Cum*
		1	*0.57*	*2.000*	*0.150*	*0.17*	*Cum*
		1	*0.07*	*2.000*	*0.150*	*0.02*	*Cum*
		1	*2.17*	*2.000*	*0.150*	*0.65*	*Cum*
		1	*1.17*	*2.000*	*0.150*	*0.35*	*Cum*
		1	*0.54*	*2.000*	*0.150*	*0.16*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.31*	*1.932*	*0.150*	*0.76*	*Cum*
	Section 2-2	*2*	*3.50*	*1.720*	*0.150*	*1.81*	*Cum*
	Section 3-3	*2*	*4.05*	*1.600*	*0.150*	*1.94*	*Cum*
	Section 5-5	*2*	*2.47*	*2.082*	*0.150*	*1.54*	*Cum*
	Section 6-6	*2*	*0.68*	*1.080*	*0.150*	*0.22*	*Cum*
	Toe Wall D/S Portion	*1*	*6.25*	*0.750*	*0.300*	*1.41*	*Cum*
	Toe Wall D/S Portion	*1*	*5.95*	*0.450*	*0.600*	*1.61*	*Cum*
	Toe Wall for resting Brick Edging	*1*	*1.75*	*0.900*	*0.150*	*0.24*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.75*	*0.300*	*0.600*	*0.63*	*Cum*
	TOTAL					**13.64**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.16*	*0.450*	*0.450*	*0.47*	*Cum*
		2	*1.16*	*1.041*	*1.970*	*4.77*	*Cum*
		2	*1.16*	*1.782*	*0.700*	*2.90*	*Cum*
	Section 2-2	*2*	*3.50*	*0.820*	*0.500*	*2.87*	*Cum*
		2	*3.50*	*1.045*	*0.750*	*5.49*	*Cum*
		2	*3.50*	*1.420*	*1.350*	*13.42*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Section 3-3	*2*	*3.74*	*0.820*	*0.500*	*3.06*	*Cum*
		2	*3.74*	*0.985*	*0.550*	*4.05*	*Cum*
		2	*3.74*	*1.300*	*1.550*	*15.05*	*Cum*
	Section 5-5	*2*	*2.42*	*0.450*	*0.450*	*0.98*	*Cum*
		2	*2.42*	*1.041*	*1.970*	*9.94*	*Cum*
		2	*2.42*	*1.782*	*0.700*	*6.05*	*Cum*
	Section 6-6	*2*	*1.40*	*0.450*	*0.450*	*0.57*	*Cum*
		2	*1.40*	*0.615*	*0.550*	*0.95*	*Cum*
		2	*1.40*	*0.930*	*0.500*	*1.30*	*Cum*
	deduction for M 25 grade of concrete	*2*	*0.82*	*5.500*	*0.300*	*-2.71*	*Cum*
	Floor	*1*	*0.65*	*2.000*	*0.800*	*1.04*	*Cum*
		1	*6.00*	*2.000*	*0.700*	*8.40*	*Cum*
		1	*0.25*	*2.000*	*0.350*	*0.18*	*Cum*
		1	*0.20*	*2.000*	*0.450*	*0.18*	*Cum*
		1	*0.80*	*2.000*	*0.550*	*0.88*	*Cum*
		1	*0.05*	*2.000*	*0.525*	*0.05*	*Cum*
		1	*3.30*	*2.000*	*0.500*	*3.30*	*Cum*
		1	*0.71*	*2.000*	*1.050*	*1.50*	*Cum*
	Crest	*1*	*1.05*	*2.000*	*1.570*	*3.31*	*Cum*
	TOTAL					**87.99**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.80*	*2.000*	*0.150*	*0.24*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*7.79*	*0.450*	*0.050*	*0.18*	*Cum*
	On Abutment Top (Right Side)	*1*	*7.79*	*0.450*	*0.050*	*0.18*	*Cum*
	Slab Bridge						
	Slab	*1*	*2.80*	*5.500*	*0.328*	*5.05*	*Cum*
	Wearing coat	*1*	*2.80*	*4.500*	*0.070*	*0.88*	*Cum*
	Dirt wall	*2*	*0.40*	*5.500*	*0.300*	*1.32*	*Cum*
	300 mm thick pedastal	*2*	*0.82*	*5.500*	*0.300*	*2.71*	*Cum*
	TOTAL					**10.55**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Dia of Bars	***No.***	***Length***		***Weight per m***	**Quantity**	**Unit**
a1	*16*	*31*	*3.26*		*1.578*	*159.5*	*Kg*
a2	*10*	*14*	*5.90*		*0.616*	*50.9*	*Kg*
a3	*10*	*2*	*5.40*		*0.616*	*6.7*	*Kg*
a4	*10*	*19*	*3.18*		*0.616*	*37.2*	*Kg*
a5	*10*	*10*	*5.80*		*0.616*	*35.8*	*Kg*
x1	*12*	*48*	*2.50*		*0.888*	*106.6*	*Kg*
x2	*16*	*48*	*1.37*		*1.578*	*103.4*	*Kg*
x3	*12*	*24*	*2.70*		*0.888*	*57.5*	*Kg*
	Taking Skin reinforcement @0.3% of M-20	**87.99**	**0.003**	**0.264**	**7850.0**	**2072.1**	**Kg**
	Total Reinforcement Steel (in kg)					*2629.6*	*Kg*
	Total Weight in Metric Tonne					**2.63**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.16*		*0.450*	*2.09*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.16*		*1.970*	*9.16*	*Sqm*
		4		*1.041*	*1.970*	*8.20*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		4	*1.16*		*0.700*	*3.26*	*Sqm*
		4		*1.782*	*0.700*	*4.99*	*Sqm*
	Section 2-2	*4*	*3.50*		*0.500*	*7.00*	*Sqm*
		4		*0.820*	*0.500*	*1.64*	*Sqm*
		4	*3.50*		*0.750*	*10.50*	*Sqm*
		4		*1.045*	*0.750*	*3.14*	*Sqm*
		4	*3.50*		*1.350*	*18.90*	*Sqm*
		4		*1.420*	*1.350*	*7.67*	*Sqm*
	Section 3-3	*4*	*3.74*		*0.500*	*7.47*	*Sqm*
		4		*0.820*	*0.500*	*1.64*	*Sqm*
		4	*3.74*		*0.550*	*8.22*	*Sqm*
		4		*0.985*	*0.550*	*2.17*	*Sqm*
		4	*3.74*		*1.550*	*23.16*	*Sqm*
		4		*1.300*	*1.550*	*8.06*	*Sqm*
	Section 5-5	*4*	*2.42*		*0.450*	*4.36*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.42*		*1.970*	*19.10*	*Sqm*
		4		*1.041*	*1.970*	*8.20*	*Sqm*
		4	*2.42*		*0.700*	*6.79*	*Sqm*
		4		*1.782*	*0.700*	*4.99*	*Sqm*
	Section 6-6	*4*	*1.40*		*0.450*	*2.52*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.40*		*0.550*	*3.08*	*Sqm*
		4		*0.615*	*0.550*	*1.35*	*Sqm*
		4	*1.40*		*0.500*	*2.80*	*Sqm*
		4		*0.930*	*0.500*	*1.86*	*Sqm*
	Floor	*2*	*0.65*		*0.800*	*1.04*	*Sqm*
		2		*2.000*	*0.800*	*3.20*	*Sqm*
		2	*6.00*		*0.700*	*8.40*	*Sqm*
		2		*2.000*	*0.700*	*2.80*	*Sqm*
		2	*0.25*		*0.350*	*0.18*	*Sqm*
		2		*2.000*	*0.350*	*1.40*	*Sqm*
		2	*0.20*		*0.450*	*0.18*	*Sqm*
		2		*2.000*	*0.450*	*1.80*	*Sqm*
		2	*0.80*		*0.550*	*0.88*	*Sqm*
		2		*2.000*	*0.550*	*2.20*	*Sqm*
		2	*0.71*		*1.050*	*1.50*	*Sqm*
		2		*2.000*	*1.050*	*4.20*	*Sqm*
	Crest	*2*	*1.05*		*1.570*	*3.31*	*Sqm*
		2		*2.000*	*1.570*	*6.28*	*Sqm*
	Bridge Slab	*2*	*2.80*		*0.33*	*1.84*	*Sqm*
		2		*5.50*	*0.33*	*3.61*	*Sqm*
		1	*2.80*	*5.50*		*15.40*	*Sqm*
	Dirt Wall	*2*	*0.40*		*0.30*	*0.24*	*Sqm*
	Toe Wall D/S Portion	*2*	*6.25*		*0.300*	*3.75*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.95*		*0.600*	*7.14*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.150*	*1.05*	*Sqm*
		4		*0.900*	*0.150*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.600*	*4.20*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**261.57**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.75*	*2.142*		*7.50*	*Sqm*
	TOTAL					**7.50**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.75*	*1.400*	*0.300*	**0.74**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.75*	*1.400*	*0.150*	**0.74**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*7.79*	*0.450*		*3.50*	*Sqm*
	On Abutment Top (Right Side)	*1*	*7.79*	*0.450*		*3.50*	*Sqm*
	TOTAL					**7.01**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	4.00			**4.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	U/S Floor	1	5.907			5.91	Cum
	Abutment						
	Section 1-1	2	1.31	*0.533*		*1.397*	*Cum*
	Section 2-2	2	3.50	*0.200*		*1.400*	*Cum*
	Section 3-3	2	4.05	*0.200*		*1.620*	*Cum*
	Section 5-5	2	2.47	*0.533*		*2.631*	*Cum*
	Section 6-6	2	0.68	*0.200*		*0.270*	*Cum*
	D/S protection	2					
	Toe wall	2	*6.25*	*0.150*	*0.600*	*1.875*	*Cum*
		2	*1.75*	0.150	*0.600*	*0.315*	*Cum*
	TOTAL					**15.41**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH. 0.550 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.31*	*1.932*	*2.357*	*11.931*	*Cum*
	Section 2-2	*2*	*3.50*	*1.720*	*2.357*	*28.378*	*Cum*
	Section 3-3	*2*	*4.05*	*1.600*	*2.157*	*27.955*	*Cum*
	Section 5-5	*2*	*2.47*	*2.082*	*2.357*	*24.217*	*Cum*
	Section 6-6	*2*	*0.68*	*1.080*	*2.157*	*3.145*	*Cum*
	U/S Key Floor	*1*	*0.82*	*5.500*	*0.450*	*2.030*	*Cum*
	U/S Floor	*1*	*2.50*	*5.500*	*2.270*	*31.213*	*Cum*
	D/S Floor	*1*	*3.50*	*5.500*	*1.050*	*20.213*	*Cum*
		1	*1.00*	*2.000*	*0.700*	*1.400*	*Cum*
		1	*3.35*	*2.000*	*0.650*	*4.355*	*Cum*
	D/S Key Floor	*1*	*0.71*	*5.500*	*1.200*	*4.703*	*Cum*
	Toe Wall D/S Portion	*1*	*6.25*	*0.750*	*0.900*	*4.219*	*Cum*
	Boulder Pitching (D/S Portion)	*1*	*1.75*	*0.900*	*0.750*	*1.181*	*Cum*
						164.94	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*2.000*	*0.150*	*0.16*	*Cum*
		1	*0.89*	*2.000*	*0.150*	*0.27*	*Cum*
		1	*5.20*	*2.000*	*0.150*	*1.56*	*Cum*
		1	*0.49*	*2.000*	*0.150*	*0.15*	*Cum*
		1	*0.57*	*2.000*	*0.150*	*0.17*	*Cum*
		1	*0.07*	*2.000*	*0.150*	*0.02*	*Cum*
		1	*2.17*	*2.000*	*0.150*	*0.65*	*Cum*
		1	*1.17*	*2.000*	*0.150*	*0.35*	*Cum*
		1	*0.54*	*2.000*	*0.150*	*0.16*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.31*	*1.932*	*0.150*	*0.76*	*Cum*
	Section 2-2	*2*	*3.50*	*1.720*	*0.150*	*1.81*	*Cum*
	Section 3-3	*2*	*4.05*	*1.600*	*0.150*	*1.94*	*Cum*
	Section 5-5	*2*	*2.47*	*2.082*	*0.150*	*1.54*	*Cum*
	Section 6-6	*2*	*0.68*	*1.080*	*0.150*	*0.22*	*Cum*
	Toe Wall D/S Portion	*1*	*6.25*	*0.750*	*0.300*	*1.41*	*Cum*
	Toe Wall D/S Portion	*1*	*5.95*	*0.450*	*0.600*	*1.61*	*Cum*
	Toe Wall for resting Brick Edging	*1*	*1.75*	*0.900*	*0.150*	*0.24*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.75*	*0.300*	*0.600*	*0.63*	*Cum*
	TOTAL					**13.64**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.16*	*0.450*	*0.450*	*0.47*	*Cum*
		2	*1.16*	*1.041*	*1.970*	*4.77*	*Cum*
		2	*1.16*	*1.782*	*0.700*	*2.90*	*Cum*
	Section 2-2	*2*	*3.50*	*0.820*	*0.500*	*2.87*	*Cum*
		2	*3.50*	*1.045*	*0.750*	*5.49*	*Cum*
		2	*3.50*	*1.420*	*1.350*	*13.42*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Section 3-3	*2*	*3.74*	*0.820*	*0.500*	*3.06*	*Cum*
		2	*3.74*	*0.985*	*0.550*	*4.05*	*Cum*
		2	*3.74*	*1.300*	*1.550*	*15.05*	*Cum*
	Section 5-5	*2*	*2.42*	*0.450*	*0.450*	*0.98*	*Cum*
		2	*2.42*	*1.041*	*1.970*	*9.94*	*Cum*
		2	*2.42*	*1.782*	*0.700*	*6.05*	*Cum*
	Section 6-6	*2*	*1.40*	*0.450*	*0.450*	*0.57*	*Cum*
		2	*1.40*	*0.615*	*0.550*	*0.95*	*Cum*
		2	*1.40*	*0.930*	*0.500*	*1.30*	*Cum*
	deduction for M 25 grade of concrete	*2*	*0.82*	*5.500*	*0.300*	*-2.71*	*Cum*
	Floor	*1*	*0.65*	*2.000*	*0.800*	*1.04*	*Cum*
		1	*6.00*	*2.000*	*0.700*	*8.40*	*Cum*
		1	*0.25*	*2.000*	*0.350*	*0.18*	*Cum*
		1	*0.20*	*2.000*	*0.450*	*0.18*	*Cum*
		1	*0.80*	*2.000*	*0.550*	*0.88*	*Cum*
		1	*0.05*	*2.000*	*0.525*	*0.05*	*Cum*
		1	*3.30*	*2.000*	*0.500*	*3.30*	*Cum*
		1	*0.71*	*2.000*	*1.050*	*1.50*	*Cum*
	Crest	*1*	*1.05*	*2.000*	*1.570*	*3.31*	*Cum*
	TOTAL					**87.99**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.80*	*2.000*	*0.150*	*0.24*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*7.79*	*0.450*	*0.050*	*0.18*	*Cum*
	On Abutment Top (Right Side)	*1*	*7.79*	*0.450*	*0.050*	*0.18*	*Cum*
	Slab Bridge						
	Slab	*1*	*2.80*	*5.500*	*0.328*	*5.05*	*Cum*
	Wearing coat	*1*	*2.80*	*4.500*	*0.070*	*0.88*	*Cum*
	Dirt wall	*2*	*0.40*	*5.500*	*0.300*	*1.32*	*Cum*
	300 mm thick pedastal	*2*	*0.82*	*5.500*	*0.300*	*2.71*	*Cum*
	TOTAL					**10.55**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Dia of Bars	***No.***	***Length***		***Weight per m***	**Quantity**	**Unit**
a1	*16*	*31*	*3.26*		*1.578*	*159.5*	*Kg*
a2	*10*	*14*	*5.90*		*0.616*	*50.9*	*Kg*
a3	*10*	*2*	*5.40*		*0.616*	*6.7*	*Kg*
a4	*10*	*19*	*3.18*		*0.616*	*37.2*	*Kg*
a5	*10*	*10*	*5.80*		*0.616*	*35.8*	*Kg*
x1	*12*	*48*	*2.50*		*0.888*	*106.6*	*Kg*
x2	*16*	*48*	*1.37*		*1.578*	*103.4*	*Kg*
x3	*12*	*24*	*2.70*		*0.888*	*57.5*	*Kg*
	Taking Skin reinforcement @0.3% of M-20	**87.99**	**0.003**	**0.264**	**7850.0**	**2072.1**	**Kg**
	Total Reinforcement Steel (in kg)					*2629.6*	*Kg*
	Total Weight in Metric Tonne					**2.63**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.16*		*0.450*	*2.09*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.16*		*1.970*	*9.16*	*Sqm*
		4		*1.041*	*1.970*	*8.20*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		4	*1.16*		*0.700*	*3.26*	*Sqm*
		4		*1.782*	*0.700*	*4.99*	*Sqm*
	Section 2-2	*4*	*3.50*		*0.500*	*7.00*	*Sqm*
		4		*0.820*	*0.500*	*1.64*	*Sqm*
		4	*3.50*		*0.750*	*10.50*	*Sqm*
		4		*1.045*	*0.750*	*3.14*	*Sqm*
		4	*3.50*		*1.350*	*18.90*	*Sqm*
		4		*1.420*	*1.350*	*7.67*	*Sqm*
	Section 3-3	*4*	*3.74*		*0.500*	*7.47*	*Sqm*
		4		*0.820*	*0.500*	*1.64*	*Sqm*
		4	*3.74*		*0.550*	*8.22*	*Sqm*
		4		*0.985*	*0.550*	*2.17*	*Sqm*
		4	*3.74*		*1.550*	*23.16*	*Sqm*
		4		*1.300*	*1.550*	*8.06*	*Sqm*
	Section 5-5	*4*	*2.42*		*0.450*	*4.36*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.42*		*1.970*	*19.10*	*Sqm*
		4		*1.041*	*1.970*	*8.20*	*Sqm*
		4	*2.42*		*0.700*	*6.79*	*Sqm*
		4		*1.782*	*0.700*	*4.99*	*Sqm*
	Section 6-6	*4*	*1.40*		*0.450*	*2.52*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.40*		*0.550*	*3.08*	*Sqm*
		4		*0.615*	*0.550*	*1.35*	*Sqm*
		4	*1.40*		*0.500*	*2.80*	*Sqm*
		4		*0.930*	*0.500*	*1.86*	*Sqm*
	Floor	*2*	*0.65*		*0.800*	*1.04*	*Sqm*
		2		*2.000*	*0.800*	*3.20*	*Sqm*
		2	*6.00*		*0.700*	*8.40*	*Sqm*
		2		*2.000*	*0.700*	*2.80*	*Sqm*
		2	*0.25*		*0.350*	*0.18*	*Sqm*
		2		*2.000*	*0.350*	*1.40*	*Sqm*
		2	*0.20*		*0.450*	*0.18*	*Sqm*
		2		*2.000*	*0.450*	*1.80*	*Sqm*
		2	*0.80*		*0.550*	*0.88*	*Sqm*
		2		*2.000*	*0.550*	*2.20*	*Sqm*
		2	*0.71*		*1.050*	*1.50*	*Sqm*
		2		*2.000*	*1.050*	*4.20*	*Sqm*
	Crest	*2*	*1.05*		*1.570*	*3.31*	*Sqm*
		2		*2.000*	*1.570*	*6.28*	*Sqm*
	Bridge Slab	*2*	*2.80*		*0.33*	*1.84*	*Sqm*
		2		*5.50*	*0.33*	*3.61*	*Sqm*
		1	*2.80*	*5.50*		*15.40*	*Sqm*
	Dirt Wall	*2*	*0.40*		*0.30*	*0.24*	*Sqm*
		2		5.50	0.30	*3.30*	*Sqm*
	Toe Wall D/S Portion	*2*	*6.25*		*0.300*	*3.75*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.95*		*0.600*	*7.14*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.150*	*1.05*	*Sqm*
		4		*0.900*	*0.150*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.600*	*4.20*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**264.87**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.75*	*2.142*		*7.50*	*Sqm*
	TOTAL					**7.50**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.75*	*1.400*	*0.300*	**0.74**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.75*	*1.400*	*0.150*	**0.74**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*7.79*	*0.450*		*3.50*	*Sqm*
	On Abutment Top (Right Side)	*1*	*7.79*	*0.450*		*3.50*	*Sqm*
	TOTAL					**7.01**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	4.00			**4.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	U/S Floor	1		5.907		5.91	Cum
	Abutment						
	Section 1-1	2	1.31	*1.230*		*3.223*	*Cum*
	Section 2-2	2	3.50	*0.564*		*3.948*	*Cum*
	Section 3-3	2	4.05	*0.461*		*3.734*	*Cum*
	Section 5-5	2	2.47	*1.230*		*6.070*	*Cum*
	Section 6-6	2	0.68	*0.461*		*0.622*	*Cum*
	D/S protection	2					
	Toe wall	2	*6.25*	*0.150*	*0.600*	*1.875*	*Cum*
		2	*1.75*	0.150	*0.600*	*0.315*	*Cum*
	TOTAL					**25.69**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 0.914 METER AT CH. 0.950 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.15*	*1.718*	*1.764*	*6.946*	*Cum*
	Section 2-2	*2*	*3.00*	*1.690*	*1.764*	*17.887*	*Cum*
	Section 3-3	*2*	*4.20*	*1.570*	*1.564*	*20.626*	*Cum*
	Section 5-5	*2*	*2.41*	*1.868*	*1.764*	*15.856*	*Cum*
	Section 6-6	*2*	*0.63*	*1.050*	*1.564*	*2.069*	*Cum*
	U/S Key Floor	*1*	*0.82*	*5.500*	*0.450*	*2.030*	*Cum*
	U/S Floor	*1*	*2.25*	*5.500*	*1.814*	*22.448*	*Cum*
	D/S Floor	*1*	*3.00*	*5.500*	*0.900*	*14.850*	*Cum*
		1	*4.50*	*1.600*	*0.700*	*5.040*	*Cum*
	D/S Key Floor	*1*	*0.63*	*5.500*	*0.850*	*2.922*	*Cum*
	Toe Wall D/S Portion	*1*	*5.70*	*0.750*	*0.900*	*3.848*	*Cum*
	Boulder Pitching (D/S Portion)	*1*	*1.75*	*0.900*	*0.750*	*1.181*	*Cum*
						115.70	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*1.600*	*0.150*	*0.13*	*Cum*
		1	*0.76*	*1.600*	*0.150*	*0.18*	*Cum*
		1	*4.60*	*1.600*	*0.150*	*1.10*	*Cum*
		1	*0.35*	*1.600*	*0.150*	*0.08*	*Cum*
		1	*3.14*	*1.600*	*0.150*	*0.75*	*Cum*
		1	*0.78*	*1.600*	*0.150*	*0.19*	*Cum*
		1	*0.54*	*1.600*	*0.150*	*0.13*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.15*	*1.718*	*0.150*	*0.59*	*Cum*
	Section 2-2	*2*	*3.00*	*1.690*	*0.300*	*3.04*	*Cum*
	Section 3-3	*2*	*4.20*	*1.570*	*0.300*	*3.96*	*Cum*
	Section 5-5	*2*	*2.41*	*1.868*	*0.150*	*1.35*	*Cum*
	Section 6-6	*2*	*0.63*	*1.050*	*0.150*	*0.20*	*Cum*
	Toe Wall D/S Portion	*1*	*5.70*	*0.750*	*0.300*	*1.28*	*Cum*
	Toe Wall D/S Portion	*1*	*5.40*	*0.450*	*0.600*	*1.46*	*Cum*
	Toe Wall for resting Brick Edging	*1*	*1.75*	*0.900*	*0.150*	*0.24*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.75*	*0.300*	*0.600*	*0.63*	*Cum*
	TOTAL					**15.32**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.00*	*0.450*	*0.450*	*0.40*	*Cum*
		2	*1.00*	*0.934*	*1.614*	*3.00*	*Cum*
		2	*1.00*	*1.568*	*0.550*	*1.72*	*Cum*
	Section 2-2	*2*	*3.00*	*0.820*	*0.500*	*2.46*	*Cum*
		2	*3.00*	*1.030*	*0.700*	*4.33*	*Cum*
		2	*3.00*	*1.390*	*1.000*	*8.34*	*Cum*
	Section 3-3	*2*	*3.90*	*0.820*	*0.500*	*3.20*	*Cum*
		2	*3.90*	*0.970*	*0.500*	*3.78*	*Cum*
		2	*3.90*	*1.270*	*1.200*	*11.89*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Section 5-5	*2*	*2.36*	*0.450*	*0.450*	*0.96*	*Cum*
		2	*2.36*	*0.934*	*1.614*	*7.12*	*Cum*
		2	*2.36*	*1.568*	*0.550*	*4.07*	*Cum*
	Section 6-6	*2*	*1.34*	*0.450*	*0.450*	*0.54*	*Cum*
		2	*1.34*	*0.600*	*0.500*	*0.80*	*Cum*
		2	*1.34*	*0.900*	*0.500*	*1.21*	*Cum*
	deduction for M 25 grade of concrete	*2*	*0.82*	*5.500*	*0.300*	*-2.71*	*Cum*
	Floor	*1*	*0.61*	*1.600*	*0.650*	*0.64*	*Cum*
		1	*5.25*	*1.600*	*0.550*	*4.62*	*Cum*
		1	*0.28*	*1.600*	*0.250*	*0.11*	*Cum*
		1	*0.20*	*1.600*	*0.400*	*0.13*	*Cum*
		1	*4.30*	*1.600*	*0.500*	*3.44*	*Cum*
		1	*0.63*	*1.600*	*0.700*	*0.70*	*Cum*
	Crest	*1*	*0.90*	*1.600*	*1.239*	*1.78*	*Cum*
	TOTAL					**62.53**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.70*	*1.600*	*0.150*	*0.17*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*5.37*	*0.450*	*0.050*	*0.12*	*Cum*
	On Abutment Top (Right Side)	*1*	*5.37*	*0.450*	*0.050*	*0.12*	*Cum*
	Slab Bridge						
	Slab	*1*	*2.40*	*5.500*	*0.328*	*4.33*	*Cum*
	Wearing coat	*1*	*2.40*	*4.500*	*0.070*	*0.76*	*Cum*
	Dirt wall	*2*	*0.40*	*5.500*	*0.300*	*1.32*	*Cum*
	300 mm thick pedastal	*2*	*0.82*	*5.500*	*0.300*	*2.71*	*Cum*
	TOTAL					**9.52**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Dia of Bars	***No.***	***Length***		***Weight per m***	**Quantity**	**Unit**
a1	*16*	*31*	*2.86*		*1.578*	*139.9*	*Kg*
a2	*10*	*12*	*5.90*		*0.616*	*43.6*	*Kg*
a3	*10*	*2*	*5.40*		*0.616*	*6.7*	*Kg*
a4	*10*	*19*	*2.78*		*0.616*	*32.6*	*Kg*
a5	*10*	*8*	*5.80*		*0.616*	*28.6*	*Kg*
x1	*12*	*42*	*2.50*		*0.888*	*93.2*	*Kg*
x2	*16*	*42*	*1.27*		*1.578*	*83.8*	*Kg*
x3	*12*	*24*	*2.30*		*0.888*	*49.0*	*Kg*
	Taking Skin reinforcement @0.3% of M-20	**62.53**	**0.003**	**0.188**	**7850.0**	**1472.7**	**Kg**
	Total Reinforcement Steel (in kg)					*1950.2*	*Kg*
	Total Weight in Metric Tonne					**1.95**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.00*		*0.450*	*1.79*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.00*		*1.614*	*6.43*	*Sqm*
		4		*0.934*	*1.614*	*6.03*	*Sqm*
		4	*1.00*		*0.550*	*2.19*	*Sqm*
		4		*1.568*	*0.550*	*3.45*	*Sqm*
	Section 2-2	*4*	*3.00*		*0.500*	*6.00*	*Sqm*
		4		*0.820*	*0.500*	*1.64*	*Sqm*
		4	*3.00*		*0.700*	*8.40*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		4		*1.030*	*0.700*	*2.88*	*Sqm*
		4	*3.00*		*1.000*	*12.00*	*Sqm*
		4		*1.390*	*1.000*	*5.56*	*Sqm*
	Section 3-3	*4*	*3.90*		*0.500*	*7.80*	*Sqm*
		4		*0.820*	*0.500*	*1.64*	*Sqm*
		4	*3.90*		*0.500*	*7.80*	*Sqm*
		4		*0.970*	*0.500*	*1.94*	*Sqm*
		4	*3.90*		*1.200*	*18.72*	*Sqm*
		4		*1.270*	*1.200*	*6.10*	*Sqm*
	Section 5-5	*4*	*2.36*		*0.450*	*4.25*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.36*		*1.614*	*15.25*	*Sqm*
		4		*0.934*	*1.614*	*6.03*	*Sqm*
		4	*2.36*		*0.550*	*5.20*	*Sqm*
		4		*1.568*	*0.550*	*3.45*	*Sqm*
	Section 6-6	*4*	*1.34*		*0.450*	*2.41*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.34*		*0.500*	*2.68*	*Sqm*
		4		*0.600*	*0.500*	*1.20*	*Sqm*
		4	*1.34*		*0.500*	*2.68*	*Sqm*
		4		*0.900*	*0.500*	*1.80*	*Sqm*
	Floor	*2*	*0.61*		*0.650*	*0.80*	*Sqm*
		2		*1.600*	*0.650*	*2.08*	*Sqm*
		2	*5.25*		*0.550*	*5.78*	*Sqm*
		2		*1.600*	*0.550*	*1.76*	*Sqm*
		2	*0.28*		*0.250*	*0.14*	*Sqm*
		2		*1.600*	*0.250*	*0.80*	*Sqm*
		2	*0.20*		*0.400*	*0.16*	*Sqm*
		2		*1.600*	*0.400*	*1.28*	*Sqm*
		2	*4.30*		*0.500*	*4.30*	*Sqm*
		2		*1.600*	*0.500*	*1.60*	*Sqm*
		2	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*1.600*	*0.700*	*2.24*	*Sqm*
	Crest	*2*	*0.90*		*1.239*	*2.23*	*Sqm*
		2		*1.600*	*1.239*	*3.96*	*Sqm*
	Bridge Slab	*2*	*2.40*		*0.33*	*1.57*	*Sqm*
		2		*5.50*	*0.33*	*3.61*	*Sqm*
		1	*2.40*	*5.50*		*13.20*	*Sqm*
	Dirt Wall	*2*	*0.40*		*0.30*	*0.24*	*Sqm*
		2		5.50	0.30	*3.30*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.70*		*0.300*	*3.42*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.40*		*0.600*	*6.48*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.150*	*1.05*	*Sqm*
		4		*0.900*	*0.150*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.600*	*4.20*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**215.07**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.75*	*2.015*		*7.05*	*Sqm*
	TOTAL					**7.05**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.75*	*1.000*	*0.300*	**0.53**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.75*	*1.000*	*0.150*	**0.53**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*5.37*	*0.450*		*2.42*	*Sqm*
	On Abutment Top (Right Side)	*1*	*5.37*	*0.450*		*2.42*	*Sqm*
	TOTAL					**4.83**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	4.00			**4.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	U/S Floor	1	3.629			3.63	*Cum*
	Abutment						
	Section 1-1	2	1.15	*0.741*		*1.699*	*Cum*
	Section 2-2	2	3.00	*0.353*		*2.118*	*Cum*
	Section 3-3	2	4.20	*0.280*		*2.352*	*Cum*
	Section 5-5	2	2.41	*0.741*		*3.566*	*Cum*
	Section 6-6	2	0.63	*0.280*		*0.353*	*Cum*
	D/S protection	2					
	Toe wall	2	*5.70*	*0.150*	*0.600*	*1.710*	*Cum*
		2	*1.75*	0.150	*0.600*	*0.315*	*Cum*
	TOTAL					**15.74**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH. 1.050 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.26*	*1.902*	*1.977*	*9.468*	*Cum*
	Section 2-2	*2*	*3.25*	*1.690*	*1.977*	*21.717*	*Cum*
	Section 3-3	*2*	*4.30*	*1.570*	*1.777*	*23.993*	*Cum*
	Section 5-5	*2*	*2.37*	*2.052*	*1.977*	*19.213*	*Cum*
	Section 6-6	*2*	*0.63*	*1.050*	*1.777*	*2.351*	*Cum*
	U/S Key Floor	*1*	*0.82*	*5.500*	*0.450*	*2.030*	*Cum*
	U/S Floor	*1*	*2.50*	*5.500*	*2.220*	*30.525*	*Cum*
	D/S Floor	*1*	*3.25*	*5.500*	*1.050*	*18.769*	*Cum*
		1	*1.25*	*1.600*	*0.700*	*1.400*	*Cum*
		1	*3.35*	*1.600*	*0.650*	*3.484*	*Cum*
	D/S Key Floor	*1*	*0.71*	*5.500*	*1.200*	*4.703*	*Cum*
	Toe Wall D/S Portion	*1*	*5.70*	*0.750*	*0.900*	*3.848*	*Cum*
	Boulder Pitching (D/S Portion)	*1*	*1.75*	*0.900*	*0.750*	*1.181*	*Cum*
						142.68	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*1.600*	*0.150*	*0.13*	*Cum*
		1	*0.95*	*1.600*	*0.150*	*0.23*	*Cum*
		1	*4.97*	*1.600*	*0.150*	*1.19*	*Cum*
		1	*0.42*	*1.600*	*0.150*	*0.10*	*Cum*
		1	*0.82*	*1.600*	*0.150*	*0.20*	*Cum*
		1	*0.07*	*1.600*	*0.150*	*0.02*	*Cum*
		1	*2.17*	*1.600*	*0.150*	*0.52*	*Cum*
		1	*1.17*	*1.600*	*0.150*	*0.28*	*Cum*
		1	*0.54*	*1.600*	*0.150*	*0.13*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.26*	*1.902*	*0.150*	*0.72*	*Cum*
	Section 2-2	*2*	*3.25*	*1.690*	*0.150*	*1.65*	*Cum*
	Section 3-3	*2*	*4.30*	*1.570*	*0.150*	*2.03*	*Cum*
	Section 5-5	*2*	*2.37*	*2.052*	*0.150*	*1.46*	*Cum*
	Section 6-6	*2*	*0.63*	*1.050*	*0.150*	*0.20*	*Cum*
	Toe Wall D/S Portion	*1*	*5.70*	*0.750*	*0.300*	*1.28*	*Cum*
	Toe Wall D/S Portion	*1*	*5.40*	*0.450*	*0.600*	*1.46*	*Cum*
	Toe Wall for resting Brick Edging	*1*	*1.75*	*0.900*	*0.150*	*0.24*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.75*	*0.300*	*0.600*	*0.63*	*Cum*
	TOTAL					**12.45**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.11*	*0.450*	*0.450*	*0.45*	*Cum*
		2	*1.11*	*1.026*	*1.920*	*4.37*	*Cum*
		2	*1.11*	*1.752*	*0.650*	*2.53*	*Cum*
	Section 2-2	*2*	*3.25*	*0.820*	*0.500*	*2.67*	*Cum*
		2	*3.25*	*1.030*	*0.700*	*4.69*	*Cum*
		2	*3.25*	*1.390*	*1.350*	*12.20*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Section 3-3	*2*	*4.00*	*0.820*	*0.500*	*3.28*	*Cum*
		2	*4.00*	*0.970*	*0.500*	*3.88*	*Cum*
		2	*4.00*	*1.270*	*1.550*	*15.75*	*Cum*
	Section 5-5	*2*	*2.32*	*0.450*	*0.450*	*0.94*	*Cum*
		2	*2.32*	*1.026*	*1.920*	*9.16*	*Cum*
		2	*2.32*	*1.752*	*0.650*	*5.29*	*Cum*
	Section 6-6	*2*	*1.34*	*0.450*	*0.450*	*0.54*	*Cum*
		2	*1.34*	*0.600*	*0.500*	*0.80*	*Cum*
		2	*1.34*	*0.900*	*0.500*	*1.21*	*Cum*
	deduction for M 25 grade of concrete	*2*	*0.82*	*5.500*	*0.300*	*-2.71*	*Cum*
	Floor	*1*	*0.66*	*1.600*	*0.850*	*0.90*	*Cum*
		1	*5.75*	*1.600*	*0.700*	*6.44*	*Cum*
		1	*0.28*	*1.600*	*0.300*	*0.13*	*Cum*
		1	*0.20*	*1.600*	*0.450*	*0.14*	*Cum*
		1	*1.05*	*1.600*	*0.550*	*0.92*	*Cum*
		1	*0.05*	*1.600*	*0.525*	*0.04*	*Cum*
		1	*3.30*	*1.600*	*0.500*	*2.64*	*Cum*
		1	*0.71*	*1.600*	*1.050*	*1.20*	*Cum*
	Crest	*1*	*1.00*	*1.600*	*1.540*	*2.46*	*Cum*
	TOTAL					**79.92**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.75*	*1.600*	*0.150*	*0.18*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*7.55*	*0.450*	*0.050*	*0.17*	*Cum*
	On Abutment Top (Right Side)	*1*	*7.55*	*0.450*	*0.050*	*0.17*	*Cum*
	Slab Bridge						
	Slab	*1*	*2.40*	*5.500*	*0.328*	*4.33*	*Cum*
	Wearing coat	*1*	*2.40*	*4.500*	*0.070*	*0.76*	*Cum*
	Dirt wall	*2*	*0.40*	*5.500*	*0.300*	*1.32*	*Cum*
	300 mm thick pedastal	*2*	*0.82*	*5.500*	*0.300*	*2.71*	*Cum*
	TOTAL					**9.63**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Dia of Bars	***No.***	***Length***		***Weight per m***	**Quantity**	**Unit**
a1	*16*	*31*	*2.86*		*1.578*	*139.9*	*Kg*
a2	*10*	*12*	*5.90*		*0.616*	*43.6*	*Kg*
a3	*10*	*2*	*5.40*		*0.616*	*6.7*	*Kg*
a4	*10*	*19*	*2.78*		*0.616*	*32.6*	*Kg*
a5	*10*	*8*	*5.80*		*0.616*	*28.6*	*Kg*
x1	*12*	*42*	*2.50*		*0.888*	*93.2*	*Kg*
x2	*16*	*42*	*1.27*		*1.578*	*83.8*	*Kg*
x3	*12*	*24*	*2.30*		*0.888*	*49.0*	*Kg*
	Taking Skin reinforcement @0.3% of M-20	**79.92**	**0.003**	**0.240**	**7850.0**	**1882.1**	**Kg**
	Total Reinforcement Steel (in kg)					*2359.6*	*Kg*
	Total Weight in Metric Tonne					**2.36**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.11*		*0.450*	*2.00*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.11*		*1.920*	*8.52*	*Sqm*
		4		*1.026*	*1.920*	*7.88*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		4	*1.11*		*0.650*	*2.88*	*Sqm*
		4		*1.752*	*0.650*	*4.56*	*Sqm*
	Section 2-2	*4*	*3.25*		*0.500*	*6.50*	*Sqm*
		4		*0.820*	*0.500*	*1.64*	*Sqm*
		4	*3.25*		*0.700*	*9.10*	*Sqm*
		4		*1.030*	*0.700*	*2.88*	*Sqm*
		4	*3.25*		*1.350*	*17.55*	*Sqm*
		4		*1.390*	*1.350*	*7.51*	*Sqm*
	Section 3-3	*4*	*4.00*		*0.500*	*8.00*	*Sqm*
		4		*0.820*	*0.500*	*1.64*	*Sqm*
		4	*4.00*		*0.500*	*8.00*	*Sqm*
		4		*0.970*	*0.500*	*1.94*	*Sqm*
		4	*4.00*		*1.550*	*24.80*	*Sqm*
		4		*1.270*	*1.550*	*7.87*	*Sqm*
	Section 5-5	*4*	*2.32*		*0.450*	*4.18*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.32*		*1.920*	*17.85*	*Sqm*
		4		*1.026*	*1.920*	*7.88*	*Sqm*
		4	*2.32*		*0.650*	*6.04*	*Sqm*
		4		*1.752*	*0.650*	*4.56*	*Sqm*
	Section 6-6	*4*	*1.34*		*0.450*	*2.41*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.34*		*0.500*	*2.68*	*Sqm*
		4		*0.600*	*0.500*	*1.20*	*Sqm*
		4	*1.34*		*0.500*	*2.68*	*Sqm*
		4		*0.900*	*0.500*	*1.80*	*Sqm*
	Floor	*2*	*0.66*		*0.850*	*1.13*	*Sqm*
		2		*1.600*	*0.850*	*2.72*	*Sqm*
		2	*5.75*		*0.700*	*8.05*	*Sqm*
		2		*1.600*	*0.700*	*2.24*	*Sqm*
		2	*0.28*		*0.300*	*0.17*	*Sqm*
		2		*1.600*	*0.300*	*0.96*	*Sqm*
		2	*0.20*		*0.450*	*0.18*	*Sqm*
		2		*1.600*	*0.450*	*1.44*	*Sqm*
		2	*1.05*		*0.550*	*1.16*	*Sqm*
		2		*1.600*	*0.550*	*1.76*	*Sqm*
		2	*0.71*		*1.050*	*1.50*	*Sqm*
		2		*1.600*	*1.050*	*3.36*	*Sqm*
	Crest	*2*	*1.00*		*1.540*	*3.08*	*Sqm*
		2		*1.600*	*1.540*	*4.93*	*Sqm*
	Bridge Slab	*2*	*2.40*		*0.33*	*1.57*	*Sqm*
		2		*5.50*	*0.33*	*3.61*	*Sqm*
		1	*2.40*	*5.50*		*13.20*	*Sqm*
	Dirt Wall	*2*	*0.40*		*0.30*	*0.24*	*Sqm*
		2		5.50	0.30	*3.30*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.70*		*0.300*	*3.42*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.40*		*0.600*	*6.48*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.150*	*1.05*	*Sqm*
		4		*0.900*	*0.150*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.600*	*4.20*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**248.96**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.75*	*2.051*		*7.18*	*Sqm*
	TOTAL					**7.18**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.75*	*1.000*	*0.300*	**0.53**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.75*	*1.000*	*0.150*	**0.53**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*7.55*	*0.450*		*3.40*	*Sqm*
	On Abutment Top (Right Side)	*1*	*7.55*	*0.450*		*3.40*	*Sqm*
	TOTAL					**6.79**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	4.00			**4.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	U/S Floor	1		*5.549*		*5.55*	*Cum*
	Abutment						
	Section 1-1	2	1.26	*0.866*		*2.181*	*Cum*
	Section 2-2	2	3.25	*0.333*		*2.162*	*Cum*
	Section 3-3	2	4.30	*0.275*		*2.365*	*Cum*
	Section 5-5	2	2.37	*0.866*		*4.101*	*Cum*
	Section 6-6	2	0.63	*0.275*		*0.347*	*Cum*
	D/S protection	2					
	Toe wall	2	*5.70*	*0.150*	*0.600*	*1.710*	*Cum*
		2	*1.75*	0.150	*0.600*	*0.315*	*Cum*
	TOTAL					**18.73**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 1.524 METER AT CH. 1.150 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.47*	*2.084*	*2.486*	*15.232*	*Cum*
	Section 2-2	*2*	*3.75*	*1.690*	*2.486*	*31.510*	*Cum*
	Section 3-3	*2*	*4.15*	*1.570*	*2.286*	*29.789*	*Cum*
	Section 5-5	*2*	*2.33*	*2.234*	*2.486*	*25.880*	*Cum*
	Section 6-6	*2*	*0.63*	*1.050*	*2.286*	*3.024*	*Cum*
	U/S Key Floor	*1*	*0.82*	*5.500*	*0.450*	*2.030*	*Cum*
	U/S Floor	*1*	*2.75*	*5.500*	*2.724*	*41.201*	*Cum*
	D/S Floor	*1*	*3.75*	*5.500*	*1.200*	*24.750*	*Cum*
		1	*1.35*	*1.600*	*0.800*	*1.728*	*Cum*
		1	*3.10*	*1.600*	*0.750*	*3.720*	*Cum*
	D/S Key Floor	*1*	*0.81*	*5.500*	*1.600*	*7.150*	*Cum*
	Toe Wall D/S Portion	*1*	*5.70*	*0.750*	*0.900*	*3.848*	*Cum*
	Boulder Pitching (D/S Portion)	*1*	*1.75*	*0.900*	*0.750*	*1.181*	*Cum*
						191.04	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*1.600*	*0.150*	*0.13*	*Cum*
		1	*0.84*	*1.600*	*0.150*	*0.20*	*Cum*
		1	*5.71*	*1.600*	*0.150*	*1.37*	*Cum*
		1	*0.57*	*1.600*	*0.150*	*0.14*	*Cum*
		1	*0.88*	*1.600*	*0.150*	*0.21*	*Cum*
		1	*0.07*	*1.600*	*0.150*	*0.02*	*Cum*
		1	*1.72*	*1.600*	*0.150*	*0.41*	*Cum*
		1	*1.62*	*1.600*	*0.150*	*0.39*	*Cum*
		1	*0.54*	*1.600*	*0.150*	*0.13*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.47*	*2.084*	*0.150*	*0.92*	*Cum*
	Section 2-2	*2*	*3.75*	*1.690*	*0.150*	*1.90*	*Cum*
	Section 3-3	*2*	*4.15*	*1.570*	*0.150*	*1.95*	*Cum*
	Section 5-5	*2*	*2.33*	*2.234*	*0.150*	*1.56*	*Cum*
	Section 6-6	*2*	*0.63*	*1.050*	*0.150*	*0.20*	*Cum*
	Toe Wall D/S Portion	*1*	*5.70*	*0.750*	*0.300*	*1.28*	*Cum*
	Toe Wall D/S Portion	*1*	*5.40*	*0.450*	*0.600*	*1.46*	*Cum*
	Toe Wall for resting Brick Edging	*1*	*1.75*	*0.900*	*0.150*	*0.24*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.75*	*0.300*	*0.600*	*0.63*	*Cum*
	TOTAL					**13.14**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.34*	*0.450*	*0.450*	*0.54*	*Cum*
		2	*1.34*	*1.117*	*2.224*	*6.66*	*Cum*
		2	*1.34*	*1.934*	*0.850*	*4.41*	*Cum*
	Section 2-2	*2*	*3.75*	*0.820*	*0.500*	*3.08*	*Cum*
		2	*3.75*	*1.030*	*0.700*	*5.41*	*Cum*
		2	*3.75*	*1.390*	*1.850*	*19.29*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Section 3-3	*2*	*3.85*	*0.820*	*0.500*	*3.16*	*Cum*
		2	*3.85*	*0.970*	*0.500*	*3.73*	*Cum*
		2	*3.85*	*1.270*	*2.050*	*20.05*	*Cum*
	Section 5-5	*2*	*2.29*	*0.450*	*0.450*	*0.93*	*Cum*
		2	*2.29*	*1.117*	*2.224*	*11.36*	*Cum*
		2	*2.29*	*1.934*	*0.850*	*7.52*	*Cum*
	Section 6-6	*2*	*1.34*	*0.450*	*0.450*	*0.54*	*Cum*
		2	*1.34*	*0.600*	*0.500*	*0.80*	*Cum*
		2	*1.34*	*0.900*	*0.500*	*1.21*	*Cum*
	deduction for M 25 grade of concrete	*2*	*0.82*	*5.500*	*0.300*	*-2.71*	*Cum*
	Floor	*1*	*0.64*	*1.600*	*0.750*	*0.77*	*Cum*
		1	*6.50*	*1.600*	*0.850*	*8.84*	*Cum*
		1	*0.27*	*1.600*	*0.300*	*0.13*	*Cum*
		1	*0.20*	*1.600*	*0.550*	*0.18*	*Cum*
		1	*1.15*	*1.600*	*0.650*	*1.20*	*Cum*
		1	*0.05*	*1.600*	*0.625*	*0.05*	*Cum*
		1	*3.05*	*1.600*	*0.600*	*2.93*	*Cum*
		1	*0.81*	*1.600*	*1.450*	*1.89*	*Cum*
	Crest	*1*	*1.20*	*1.600*	*1.839*	*3.52*	*Cum*
	TOTAL					**105.45**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.90*	*1.600*	*0.150*	*0.22*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*8.14*	*0.450*	*0.050*	*0.18*	*Cum*
	On Abutment Top (Right Side)	*1*	*8.14*	*0.450*	*0.050*	*0.18*	*Cum*
	Slab Bridge						
	Slab	*1*	*2.40*	*5.500*	*0.328*	*4.33*	*Cum*
	Wearing coat	*1*	*2.40*	*4.500*	*0.070*	*0.76*	*Cum*
	Dirt wall	*2*	*0.40*	*5.500*	*0.300*	*1.32*	*Cum*
	300 mm thick pedastal	*2*	*0.82*	*5.500*	*0.300*	*2.71*	*Cum*
	TOTAL					**9.69**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Dia of Bars	***No.***	***Length***		***Weight per m***	**Quantity**	**Unit**
a1	*16*	*31*	*2.86*		*1.578*	*139.9*	*Kg*
a2	*10*	*12*	*5.90*		*0.616*	*43.6*	*Kg*
a3	*10*	*2*	*5.40*		*0.616*	*6.7*	*Kg*
a4	*10*	*19*	*2.78*		*0.616*	*32.6*	*Kg*
a5	*10*	*8*	*5.80*		*0.616*	*28.6*	*Kg*
x1	*12*	*42*	*2.50*		*0.888*	*93.2*	*Kg*
x2	*16*	*42*	*1.27*		*1.578*	*83.8*	*Kg*
x3	*12*	*24*	*2.30*		*0.888*	*49.0*	*Kg*
	Taking Skin reinforcement @0.3% of M-20	**105.45**	**0.003**	**0.316**	**7850.0**	**2483.4**	**Kg**
	Total Reinforcement Steel (in kg)					*2960.9*	*Kg*
	Total Weight in Metric Tonne					**2.96**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.34*		*0.450*	*2.41*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.34*		*2.224*	*11.92*	*Sqm*
		4		*1.117*	*2.224*	*9.94*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		4	*1.34*		*0.850*	*4.56*	*Sqm*
		4		*1.934*	*0.850*	*6.58*	*Sqm*
	Section 2-2	*4*	*3.75*		*0.500*	*7.50*	*Sqm*
		4		*0.820*	*0.500*	*1.64*	*Sqm*
		4	*3.75*		*0.700*	*10.50*	*Sqm*
		4		*1.030*	*0.700*	*2.88*	*Sqm*
		4	*3.75*		*1.850*	*27.75*	*Sqm*
		4		*1.390*	*1.850*	*10.29*	*Sqm*
	Section 3-3	*4*	*3.85*		*0.500*	*7.70*	*Sqm*
		4		*0.820*	*0.500*	*1.64*	*Sqm*
		4	*3.85*		*0.500*	*7.70*	*Sqm*
		4		*0.970*	*0.500*	*1.94*	*Sqm*
		4	*3.85*		*2.050*	*31.57*	*Sqm*
		4		*1.270*	*2.050*	*10.41*	*Sqm*
	Section 5-5	*4*	*2.29*		*0.450*	*4.11*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.29*		*2.224*	*20.34*	*Sqm*
		4		*1.117*	*2.224*	*9.94*	*Sqm*
		4	*2.29*		*0.850*	*7.77*	*Sqm*
		4		*1.934*	*0.850*	*6.58*	*Sqm*
	Section 6-6	*4*	*1.34*		*0.450*	*2.41*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.34*		*0.500*	*2.68*	*Sqm*
		4		*0.600*	*0.500*	*1.20*	*Sqm*
		4	*1.34*		*0.500*	*2.68*	*Sqm*
		4		*0.900*	*0.500*	*1.80*	*Sqm*
	Floor	*2*	*0.64*		*0.750*	*0.96*	*Sqm*
		2		*1.600*	*0.750*	*2.40*	*Sqm*
		2	*6.50*		*0.850*	*11.05*	*Sqm*
		2		*1.600*	*0.850*	*2.72*	*Sqm*
		2	*0.27*		*0.300*	*0.16*	*Sqm*
		2		*1.600*	*0.300*	*0.96*	*Sqm*
		2	*0.20*		*0.550*	*0.22*	*Sqm*
		2		*1.600*	*0.550*	*1.76*	*Sqm*
		2	*1.15*		*0.650*	*1.50*	*Sqm*
		2		*1.600*	*0.650*	*2.08*	*Sqm*
		2	*0.81*		*1.450*	*2.36*	*Sqm*
		2		*1.600*	*1.450*	*4.64*	*Sqm*
	Crest	*2*	*1.20*		*1.839*	*4.41*	*Sqm*
		2		*1.600*	*1.839*	*5.88*	*Sqm*
	Bridge Slab	*2*	*2.40*		*0.33*	*1.57*	*Sqm*
		2		*5.50*	*0.33*	*3.61*	*Sqm*
		1	*2.40*	*5.50*		*13.20*	*Sqm*
	Dirt Wall	*2*	*0.40*		*0.30*	*0.24*	*Sqm*
		2		5.50	0.30	*3.30*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.70*		*0.300*	*3.42*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.40*		*0.600*	*6.48*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.150*	*1.05*	*Sqm*
		4		*0.900*	*0.150*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.600*	*4.20*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**299.28**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.75*	*2.051*		*7.18*	*Sqm*
	TOTAL					**7.18**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.75*	*1.000*	*0.300*	**0.53**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.75*	*1.000*	*0.150*	**0.53**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*8.14*	*0.450*		*3.66*	*Sqm*
	On Abutment Top (Right Side)	*1*	*8.14*	*0.450*		*3.66*	*Sqm*
	TOTAL					**7.33**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	4.00			**4.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	U/S Floor	1		7.084		7.08	Cum
	Abutment						
	Section 1-1	2	1.47	*1.235*		*3.631*	*Cum*
	Section 2-2	2	3.75	*0.412*		*3.091*	*Cum*
	Section 3-3	2	4.15	*0.354*		*2.937*	*Cum*
	Section 5-5	2	2.33	*1.235*		*5.755*	*Cum*
	Section 6-6	2	0.63	*0.354*		*0.446*	*Cum*
	D/S protection	2					
	Toe wall	2	*5.70*	*0.150*	*0.600*	*1.710*	*Cum*
		2	*1.75*	0.150	*0.600*	*0.315*	*Cum*
	TOTAL					**24.97**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 1.828 METER AT CH.1.950 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.53*	*1.799*	*1.223*	*6.750*	*Cum*
	Section 2-2	*2*	*4.00*	*1.251*	*1.223*	*12.240*	*Cum*
	Section 3-3	*2*	*2.70*	*1.131*	*1.023*	*6.248*	*Cum*
	Section 5-5	*2*	*2.28*	*1.949*	*1.223*	*10.884*	*Cum*
	Section 6-6	*2*	*0.63*	*1.131*	*1.023*	*1.458*	*Cum*
	U/S Key Floor	*1*	*0.65*	*1.600*	*0.950*	*0.988*	*Cum*
	U/S Floor	*1*	*3.00*	*1.600*	*3.128*	*15.014*	*Cum*
	D/S Floor	*1*	*4.00*	*1.600*	*1.050*	*6.720*	*Cum*
		1	*3.00*	*1.600*	*0.850*	*4.080*	*Cum*
	D/S Key Floor	*1*	*0.94*	*1.600*	*2.100*	*3.150*	*Cum*
	Toe Wall D/S Portion	*1*	*5.70*	*0.750*	*0.900*	*3.848*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*1.75*	*0.600*	*0.750*	*1.575*	*Cum*
						72.95	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*1.600*	*0.150*	*0.13*	*Cum*
		1	*0.89*	*1.600*	*0.150*	*0.21*	*Cum*
		1	*0.15*	*1.600*	*0.150*	*0.04*	*Cum*
		1	*0.35*	*1.600*	*0.150*	*0.08*	*Cum*
		1	*5.90*	*1.600*	*0.150*	*1.42*	*Cum*
		1	*0.49*	*1.600*	*0.150*	*0.12*	*Cum*
		1	*0.89*	*1.600*	*0.150*	*0.21*	*Cum*
		1	*2.18*	*1.600*	*0.150*	*0.52*	*Cum*
		1	*0.54*	*1.600*	*0.150*	*0.13*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.53*	*1.799*	*0.150*	*0.83*	*Cum*
	Section 2-2	*2*	*4.00*	*1.251*	*0.150*	*1.50*	*Cum*
	Section 3-3	*2*	*2.70*	*1.131*	*0.150*	*0.92*	*Cum*
	Section 5-5	*2*	*2.28*	*1.949*	*0.150*	*1.33*	*Cum*
	Section 6-6	*2*	*0.63*	*1.131*	*0.150*	*0.21*	*Cum*
	Toe Wall D/S Portion	*1*	*5.70*	*0.750*	*0.300*	*1.28*	*Cum*
	Toe Wall D/S Portion	*1*	*5.40*	*0.450*	*0.600*	*1.46*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.75*	*0.600*	*0.150*	*0.32*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.75*	*0.300*	*0.600*	*0.63*	*Cum*
	TOTAL					**11.35**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.38*	*0.450*	*0.450*	*0.56*	*Cum*
		2	*1.38*	*0.975*	*1.749*	*4.72*	*Cum*
		2	*1.38*	*1.649*	*0.550*	*2.51*	*Cum*
	Section 2-2	*2*	*4.00*	*0.450*	*0.450*	*1.62*	*Cum*
		2	*4.00*	*0.701*	*0.835*	*4.68*	*Cum*
		2	*4.00*	*1.101*	*0.550*	*4.84*	*Cum*
	Section 3-3	*2*	*2.40*	*0.450*	*0.450*	*0.97*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	*2.40*	*0.641*	*0.635*	*1.95*	*Cum*
		2	*2.40*	*0.981*	*0.500*	*2.35*	*Cum*
	Section 5-5	*2*	*2.25*	*0.450*	*0.450*	*0.91*	*Cum*
		2	*2.25*	*0.975*	*1.749*	*7.66*	*Cum*
		2	*2.25*	*1.649*	*0.500*	*3.71*	*Cum*
	Section 6-6	*2*	*1.34*	*0.450*	*0.450*	*0.54*	*Cum*
		2	*1.34*	*0.641*	*0.635*	*1.09*	*Cum*
		2	*1.34*	*0.981*	*0.500*	*1.31*	*Cum*
	Floor	*1*	*0.65*	*1.600*	*0.800*	*0.83*	*Cum*
		1	*1.16*	*1.600*	*0.700*	*1.30*	*Cum*
		1	*0.25*	*1.600*	*0.825*	*0.33*	*Cum*
		1	*5.60*	*1.600*	*0.950*	*8.51*	*Cum*
		1	*0.20*	*1.600*	*0.700*	*0.22*	*Cum*
		1	*0.36*	*1.600*	*0.350*	*0.20*	*Cum*
		1	*2.80*	*1.600*	*0.800*	*3.58*	*Cum*
		1	*0.94*	*1.600*	*1.950*	*2.93*	*Cum*
	Crest	*1*	*1.25*	*1.600*	*2.143*	*4.28*	*Cum*
	TOTAL					**61.63**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.90*	*1.600*	*0.150*	*0.22*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*12.55*	*0.450*	*0.050*	*0.28*	*Cum*
	On Abutment Top (Right Side)	*1*	*12.55*	*0.450*	*0.050*	*0.28*	*Cum*
	TOTAL					**0.78**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**61.63**	**0.00**	**0.185**	**7850.0**	**1451.42**	**Kg**
	Total Weight in Metric Tonne					**1.45**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.38*		*0.450*	*2.49*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.38*		*1.749*	*9.69*	*Sqm*
		4		*0.975*	*1.749*	*6.82*	*Sqm*
		4	*1.38*		*0.550*	*3.05*	*Sqm*
		4		*1.649*	*0.550*	*3.63*	*Sqm*
	Section 2-2	*4*	*4.00*		*0.450*	*7.20*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.00*		*0.835*	*13.36*	*Sqm*
		4		*0.701*	*0.835*	*2.34*	*Sqm*
		4	*4.00*		*0.550*	*8.80*	*Sqm*
		4		*1.101*	*0.550*	*2.42*	*Sqm*
	Section 3-3	*4*	*2.40*		*0.450*	*4.32*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.40*		*0.635*	*6.10*	*Sqm*
		4		*0.641*	*0.635*	*1.63*	*Sqm*
		4	*2.40*		*0.500*	*4.80*	*Sqm*
		4		*0.981*	*0.500*	*1.96*	*Sqm*
	Section 5-5	*4*	*2.25*		*0.450*	*4.05*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.25*		*1.749*	*15.73*	*Sqm*
		4		*0.975*	*1.749*	*6.82*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		4	*2.25*		*0.500*	*4.50*	*Sqm*
		4		*1.649*	*0.500*	*3.30*	*Sqm*
	Section 6-6	*4*	*1.34*		*0.450*	*2.41*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.34*		*0.635*	*3.40*	*Sqm*
		4		*0.641*	*0.635*	*1.63*	*Sqm*
		4	*1.34*		*0.500*	*2.68*	*Sqm*
		4		*0.981*	*0.500*	*1.96*	*Sqm*
	Floor	*2*	*0.65*		*0.800*	*1.04*	*Sqm*
		2		*1.600*	*0.800*	*2.56*	*Sqm*
		2	*1.16*		*0.700*	*1.63*	*Sqm*
		2		*1.600*	*0.700*	*2.24*	*Sqm*
		2	*5.60*		*0.950*	*10.64*	*Sqm*
		2		*1.600*	*0.950*	*3.04*	*Sqm*
		2	*0.20*		*0.700*	*0.28*	*Sqm*
		2		*1.600*	*0.700*	*2.24*	*Sqm*
		2	*0.36*		*0.350*	*0.25*	*Sqm*
		2		*1.600*	*0.350*	*1.12*	*Sqm*
		2	*2.80*		*0.800*	*4.48*	*Sqm*
		2		*1.600*	*0.800*	*2.56*	*Sqm*
		2	*0.94*		*1.950*	*3.66*	*Sqm*
		2		*1.600*	*1.950*	*6.24*	*Sqm*
	Crest	*2*	*1.25*		*2.143*	*5.35*	*Sqm*
		2		*1.600*	*2.143*	*6.86*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.70*		*0.300*	*3.42*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.40*		*0.600*	*6.48*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.150*	*1.05*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.600*	*4.20*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**200.52**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.75*	*2.051*		*7.18*	*Sqm*
	TOTAL					**7.18**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.75*	*1.000*	*0.300*	**0.53**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.75*	*1.000*	*0.150*	**0.53**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*12.55*	*0.450*		*5.65*	*Sqm*
	On Abutment Top (Right Side)	*1*	*12.55*	*0.450*		*5.65*	*Sqm*
	TOTAL					**11.29**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1	*10.056*			*10.06*	*Cum*
	Abutment						
	Section 1-1	2	*1.53*	*0.790*		*2.424*	*Cum*
	Section 2-2	2	*4.00*	*0.753*		*6.023*	*Cum*
	Section 3-3	2	*2.70*	*0.615*		*3.321*	*Cum*
	Section 5-5	2	*2.28*	*0.790*		*3.608*	*Cum*
	Section 6-6	2	*0.63*	*0.615*		*0.775*	*Cum*
	Toe wall	2	*5.70*	*0.150*	*0.600*	*1.710*	*Cum*
		2	*1.75*	0.150	*0.600*	*0.315*	*Cum*
	TOTAL					**28.23**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 0.457 METER AT CH.2.100 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*0.95*	*1.444*	*1.372*	*3.746*	*Cum*
	Section 2-2	*2*	*2.00*	*1.140*	*1.372*	*6.256*	*Cum*
	Section 3-3	*2*	*2.60*	*1.020*	*1.172*	*6.216*	*Cum*
	Section 5-5	*2*	*2.46*	*1.594*	*1.372*	*10.751*	*Cum*
	Section 6-6	*2*	*0.96*	*1.020*	*1.172*	*2.283*	*Cum*
	U/S Key Floor	*1*	*0.63*	*1.400*	*0.850*	*0.744*	*Cum*
	U/S Floor	*1*	*1.60*	*1.400*	*1.307*	*2.928*	*Cum*
	D/S Floor	*1*	*2.00*	*1.400*	*0.850*	*2.380*	*Cum*
		1	*2.90*	*1.400*	*0.650*	*2.639*	*Cum*
	D/S Key Floor	*1*	*0.63*	*1.400*	*0.850*	*0.744*	*Cum*
	Toe Wall D/S Portion	*1*	*5.35*	*0.750*	*0.900*	*3.611*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*1.75*	*0.600*	*0.750*	*1.575*	*Cum*
						43.87	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*1.400*	*0.150*	*0.11*	*Cum*
		1	*0.78*	*1.400*	*0.150*	*0.16*	*Cum*
		1	*2.98*	*1.400*	*0.150*	*0.63*	*Cum*
		1	*0.28*	*1.400*	*0.150*	*0.06*	*Cum*
		1	*1.54*	*1.400*	*0.150*	*0.32*	*Cum*
		1	*0.78*	*1.400*	*0.150*	*0.16*	*Cum*
		1	*0.54*	*1.400*	*0.150*	*0.11*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*0.95*	*1.444*	*0.150*	*0.41*	*Cum*
	Section 2-2	*2*	*2.00*	*1.140*	*0.150*	*0.68*	*Cum*
	Section 3-3	*2*	*2.60*	*1.020*	*0.150*	*0.80*	*Cum*
	Section 5-5	*2*	*2.46*	*1.594*	*0.150*	*1.18*	*Cum*
	Section 6-6	*2*	*0.96*	*1.020*	*0.150*	*0.29*	*Cum*
	Toe Wall D/S Portion	*1*	*5.35*	*0.750*	*0.300*	*1.20*	*Cum*
	Toe Wall D/S Portion	*1*	*5.05*	*0.450*	*0.600*	*1.36*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.75*	*0.600*	*0.150*	*0.32*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.75*	*0.300*	*0.600*	*0.63*	*Cum*
	TOTAL					**8.43**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*0.80*	*0.450*	*0.450*	*0.32*	*Cum*
		2	*0.80*	*0.797*	*1.157*	*1.47*	*Cum*
		2	*0.80*	*1.294*	*0.500*	*1.03*	*Cum*
	Section 2-2	*2*	*2.00*	*0.450*	*0.450*	*0.81*	*Cum*
		2	*2.00*	*0.645*	*0.650*	*1.68*	*Cum*
		2	*2.00*	*0.990*	*0.500*	*1.98*	*Cum*
	Section 3-3	*2*	*2.32*	*0.450*	*0.450*	*0.94*	*Cum*
		2	*2.32*	*0.585*	*0.450*	*1.22*	*Cum*
		2	*2.32*	*0.870*	*0.500*	*2.01*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Section 5-5	*2*	*2.42*	*0.450*	*0.450*	*0.98*	*Cum*
		2	*2.42*	*0.797*	*1.157*	*4.46*	*Cum*
		2	*2.42*	*1.294*	*0.500*	*3.13*	*Cum*
	Section 6-6	*2*	*1.47*	*0.450*	*0.450*	*0.59*	*Cum*
		2	*1.47*	*0.585*	*0.450*	*0.77*	*Cum*
		2	*1.47*	*0.870*	*0.500*	*1.27*	*Cum*
	Floor	*1*	*0.63*	*1.400*	*0.700*	*0.61*	*Cum*
		1	*3.60*	*1.400*	*0.500*	*2.52*	*Cum*
		1	*0.31*	*1.400*	*0.200*	*0.09*	*Cum*
		1	*0.20*	*1.400*	*0.400*	*0.11*	*Cum*
		1	*2.70*	*1.400*	*0.500*	*1.89*	*Cum*
		1	*0.63*	*1.400*	*0.700*	*0.61*	*Cum*
	Crest	*1*	*0.72*	*1.400*	*0.767*	*0.77*	*Cum*
	TOTAL					**29.27**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.60*	*1.400*	*0.150*	*0.13*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*9.61*	*0.450*	*0.050*	*0.22*	*Cum*
	On Abutment Top (Right Side)	*1*	*9.61*	*0.450*	*0.050*	*0.22*	*Cum*
	TOTAL					**0.56**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**29.27**	**0.00**	**0.088**	**7850.0**	**689.40**	**Kg**
	Total Weight in Metric Tonne					**0.69**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*0.80*		*0.450*	*1.43*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*0.80*		*1.157*	*3.68*	*Sqm*
		4		*0.797*	*1.157*	*3.69*	*Sqm*
		4	*0.80*		*0.500*	*1.59*	*Sqm*
		4		*1.294*	*0.500*	*2.59*	*Sqm*
	Section 2-2	*4*	*2.00*		*0.450*	*3.60*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.00*		*0.650*	*5.20*	*Sqm*
		4		*0.645*	*0.650*	*1.68*	*Sqm*
		4	*2.00*		*0.500*	*4.00*	*Sqm*
		4		*0.990*	*0.500*	*1.98*	*Sqm*
	Section 3-3	*4*	*2.32*		*0.450*	*4.17*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.32*		*0.450*	*4.17*	*Sqm*
		4		*0.585*	*0.450*	*1.05*	*Sqm*
		4	*2.32*		*0.500*	*4.63*	*Sqm*
		4		*0.870*	*0.500*	*1.74*	*Sqm*
	Section 5-5	*4*	*2.42*		*0.450*	*4.35*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.42*		*1.157*	*11.20*	*Sqm*
		4		*0.797*	*1.157*	*3.69*	*Sqm*
		4	*2.42*		*0.500*	*4.84*	*Sqm*
		4		*1.294*	*0.500*	*2.59*	*Sqm*
	Section 6-6	*4*	*1.47*		*0.450*	*2.64*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		4	*1.47*		*0.450*	*2.64*	*Sqm*
		4		*0.585*	*0.450*	*1.05*	*Sqm*
		4	*1.47*		*0.500*	*2.93*	*Sqm*
		4		*0.870*	*0.500*	*1.74*	*Sqm*
	Floor	*2*	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*1.400*	*0.700*	*1.96*	*Sqm*
		2	*3.60*		*0.500*	*3.60*	*Sqm*
		2		*1.400*	*0.500*	*1.40*	*Sqm*
		2	*0.31*		*0.200*	*0.12*	*Sqm*
		2		*1.400*	*0.200*	*0.56*	*Sqm*
		2	*0.20*		*0.400*	*0.16*	*Sqm*
		2		*1.400*	*0.400*	*1.12*	*Sqm*
		2	*2.70*		*0.500*	*2.70*	*Sqm*
		2		*1.400*	*0.500*	*1.40*	*Sqm*
		2	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*1.400*	*0.700*	*1.96*	*Sqm*
	Crest	*2*	*0.72*		*0.767*	*1.10*	*Sqm*
		2		*1.400*	*0.767*	*2.15*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.35*		*0.300*	*3.21*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.05*		*0.600*	*6.06*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.150*	*1.05*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.600*	*4.20*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**123.48**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.75*	*1.961*		*6.86*	*Sqm*
	TOTAL					**6.86**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.75*	*0.800*	*0.300*	**0.42**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.75*	*0.800*	*0.150*	**0.42**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*9.61*	*0.450*		*4.32*	*Sqm*
	On Abutment Top (Right Side)	*1*	*9.61*	*0.450*		*4.32*	*Sqm*
	TOTAL					**8.65**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	4.00			**4.00**	**No.**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1	*0.887*			*0.89*	*Cum*
	Abutment						
	Section 1-1	2	*0.95*	*0.447*		*0.845*	*Cum*
	Section 2-2	2	*2.00*	*0.446*		*1.784*	*Cum*
	Section 3-3	2	*2.60*	*0.426*		*2.214*	*Cum*
	Section 5-5	2	*2.46*	*0.447*		*2.197*	*Cum*
	Section 6-6	2	*0.96*	*0.426*		*0.813*	*Cum*
	Toe wall	2	*5.35*	*0.150*	*0.600*	*1.605*	*Cum*
		2	*1.75*	0.150	*0.600*	*0.315*	*Cum*
	TOTAL					**10.66**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 1.828 METER AT CH. 2.215 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.52*	*2.237*	*2.403*	*16.358*	*Cum*
	Section 2-2	*2*	*3.50*	*1.618*	*2.403*	*27.216*	*Cum*
	Section 3-3	*2*	*4.20*	*1.498*	*2.203*	*27.721*	*Cum*
	Section 5-5	*2*	*2.40*	*2.387*	*2.403*	*27.584*	*Cum*
	Section 6-6	*2*	*0.17*	*0.978*	*2.203*	*0.720*	*Cum*
	U/S Key Floor	*1*	*0.82*	*5.500*	*0.450*	*2.030*	*Cum*
	U/S Floor	*1*	*3.25*	*5.500*	*3.128*	*55.913*	*Cum*
	D/S Floor	*1*	*1.83*	*5.500*	*1.300*	*13.085*	*Cum*
		1	*2.00*	*1.100*	*0.950*	*2.090*	*Cum*
		1	*2.50*	*1.100*	*0.850*	*2.338*	*Cum*
	D/S Key Floor	*1*	*0.90*	*5.500*	*1.950*	*9.653*	*Cum*
	Toe Wall D/S Portion	*1*	*4.84*	*0.750*	*0.900*	*3.267*	*Cum*
	Boulder Pitching (D/S Portion)	*1*	*1.50*	*0.900*	*0.750*	*1.013*	*Cum*
						188.99	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*1.100*	*0.150*	*0.09*	*Cum*
		1	*0.89*	*1.100*	*0.150*	*0.15*	*Cum*
		1	*0.42*	*1.100*	*0.150*	*0.07*	*Cum*
		1	*0.35*	*1.100*	*0.150*	*0.06*	*Cum*
		1	*5.65*	*1.100*	*0.150*	*0.93*	*Cum*
		1	*0.49*	*1.100*	*0.150*	*0.08*	*Cum*
		1	*1.20*	*1.100*	*0.150*	*0.20*	*Cum*
		1	*0.14*	*1.100*	*0.150*	*0.02*	*Cum*
		1	*0.90*	*1.100*	*0.150*	*0.15*	*Cum*
		1	*2.11*	*1.100*	*0.150*	*0.35*	*Cum*
		1	*0.54*	*1.100*	*0.150*	*0.09*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.52*	*2.237*	*0.150*	*1.02*	*Cum*
	Section 2-2	*2*	*3.50*	*1.618*	*0.150*	*1.70*	*Cum*
	Section 3-3	*2*	*4.20*	*1.498*	*0.150*	*1.89*	*Cum*
	Section 5-5	*2*	*2.40*	*2.387*	*0.150*	*1.72*	*Cum*
	Section 6-6	*2*	*0.17*	*0.978*	*0.150*	*0.05*	*Cum*
	Toe Wall D/S Portion	*1*	*4.84*	*0.750*	*0.300*	*1.09*	*Cum*
	Toe Wall D/S Portion	*1*	*4.54*	*0.450*	*0.600*	*1.23*	*Cum*
	Toe Wall for resting Brick Edging	*1*	*1.50*	*0.900*	*0.150*	*0.20*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.300*	*0.600*	*0.54*	*Cum*
	TOTAL					**11.62**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.37*	*0.450*	*0.450*	*0.56*	*Cum*
		2	*1.37*	*1.194*	*2.478*	*8.11*	*Cum*
		2	*1.37*	*2.087*	*0.700*	*4.01*	*Cum*
	Section 2-2	*2*	*3.50*	*0.820*	*0.500*	*2.87*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	*3.50*	*0.994*	*0.580*	*4.04*	*Cum*
		2	*3.50*	*1.318*	*2.300*	*21.22*	*Cum*
	Section 3-3	*2*	*4.05*	*0.820*	*0.500*	*3.32*	*Cum*
		2	*4.05*	*0.934*	*0.380*	*2.87*	*Cum*
		2	*4.05*	*1.198*	*2.500*	*24.26*	*Cum*
	Section 5-5	*2*	*2.36*	*0.450*	*0.450*	*0.95*	*Cum*
		2	*2.36*	*1.194*	*2.478*	*13.94*	*Cum*
		2	*2.36*	*2.087*	*0.700*	*6.89*	*Cum*
	Section 6-6	*2*	*0.94*	*0.450*	*0.450*	*0.38*	*Cum*
		2	*0.94*	*0.564*	*0.380*	*0.40*	*Cum*
		2	*0.94*	*0.828*	*0.700*	*1.09*	*Cum*
	deduction for M 25 grade of concrete	*2*	*0.82*	*5.500*	*0.300*	*-2.71*	*Cum*
	Floor	*1*	*0.65*	*1.100*	*0.800*	*0.57*	*Cum*
		1	*1.42*	*1.100*	*0.700*	*1.09*	*Cum*
		1	*0.20*	*1.100*	*0.825*	*0.18*	*Cum*
		1	*5.08*	*1.100*	*0.950*	*5.31*	*Cum*
		1	*0.62*	*1.100*	*0.350*	*0.24*	*Cum*
		1	*0.20*	*1.100*	*0.700*	*0.15*	*Cum*
		1	*1.80*	*1.100*	*0.800*	*1.58*	*Cum*
		1	*0.10*	*1.100*	*0.750*	*0.08*	*Cum*
		1	*2.40*	*1.100*	*0.700*	*1.85*	*Cum*
		1	*0.90*	*1.100*	*1.800*	*1.78*	*Cum*
	Crest	*1*	*1.24*	*1.100*	*2.088*	*2.85*	*Cum*
	TOTAL					**107.90**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.90*	*1.100*	*0.150*	*0.15*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*7.95*	*0.450*	*0.050*	*0.18*	*Cum*
	On Abutment Top (Right Side)	*1*	*7.95*	*0.450*	*0.050*	*0.18*	*Cum*
	Slab Bridge						
	Slab	*1*	*1.90*	*5.500*	*0.328*	*3.43*	*Cum*
	Wearing coat	*1*	*1.90*	*4.500*	*0.070*	*0.60*	*Cum*
	Dirt wall	*2*	*0.40*	*5.500*	*0.300*	*1.32*	*Cum*
	300 mm thick pedastal	*2*	*0.82*	*5.500*	*0.300*	*2.71*	*Cum*
	TOTAL					**8.56**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Dia of Bars	***No.***	***Length***		***Weight per m***	**Quantity**	**Unit**
a1	*16*	*36*	*2.36*		*1.578*	*134.1*	*Kg*
a2	*10*	*10*	*6.90*		*0.616*	*42.5*	*Kg*
a3	*10*	*2*	*6.40*		*0.616*	*7.9*	*Kg*
a4	*10*	*23*	*2.28*		*0.616*	*32.3*	*Kg*
a5	*10*	*7*	*5.85*		*0.616*	*25.2*	*Kg*
x1	*12*	*32*	*2.50*		*0.888*	*71.0*	*Kg*
x2	*16*	*32*	*1.27*		*1.578*	*63.9*	*Kg*
x3	*10*	*24*	*1.80*		*0.616*	*26.6*	*Kg*
	Taking Skin reinforcement @0.3% of M-20	**107.90**	**0.003**	**0.324**	**7850.0**	**2541.1**	**Kg**
	Total Reinforcement Steel (in kg)					*2944.7*	*Kg*
	Total Weight in Metric Tonne					**2.94**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Section 1-1	*4*	*1.37*		*0.450*	*2.47*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.37*		*2.478*	*13.59*	*Sqm*
		4		*1.194*	*2.478*	*11.83*	*Sqm*
		4	*1.37*		*0.700*	*3.84*	*Sqm*
		4		*2.087*	*0.700*	*5.84*	*Sqm*
	Section 2-2	*4*	*3.50*		*0.500*	*7.00*	*Sqm*
		4		*0.820*	*0.500*	*1.64*	*Sqm*
		4	*3.50*		*0.580*	*8.12*	*Sqm*
		4		*0.994*	*0.580*	*2.31*	*Sqm*
		4	*3.50*		*2.300*	*32.20*	*Sqm*
		4		*1.318*	*2.300*	*12.13*	*Sqm*
	Section 3-3	*4*	*4.05*		*0.500*	*8.10*	*Sqm*
		4		*0.820*	*0.500*	*1.64*	*Sqm*
		4	*4.05*		*0.380*	*6.16*	*Sqm*
		4		*0.934*	*0.380*	*1.42*	*Sqm*
		4	*4.05*		*2.500*	*40.50*	*Sqm*
		4		*1.198*	*2.500*	*11.98*	*Sqm*
	Section 5-5	*4*	*2.36*		*0.450*	*4.24*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.36*		*2.478*	*23.36*	*Sqm*
		4		*1.194*	*2.478*	*11.83*	*Sqm*
		4	*2.36*		*0.700*	*6.60*	*Sqm*
		4		*2.087*	*0.700*	*5.84*	*Sqm*
	Section 6-6	*4*	*0.94*		*0.450*	*1.70*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*0.94*		*0.380*	*1.43*	*Sqm*
		4		*0.564*	*0.380*	*0.86*	*Sqm*
		4	*0.94*		*0.700*	*2.64*	*Sqm*
		4		*0.828*	*0.700*	*2.32*	*Sqm*
	Floor	*2*	*0.65*		*0.800*	*1.04*	*Sqm*
		2		*1.100*	*0.800*	*1.76*	*Sqm*
		2	*1.42*		*0.700*	*1.99*	*Sqm*
		2		*1.100*	*0.700*	*1.54*	*Sqm*
		2	*0.20*		*0.825*	*0.33*	*Sqm*
		2		*1.100*	*0.825*	*1.82*	*Sqm*
		2	*5.08*		*0.950*	*9.65*	*Sqm*
		2		*1.100*	*0.950*	*2.09*	*Sqm*
		2	*0.62*		*0.350*	*0.44*	*Sqm*
		2		*1.100*	*0.350*	*0.77*	*Sqm*
		2	*0.20*		*0.700*	*0.28*	*Sqm*
		2		*1.100*	*0.700*	*1.54*	*Sqm*
		2	*1.80*		*0.800*	*2.88*	*Sqm*
		2		*1.100*	*0.800*	*1.76*	*Sqm*
		2	*0.90*		*1.800*	*3.24*	*Sqm*
		2		*1.100*	*1.800*	*3.96*	*Sqm*
	Crest	*2*	*1.24*		*2.088*	*5.18*	*Sqm*
		2		*1.100*	*2.088*	*4.59*	*Sqm*
	Bridge Slab	*2*	*1.90*		*0.33*	*1.25*	*Sqm*
		2		*5.50*	*0.33*	*3.61*	*Sqm*
		1	*1.90*	*5.50*		*10.45*	*Sqm*
	Dirt Wall	*2*	*0.40*		*0.30*	*0.24*	*Sqm*
		2		5.50	0.30	*3.30*	*Sqm*
	Toe Wall D/S Portion	*2*	*4.84*		*0.300*	*2.90*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*4.54*		*0.600*	*5.45*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.150*	*0.90*	*Sqm*
		4		*0.900*	*0.150*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.600*	*3.60*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**312.81**	**Sqm**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.50*	*1.835*		*5.51*	*Sqm*
	TOTAL					**5.51**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.50*	*0.500*	*0.300*	**0.23**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.50*	*0.500*	*0.150*	**0.23**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*7.95*	*0.450*		*3.58*	*Sqm*
	On Abutment Top (Right Side)	*1*	*7.95*	*0.450*		*3.58*	*Sqm*
	TOTAL					**7.16**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	4.00			**4.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	U/S Floor	1	*10.906*			*10.91*	*Cum*
	Abutment						
	Section 1-1	2	1.52	*1.294*		*3.938*	*Cum*
	Section 2-2	2	3.50	*0.315*		*2.205*	*Cum*
	Section 3-3	2	4.20	*0.315*		*2.646*	*Cum*
	Section 5-5	2	2.40	*1.294*		*6.223*	*Cum*
	Section 6-6	2	0.17	*0.315*		*0.105*	*Cum*
	D/S protection	2					
	Toe wall	2	*4.84*	*0.150*	*0.600*	*1.452*	*Cum*
		2	*1.50*	0.150	*0.600*	*0.270*	*Cum*
	TOTAL					**27.74**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 2.134 METER AT CH.2.525 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.59*	*2.378*	*2.107*	*15.948*	*Cum*
	Section 2-2	*2*	*4.00*	*1.098*	*2.107*	*18.508*	*Cum*
	Section 3-3	*2*	*5.20*	*0.978*	*1.907*	*19.396*	*Cum*
	Section 5-5	*2*	*2.01*	*2.528*	*2.107*	*21.460*	*Cum*
	Section 6-6	*2*	*0.89*	*0.978*	*1.907*	*3.327*	*Cum*
	U/S Key Floor	*1*	*0.63*	*1.100*	*0.850*	*0.584*	*Cum*
	U/S Floor	*1*	*4.00*	*1.100*	*3.548*	*15.611*	*Cum*
	D/S Floor	*1*	*4.00*	*1.100*	*1.450*	*6.380*	*Cum*
		1	*5.30*	*1.100*	*1.250*	*7.288*	*Cum*
	D/S Key Floor	*1*	*3.40*	*1.100*	*0.950*	*3.553*	*Cum*
	Toe Wall D/S Portion	*1*	*4.84*	*0.750*	*0.900*	*3.267*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*1.50*	*0.600*	*0.750*	*1.350*	*Cum*
						116.67	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*1.100*	*0.150*	*0.09*	*Cum*
		1	*0.78*	*1.100*	*0.150*	*0.13*	*Cum*
		1	*1.07*	*1.100*	*0.150*	*0.18*	*Cum*
		1	*0.42*	*1.100*	*0.150*	*0.07*	*Cum*
		1	*6.25*	*1.100*	*0.150*	*1.03*	*Cum*
		1	*0.57*	*1.100*	*0.150*	*0.09*	*Cum*
		1	*1.15*	*1.100*	*0.150*	*0.19*	*Cum*
		1	*0.14*	*1.100*	*0.150*	*0.02*	*Cum*
		1	*1.82*	*1.100*	*0.150*	*0.30*	*Cum*
		1	*2.18*	*1.100*	*0.150*	*0.36*	*Cum*
		1	*0.54*	*1.100*	*0.150*	*0.09*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.59*	*2.378*	*0.150*	*1.14*	*Cum*
	Section 2-2	*2*	*4.00*	*1.098*	*0.150*	*1.32*	*Cum*
	Section 3-3	*2*	*5.20*	*0.978*	*0.150*	*1.53*	*Cum*
	Section 5-5	*2*	*2.01*	*2.528*	*0.150*	*1.53*	*Cum*
	Section 6-6	*2*	*0.89*	*0.978*	*0.150*	*0.26*	*Cum*
	Toe Wall D/S Portion	*1*	*4.84*	*0.750*	*0.300*	*1.09*	*Cum*
	Toe Wall D/S Portion	*1*	*4.54*	*0.450*	*0.600*	*1.23*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.600*	*0.150*	*0.27*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.300*	*0.600*	*0.54*	*Cum*
	TOTAL					**11.44**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.44*	*0.450*	*0.450*	*0.58*	*Cum*
		2	*1.44*	*1.264*	*2.714*	*9.89*	*Cum*
		2	*1.44*	*2.228*	*1.100*	*7.07*	*Cum*
	Section 2-2	*2*	*4.00*	*0.450*	*0.450*	*1.62*	*Cum*
		2	*4.00*	*0.624*	*0.580*	*2.90*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	*4.00*	*0.948*	*1.100*	*8.34*	*Cum*
	Section 3-3	*2*	*4.94*	*0.450*	*0.450*	*2.00*	*Cum*
		2	*4.94*	*0.564*	*0.380*	*2.12*	*Cum*
		2	*4.94*	*0.828*	*0.900*	*7.36*	*Cum*
	Section 5-5	*2*	*1.97*	*0.450*	*0.450*	*0.80*	*Cum*
		2	*1.97*	*1.264*	*2.714*	*13.52*	*Cum*
		2	*1.97*	*2.228*	*0.800*	*7.02*	*Cum*
	Section 6-6	*2*	*1.38*	*0.450*	*0.450*	*0.56*	*Cum*
		2	*1.38*	*0.564*	*0.380*	*0.59*	*Cum*
		2	*1.38*	*0.828*	*0.800*	*1.83*	*Cum*
	Floor	*1*	*0.63*	*1.100*	*0.700*	*0.48*	*Cum*
		1	*2.02*	*1.100*	*0.800*	*1.78*	*Cum*
		1	*0.30*	*1.100*	*0.950*	*0.31*	*Cum*
		1	*5.68*	*1.100*	*1.100*	*6.87*	*Cum*
		1	*0.65*	*1.100*	*0.400*	*0.29*	*Cum*
		1	*0.20*	*1.100*	*0.800*	*0.18*	*Cum*
		1	*1.80*	*1.100*	*0.900*	*1.78*	*Cum*
		1	*0.10*	*1.100*	*0.850*	*0.09*	*Cum*
		1	*3.40*	*1.100*	*0.800*	*2.99*	*Cum*
		1	*0.94*	*1.100*	*1.950*	*2.01*	*Cum*
	Crest	*1*	*1.29*	*1.100*	*2.404*	*3.41*	*Cum*
	TOTAL					**86.38**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.90*	*1.100*	*0.150*	*0.15*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*14.69*	*0.450*	*0.050*	*0.33*	*Cum*
	On Abutment Top (Right Side)	*1*	*14.69*	*0.450*	*0.050*	*0.33*	*Cum*
	TOTAL					**0.81**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**86.38**	**0.00**	**0.259**	**7850.0**	**2034.35**	**Kg**
	Total Weight in Metric Tonne					**2.03**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.44*		*0.450*	*2.59*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.44*		*2.714*	*15.65*	*Sqm*
		4		*1.264*	*2.714*	*13.72*	*Sqm*
		4	*1.44*		*1.100*	*6.34*	*Sqm*
		4		*2.228*	*1.100*	*9.80*	*Sqm*
	Section 2-2	*4*	*4.00*		*0.450*	*7.20*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.00*		*0.580*	*9.28*	*Sqm*
		4		*0.624*	*0.580*	*1.45*	*Sqm*
		4	*4.00*		*1.100*	*17.60*	*Sqm*
		4		*0.948*	*1.100*	*4.17*	*Sqm*
	Section 3-3	*4*	*4.94*		*0.450*	*8.88*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.94*		*0.380*	*7.50*	*Sqm*
		4		*0.564*	*0.380*	*0.86*	*Sqm*
		4	*4.94*		*0.900*	*17.77*	*Sqm*
		4		*0.828*	*0.900*	*2.98*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Section 5-5	*4*	*1.97*		*0.450*	*3.55*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.97*		*2.714*	*21.39*	*Sqm*
		4		*1.264*	*2.714*	*13.72*	*Sqm*
		4	*1.97*		*0.800*	*6.31*	*Sqm*
		4		*2.228*	*0.800*	*7.13*	*Sqm*
	Section 6-6	*4*	*1.38*		*0.450*	*2.49*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.38*		*0.380*	*2.10*	*Sqm*
		4		*0.564*	*0.380*	*0.86*	*Sqm*
		4	*1.38*		*0.800*	*4.42*	*Sqm*
		4		*0.828*	*0.800*	*2.65*	*Sqm*
	Floor	*2*	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*1.100*	*0.700*	*1.54*	*Sqm*
		2	*2.02*		*0.800*	*3.24*	*Sqm*
		2		*1.100*	*0.800*	*1.76*	*Sqm*
		2	*0.30*		*0.950*	*0.57*	*Sqm*
		2		*1.100*	*0.950*	*2.09*	*Sqm*
		2	*5.68*		*1.100*	*12.49*	*Sqm*
		2		*1.100*	*1.100*	*2.42*	*Sqm*
		2	*0.65*		*0.400*	*0.52*	*Sqm*
		2		*1.100*	*0.400*	*0.88*	*Sqm*
		2	*0.20*		*0.800*	*0.32*	*Sqm*
		2		*1.100*	*0.800*	*1.76*	*Sqm*
		2	*1.80*		*0.900*	*3.24*	*Sqm*
		2		*1.100*	*0.900*	*1.98*	*Sqm*
		2	*0.10*		*0.850*	*0.17*	*Sqm*
		2		*1.100*	*0.850*	*1.87*	*Sqm*
		2	*3.40*		*0.800*	*5.44*	*Sqm*
		2		*1.100*	*0.800*	*1.76*	*Sqm*
		2	*0.94*		*1.950*	*3.66*	*Sqm*
		2		*1.100*	*1.950*	*4.29*	*Sqm*
	Crest	*2*	*1.29*		*2.404*	*6.20*	*Sqm*
		2		*1.100*	*2.404*	*5.29*	*Sqm*
	Toe Wall D/S Portion	*2*	*4.84*		*0.300*	*2.90*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*4.54*		*0.600*	*5.45*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.150*	*0.90*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.600*	*3.60*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**271.74**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.50*	*1.835*		*5.51*	*Sqm*
	TOTAL					**5.51**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.50*	*0.500*	*0.300*	**0.23**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.50*	*0.500*	*0.150*	**0.23**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*14.69*	*0.450*		*6.61*	*Sqm*
	On Abutment Top (Right Side)	*1*	*14.69*	*0.450*		*6.61*	*Sqm*
	TOTAL					**13.22**	**Sqm**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	4.00			**4.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1	*17.273*			*17.27*	*Cum*
	Abutment						
	Section 1-1	2	*1.59*	*0.425*		*1.353*	*Cum*
	Section 2-2	2	*4.00*	*0.425*		*3.400*	*Cum*
	Section 3-3	2	*5.20*	*0.491*		*5.110*	*Cum*
	Section 5-5	2	*2.01*	*0.425*		*1.712*	*Cum*
	Section 6-6	2	*0.89*	*0.491*		*0.876*	*Cum*
	Toe wall	2	*4.84*	*0.150*	*0.600*	*1.452*	*Cum*
		2	*1.50*	0.150	*0.600*	*0.270*	*Cum*
	TOTAL					**31.45**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 1.524 METER AT CH.2.810 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.37*	*1.964*	*1.621*	*8.723*	*Cum*
	Section 2-2	*2*	*3.00*	*1.050*	*1.621*	*10.212*	*Cum*
	Section 3-3	*2*	*2.55*	*0.930*	*1.421*	*6.740*	*Cum*
	Section 5-5	*2*	*0.52*	*2.114*	*1.621*	*3.540*	*Cum*
	Section 6-6	*2*	*0.03*	*0.930*	*1.421*	*0.079*	*Cum*
	U/S Key Floor	*1*	*0.68*	*0.800*	*1.050*	*0.567*	*Cum*
	U/S Floor	*1*	*3.00*	*0.800*	*2.624*	*6.298*	*Cum*
	D/S Floor	*1*	*3.00*	*0.800*	*0.950*	*2.280*	*Cum*
		1	*3.00*	*0.800*	*0.750*	*1.800*	*Cum*
	D/S Key Floor	*1*	*0.74*	*0.800*	*1.900*	*1.121*	*Cum*
						41.36	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*0.800*	*0.150*	*0.07*	*Cum*
		1	*1.01*	*0.800*	*0.150*	*0.12*	*Cum*
		1	*0.42*	*0.800*	*0.150*	*0.05*	*Cum*
		1	*0.21*	*0.800*	*0.150*	*0.03*	*Cum*
		1	*4.64*	*0.800*	*0.150*	*0.56*	*Cum*
		1	*0.49*	*0.800*	*0.150*	*0.06*	*Cum*
		1	*1.32*	*0.800*	*0.150*	*0.16*	*Cum*
		1	*1.29*	*0.800*	*0.150*	*0.15*	*Cum*
		1	*0.54*	*0.800*	*0.150*	*0.07*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.37*	*1.964*	*0.150*	*0.81*	*Cum*
	Section 2-2	*2*	*3.00*	*1.050*	*0.150*	*0.95*	*Cum*
	Section 3-3	*2*	*2.55*	*0.930*	*0.150*	*0.71*	*Cum*
	Section 5-5	*2*	*0.52*	*2.114*	*0.150*	*0.33*	*Cum*
	Section 6-6	*2*	*0.03*	*0.930*	*0.150*	*0.01*	*Cum*
	TOTAL					**4.06**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.22*	*0.450*	*0.450*	*0.49*	*Cum*
		2	*1.22*	*1.057*	*2.024*	*5.22*	*Cum*
		2	*1.22*	*1.814*	*0.750*	*3.32*	*Cum*
	Section 2-2	*2*	*3.00*	*0.450*	*0.450*	*1.22*	*Cum*
		2	*3.00*	*0.600*	*0.500*	*1.80*	*Cum*
		2	*3.00*	*0.900*	*0.700*	*3.78*	*Cum*
	Section 3-3	*2*	*2.55*	*0.450*	*0.450*	*1.03*	*Cum*
		2	*2.55*	*0.540*	*0.300*	*0.83*	*Cum*
		2	*2.55*	*0.780*	*0.600*	*2.39*	*Cum*
	Section 5-5	*2*	*0.47*	*0.450*	*0.450*	*0.19*	*Cum*
		2	*0.47*	*1.057*	*2.024*	*2.02*	*Cum*
		2	*0.47*	*1.814*	*0.600*	*1.03*	*Cum*
	Section 6-6	*2*	*0.03*	*0.450*	*0.450*	*0.01*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	*0.03*	*0.540*	*0.300*	*0.01*	*Cum*
		2	*0.03*	*0.780*	*0.600*	*0.03*	*Cum*
	Floor	*1*	*0.68*	*0.800*	*0.900*	*0.49*	*Cum*
		1	*1.48*	*0.800*	*0.600*	*0.71*	*Cum*
		1	*0.15*	*0.800*	*0.675*	*0.08*	*Cum*
		1	*4.37*	*0.800*	*0.750*	*2.62*	*Cum*
		1	*0.20*	*0.800*	*0.500*	*0.08*	*Cum*
		1	*0.35*	*0.800*	*0.323*	*0.09*	*Cum*
		1	*2.80*	*0.800*	*0.600*	*1.34*	*Cum*
		1	*0.74*	*0.800*	*1.750*	*1.03*	*Cum*
	Crest	*1*	*1.09*	*0.800*	*2.143*	*1.86*	*Cum*
	TOTAL					**31.67**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.80*	*0.800*	*0.150*	*0.10*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*8.21*	*0.450*	*0.050*	*0.18*	*Cum*
	On Abutment Top (Right Side)	*1*	*8.21*	*0.450*	*0.050*	*0.18*	*Cum*
	TOTAL					**0.47**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**31.67**	**0.00**	**0.095**	**7850.0**	**745.80**	**Kg**
	Total Weight in Metric Tonne					**0.75**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.22*		*0.450*	*2.20*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.22*		*2.024*	*9.87*	*Sqm*
		4		*1.057*	*2.024*	*8.56*	*Sqm*
		4	*1.22*		*0.750*	*3.66*	*Sqm*
		4		*1.814*	*0.750*	*5.44*	*Sqm*
	Section 2-2	*4*	*3.00*		*0.450*	*5.40*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.00*		*0.500*	*6.00*	*Sqm*
		4		*0.600*	*0.500*	*1.20*	*Sqm*
		4	*3.00*		*0.700*	*8.40*	*Sqm*
		4		*0.900*	*0.700*	*2.52*	*Sqm*
	Section 3-3	*4*	*2.55*		*0.450*	*4.59*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.55*		*0.300*	*3.06*	*Sqm*
		4		*0.540*	*0.300*	*0.65*	*Sqm*
		4	*2.55*		*0.600*	*6.12*	*Sqm*
		4		*0.780*	*0.600*	*1.87*	*Sqm*
	Section 5-5	*4*	*0.47*		*0.450*	*0.85*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*0.47*		*2.024*	*3.83*	*Sqm*
		4		*1.057*	*2.024*	*8.56*	*Sqm*
		4	*0.47*		*0.600*	*1.13*	*Sqm*
		4		*1.814*	*0.600*	*4.35*	*Sqm*
	Section 6-6	*4*	*0.03*		*0.450*	*0.05*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*0.03*		*0.300*	*0.04*	*Sqm*
		4		*0.540*	*0.300*	*0.65*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		4	*0.03*		*0.600*	*0.07*	*Sqm*
		4		*0.780*	*0.600*	*1.87*	*Sqm*
	Floor	*2*	*0.68*		*0.900*	*1.22*	*Sqm*
		2		*0.800*	*0.900*	*1.44*	*Sqm*
		2	*1.48*		*0.600*	*1.77*	*Sqm*
		2		*0.800*	*0.600*	*0.96*	*Sqm*
		2	*4.37*		*0.750*	*6.56*	*Sqm*
		2		*0.800*	*0.750*	*1.20*	*Sqm*
		2	*0.20*		*0.500*	*0.20*	*Sqm*
		2		*0.800*	*0.500*	*0.80*	*Sqm*
		2	*0.35*		*0.323*	*0.23*	*Sqm*
		2		*0.800*	*0.323*	*0.52*	*Sqm*
		2	*2.80*		*0.600*	*3.36*	*Sqm*
		2		*0.800*	*0.600*	*0.96*	*Sqm*
		2	*0.74*		*1.750*	*2.58*	*Sqm*
		2		*0.800*	*1.750*	*2.80*	*Sqm*
	Crest	*2*	*1.09*		*2.143*	*4.65*	*Sqm*
		2		*0.800*	*2.143*	*3.43*	*Sqm*
	TOTAL					**127.66**	**Sqm**
7	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*8.21*	*0.450*		*3.70*	*Sqm*
	On Abutment Top (Right Side)	*1*	*8.21*	*0.450*		*3.70*	*Sqm*
	TOTAL					**7.39**	**Sqm**
8	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
9	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1		*4.372*		*4.37*	*Cum*
	Abutment						
	Section 1-1	2	*1.37*	*0.385*		*1.054*	*Cum*
	Section 2-2	2	*3.00*	*0.403*		*2.416*	*Cum*
	Section 3-3	2	*2.55*	*0.409*		*2.086*	*Cum*
	Section 5-5	2	*0.52*	*0.385*		*0.397*	*Cum*
	Section 6-6	2	*0.03*	*0.409*		*0.025*	*Cum*
	TOTAL					**10.35**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 1.829 METER AT CH. 2.870 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.53*	*2.148*	*3.098*	*20.403*	*Cum*
	Section 2-2	*2*	*3.50*	*1.570*	*3.098*	*34.047*	*Cum*
	Section 3-3	*2*	*3.80*	*1.450*	*2.898*	*31.936*	*Cum*
	Section 5-5	*2*	*0.48*	*2.298*	*2.848*	*6.257*	*Cum*
	Section 6-6	*2*	*0.15*	*0.930*	*2.898*	*0.809*	*Cum*
	U/S Key Floor	*1*	*0.82*	*5.500*	*0.450*	*2.030*	*Cum*
	U/S Floor	*1*	*3.25*	*5.500*	*3.113*	*55.645*	*Cum*
	D/S Floor	*1*	*1.82*	*5.500*	*1.300*	*13.027*	*Cum*
		1	*1.75*	*0.800*	*0.900*	*1.260*	*Cum*
		1	*2.50*	*0.800*	*0.850*	*1.700*	*Cum*
	D/S Key Floor	*1*	*0.90*	*5.500*	*1.950*	*9.653*	*Cum*
	TOTAL					**176.77**	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*0.800*	*0.150*	*0.07*	*Cum*
		1	*0.89*	*0.800*	*0.150*	*0.11*	*Cum*
		1	*0.42*	*0.800*	*0.150*	*0.05*	*Cum*
		1	*0.35*	*0.800*	*0.150*	*0.04*	*Cum*
		1	*5.34*	*0.800*	*0.150*	*0.64*	*Cum*
		1	*0.57*	*0.800*	*0.150*	*0.07*	*Cum*
		1	*1.20*	*0.800*	*0.150*	*0.14*	*Cum*
		1	*0.07*	*0.800*	*0.150*	*0.01*	*Cum*
		1	*0.95*	*0.800*	*0.150*	*0.11*	*Cum*
		1	*2.01*	*0.800*	*0.150*	*0.24*	*Cum*
		1	*0.54*	*0.800*	*0.150*	*0.07*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.53*	*2.148*	*0.150*	*0.99*	*Cum*
	Section 2-2	*2*	*3.50*	*1.570*	*0.150*	*1.65*	*Cum*
	Section 3-3	*2*	*3.80*	*1.450*	*0.150*	*1.65*	*Cum*
	Section 5-5	*2*	*0.48*	*2.298*	*0.150*	*0.33*	*Cum*
	Section 6-6	*2*	*0.15*	*0.930*	*0.150*	*0.04*	*Cum*
	TOTAL					**6.21**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.38*	*0.450*	*0.450*	*0.56*	*Cum*
		2	*1.38*	*1.149*	*2.330*	*7.41*	*Cum*
		2	*1.38*	*1.998*	*0.950*	*5.25*	*Cum*
	Section 2-2	*2*	*3.50*	*0.820*	*0.500*	*2.87*	*Cum*
		2	*3.50*	*0.970*	*0.500*	*3.40*	*Cum*
		2	*3.50*	*1.270*	*2.300*	*20.45*	*Cum*
	Section 3-3	*2*	*3.80*	*0.820*	*0.500*	*3.12*	*Cum*
		2	*3.80*	*0.910*	*0.300*	*2.07*	*Cum*
		2	*3.80*	*1.150*	*2.500*	*21.85*	*Cum*
	Section 5-5	*2*	*0.43*	*0.450*	*0.450*	*0.18*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	*0.43*	*1.149*	*2.330*	*2.32*	*Cum*
		2	*0.43*	*1.998*	*0.700*	*1.21*	*Cum*
	Section 6-6	*2*	*0.15*	*0.450*	*0.450*	*0.06*	*Cum*
		2	*0.15*	*0.540*	*0.300*	*0.05*	*Cum*
		2	*0.15*	*0.780*	*0.700*	*0.16*	*Cum*
	deduction for M 25 grade of concrete	*2*	*0.82*	*5.500*	*0.300*	*-2.71*	*Cum*
	Floor	*1*	*0.65*	*0.800*	*0.800*	*0.42*	*Cum*
		1	*1.43*	*0.800*	*0.700*	*0.80*	*Cum*
		1	*0.20*	*0.800*	*0.825*	*0.13*	*Cum*
		1	*5.07*	*0.800*	*0.950*	*3.85*	*Cum*
		1	*0.35*	*0.800*	*0.400*	*0.11*	*Cum*
		1	*0.20*	*0.800*	*0.650*	*0.10*	*Cum*
		1	*1.55*	*0.800*	*0.750*	*0.93*	*Cum*
		1	*0.05*	*0.800*	*0.725*	*0.03*	*Cum*
		1	*2.45*	*0.800*	*0.700*	*1.37*	*Cum*
		1	*0.90*	*0.800*	*1.800*	*1.30*	*Cum*
	Crest	*1*	*1.24*	*0.800*	*2.065*	*2.04*	*Cum*
	TOTAL					**79.34**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.90*	*0.800*	*0.150*	*0.11*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*4.63*	*0.450*	*0.050*	*0.10*	*Cum*
	On Abutment Top (Right Side)	*1*	*4.63*	*0.450*	*0.050*	*0.10*	*Cum*
	Slab Bridge						
	Slab	*1*	*1.60*	*5.500*	*0.328*	*2.89*	*Cum*
	Wearing coat	*1*	*1.60*	*4.500*	*0.070*	*0.50*	*Cum*
	Dirt wall	*2*	*0.40*	*5.500*	*0.300*	*1.32*	*Cum*
	300 mm thick pedastal	*2*	*0.82*	*5.500*	*0.300*	*2.71*	*Cum*
	TOTAL					**7.73**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Dia of Bars	***No.***	***Length***		***Weight per m***	**Quantity**	**Unit**
a1	*16*	*30*	*2.06*		*1.578*	*97.5*	*Kg*
a2	*10*	*8*	*5.90*		*0.616*	*29.1*	*Kg*
a3	*10*	*2*	*5.40*		*0.616*	*6.7*	*Kg*
a4	*10*	*19*	*1.98*		*0.616*	*23.2*	*Kg*
a5	*10*	*6*	*5.75*		*0.616*	*21.3*	*Kg*
x1	*12*	*24*	*2.50*		*0.888*	*53.3*	*Kg*
x2	*12*	*24*	*1.27*		*0.888*	*27.0*	*Kg*
x3	*12*	*24*	*1.50*		*0.888*	*32.0*	*Kg*
	Taking Skin reinforcement @0.3% of M-20	**79.34**	**0.003**	**0.238**	**7850.0**	**1868.3**	**Kg**
	Total Reinforcement Steel (in kg)					*2158.3*	*Kg*
	Total Weight in Metric Tonne					**2.16**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.38*		*0.450*	*2.49*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.38*		*2.330*	*12.89*	*Sqm*
		4		*1.149*	*2.330*	*10.71*	*Sqm*
		4	*1.38*		*0.950*	*5.26*	*Sqm*
		4		*1.998*	*0.950*	*7.59*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Section 2-2	*4*	*3.50*		*0.500*	*7.00*	*Sqm*
		4		*0.820*	*0.500*	*1.64*	*Sqm*
		4	*3.50*		*0.500*	*7.00*	*Sqm*
		4		*0.970*	*0.500*	*1.94*	*Sqm*
		4	*3.50*		*2.300*	*32.20*	*Sqm*
		4		*1.270*	*2.300*	*11.68*	*Sqm*
	Section 3-3	*4*	*3.80*		*0.500*	*7.60*	*Sqm*
		4		*0.820*	*0.500*	*1.64*	*Sqm*
		4	*3.80*		*0.300*	*4.56*	*Sqm*
		4		*0.910*	*0.300*	*1.09*	*Sqm*
		4	*3.80*		*2.500*	*38.00*	*Sqm*
		4		*1.150*	*2.500*	*11.50*	*Sqm*
	Section 5-5	*4*	*0.43*		*0.450*	*0.78*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*0.43*		*2.330*	*4.04*	*Sqm*
		4		*1.149*	*2.330*	*10.71*	*Sqm*
		4	*0.43*		*0.700*	*1.22*	*Sqm*
		4		*1.998*	*0.700*	*5.59*	*Sqm*
	Section 6-6	*4*	*0.15*		*0.450*	*0.27*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*0.15*		*0.300*	*0.18*	*Sqm*
		4		*0.540*	*0.300*	*0.65*	*Sqm*
		4	*0.15*		*0.700*	*0.42*	*Sqm*
		4		*0.780*	*0.700*	*2.18*	*Sqm*
	Floor	*2*	*0.65*		*0.800*	*1.04*	*Sqm*
		2		*0.800*	*0.800*	*1.28*	*Sqm*
		2	*1.43*		*0.700*	*2.00*	*Sqm*
		2		*0.800*	*0.700*	*1.12*	*Sqm*
		2	*0.20*		*0.825*	*0.33*	*Sqm*
		2		*0.800*	*0.825*	*1.32*	*Sqm*
		2	*5.07*		*0.950*	*9.64*	*Sqm*
		2		*0.800*	*0.950*	*1.52*	*Sqm*
		2	*0.35*		*0.400*	*0.28*	*Sqm*
		2		*0.800*	*0.400*	*0.64*	*Sqm*
		2	*0.20*		*0.650*	*0.26*	*Sqm*
		2		*0.800*	*0.650*	*1.04*	*Sqm*
		2	*1.55*		*0.750*	*2.33*	*Sqm*
		2		*0.800*	*0.750*	*1.20*	*Sqm*
		2	*0.90*		*1.800*	*3.24*	*Sqm*
		2		*0.800*	*1.800*	*2.88*	*Sqm*
	Crest	*2*	*1.24*		*2.065*	*5.10*	*Sqm*
		2		*0.800*	*2.065*	*3.30*	*Sqm*
	Bridge Slab	*2*	*1.60*		*0.33*	*1.05*	*Sqm*
		2		*5.50*	*0.33*	*3.61*	*Sqm*
		1	*1.60*	*5.50*		*8.80*	*Sqm*
	Dirt Wall	*2*	*0.40*		*0.30*	*0.24*	*Sqm*
		2		5.50	0.30	*3.30*	*Sqm*
	TOTAL					**248.78**	**Sqm**
7	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*4.63*	*0.450*		*2.09*	*Sqm*
	On Abutment Top (Right Side)	*1*	*4.63*	*0.450*		*2.09*	*Sqm*
	TOTAL					**4.17**	**Sqm**
8	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	4.00			**4.00**	**No.**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
9	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	U/S Floor	1	*5.474*			*5.47*	*Cum*
	Abutment						
	Section 1-1	2	1.53	*1.587*		*4.866*	*Cum*
	Section 2-2	2	3.50	*0.438*		*3.065*	*Cum*
	Section 3-3	2	3.80	*0.390*		*2.964*	*Cum*
	Section 5-5	2	0.48	*1.587*		*1.517*	*Cum*
	Section 6-6	2	0.15	*0.390*		*0.117*	*Cum*
	TOTAL					**18.00**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF SHARDA TYPE FALL FOR SALAIYA MR.						
	SHARDA TYPE FALL OF HEIGHT 2.134 METER AT CH. 0.030 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.70*	*2.480*	*2.201*	*18.532*	*Cum*
	Section 2-2	*2*	*4.50*	*1.200*	*2.201*	*23.771*	*Cum*
	Section 3-3	*2*	*4.70*	*1.080*	*2.001*	*20.314*	*Cum*
	Section 5-5	*2*	*2.35*	*2.630*	*2.201*	*27.259*	*Cum*
	Section 6-6	*2*	*1.05*	*1.080*	*2.001*	*4.517*	*Cum*
	U/S Key Floor	*1*	*0.52*	*1.500*	*0.850*	*0.663*	*Cum*
	U/S Floor	*1*	*4.50*	*1.500*	*3.284*	*22.167*	*Cum*
	D/S Floor	*1*	*4.50*	*1.500*	*1.150*	*7.763*	*Cum*
		1	*1.75*	*1.500*	*0.950*	*2.494*	*Cum*
	D/S Key Floor	*1*	*0.94*	*1.500*	*2.100*	*2.953*	*Cum*
	Toe Wall D/S Portion	*1*	*5.75*	*0.750*	*0.900*	*3.881*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*2.00*	*0.600*	*0.750*	*1.800*	*Cum*
						136.11	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*1.500*	*0.150*	*0.12*	*Cum*
		1	*0.78*	*1.500*	*0.150*	*0.18*	*Cum*
		1	*1.44*	*1.500*	*0.150*	*0.32*	*Cum*
		1	*0.42*	*1.500*	*0.150*	*0.10*	*Cum*
		1	*6.60*	*1.500*	*0.150*	*1.49*	*Cum*
		1	*0.57*	*1.500*	*0.150*	*0.13*	*Cum*
		1	*1.18*	*1.500*	*0.150*	*0.26*	*Cum*
		1	*0.14*	*1.500*	*0.150*	*0.03*	*Cum*
		1	*1.57*	*1.500*	*0.150*	*0.35*	*Cum*
		1	*2.18*	*1.500*	*0.150*	*0.49*	*Cum*
		1	*0.54*	*1.500*	*0.150*	*0.12*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.70*	*2.480*	*0.150*	*1.26*	*Cum*
	Section 2-2	*2*	*4.50*	*1.200*	*0.150*	*1.62*	*Cum*
	Section 3-3	*2*	*4.70*	*1.080*	*0.150*	*1.52*	*Cum*
	Section 5-5	*2*	*2.35*	*2.630*	*0.150*	*1.86*	*Cum*
	Section 6-6	*2*	*1.05*	*1.080*	*0.150*	*0.34*	*Cum*
	Toe Wall D/S Portion	*1*	*5.75*	*0.750*	*0.300*	*1.29*	*Cum*
	Toe Wall D/S Portion	*1*	*5.45*	*0.450*	*0.600*	*1.47*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*2.00*	*0.600*	*0.150*	*0.36*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*2.00*	*0.300*	*0.600*	*0.72*	*Cum*
	TOTAL					**14.04**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.47*	*0.450*	*0.450*	*0.60*	*Cum*
		2	*1.47*	*1.315*	*2.884*	*11.17*	*Cum*
		2	*1.47*	*2.330*	*1.100*	*7.55*	*Cum*
	Section 2-2	*2*	*4.50*	*0.450*	*0.450*	*1.82*	*Cum*
		2	*4.50*	*0.675*	*0.750*	*4.56*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	4.50	1.050	1.100	10.40	Cum
	Section 3-3	2	4.39	0.450	0.450	1.78	Cum
		2	4.39	0.615	0.550	2.97	Cum
		2	4.39	0.930	0.800	6.52	Cum
	Section 5-5	2	2.31	0.450	0.450	0.94	Cum
		2	2.31	1.315	2.884	17.52	Cum
		2	2.31	2.330	0.800	8.61	Cum
	Section 6-6	2	1.51	0.450	0.450	0.61	Cum
		2	1.51	0.615	0.550	1.02	Cum
		2	1.51	0.930	0.800	2.25	Cum
	Floor	1	0.52	1.500	0.700	0.55	Cum
		1	9.00	1.500	0.800	10.80	Cum
		1	6.46	1.500	0.300	2.90	Cum
		1	0.37	1.500	0.400	0.22	Cum
		1	0.20	1.500	0.800	0.24	Cum
		1	1.55	1.500	0.900	2.09	Cum
		1	0.10	1.500	0.850	0.13	Cum
		1	3.15	1.500	0.800	3.78	Cum
		1	0.94	1.500	1.950	2.74	Cum
	Crest	1	1.40	1.500	2.464	5.18	Cum
	TOTAL					**106.95**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	1	1.00	1.500	0.150	0.23	Cum
	Coping over Abutment Top						
	On Abutment Top (Left Side)	1	15.43	0.450	0.050	0.35	Cum
	On Abutment Top (Right Side)	1	15.43	0.450	0.050	0.35	Cum
	TOTAL					**0.92**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**106.95**	**0.00**	**0.321**	**7850.0**	**2518.64**	**Kg**
	Total Weight in Metric Tonne					**2.52**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	4	1.47		0.450	2.65	Sqm
		4		0.450	0.450	0.81	Sqm
		4	1.47		2.884	16.99	Sqm
		4		1.315	2.884	15.17	Sqm
		4	1.47		1.100	6.48	Sqm
		4		2.330	1.100	10.25	Sqm
	Section 2-2	4	4.50		0.450	8.10	Sqm
		4		0.450	0.450	0.81	Sqm
		4	4.50		0.750	13.50	Sqm
		4		0.675	0.750	2.03	Sqm
		4	4.50		1.100	19.80	Sqm
		4		1.050	1.100	4.62	Sqm
	Section 3-3	4	4.39		0.450	7.89	Sqm
		4		0.450	0.450	0.81	Sqm
		4	4.39		0.550	9.65	Sqm
		4		0.615	0.550	1.35	Sqm
		4	4.39		0.800	14.03	Sqm
		4		0.930	0.800	2.98	Sqm
	Section 5-5	4	2.31		0.450	4.16	Sqm
		4		0.450	0.450	0.81	Sqm

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		4	*2.31*		*2.884*	*26.65*	*Sqm*
		4		*1.315*	*2.884*	*15.17*	*Sqm*
		4	*2.31*		*0.800*	*7.39*	*Sqm*
		4		*2.330*	*0.800*	*7.46*	*Sqm*
	Section 6-6	*4*	*1.51*		*0.450*	*2.72*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.51*		*0.550*	*3.32*	*Sqm*
		4		*0.615*	*0.550*	*1.35*	*Sqm*
		4	*1.51*		*0.800*	*4.83*	*Sqm*
		4		*0.930*	*0.800*	*2.98*	*Sqm*
	Floor	*2*	*0.52*		*0.700*	*0.73*	*Sqm*
		2		*1.500*	*0.700*	*2.10*	*Sqm*
		2	*9.00*		*0.800*	*14.40*	*Sqm*
		2		*1.500*	*0.800*	*2.40*	*Sqm*
		2	*0.37*		*0.400*	*0.30*	*Sqm*
		2		*1.500*	*0.400*	*1.20*	*Sqm*
		2	*0.20*		*0.800*	*0.32*	*Sqm*
		2		*1.500*	*0.800*	*2.40*	*Sqm*
		2	*1.55*		*0.900*	*2.79*	*Sqm*
		2		*1.500*	*0.900*	*2.70*	*Sqm*
		2	*0.94*		*1.950*	*3.66*	*Sqm*
		2		*1.500*	*1.950*	*5.85*	*Sqm*
	Crest	*2*	*1.40*		*2.464*	*6.91*	*Sqm*
		2		*1.500*	*2.464*	*7.39*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.75*		*0.300*	*3.45*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.45*		*0.600*	*6.54*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*2.00*		*0.150*	*1.20*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*2.00*		*0.600*	*4.80*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**286.77**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*2.00*	*2.142*		*8.57*	*Sqm*
	TOTAL					**8.57**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*2.00*	*0.900*	*0.300*	**0.54**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*2.00*	*0.900*	*0.150*	**0.54**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*15.43*	*0.450*		*6.95*	*Sqm*
	On Abutment Top (Right Side)	*1*	*15.43*	*0.450*		*6.95*	*Sqm*
	TOTAL					**13.89**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1	21.568			21.57	Cum
	Abutment						
	Section 1-1	2	*1.70*	*0.722*		*2.451*	*Cum*
	Section 2-2	2	*4.50*	*0.710*		*6.390*	*Cum*
	Section 3-3	2	*4.70*	*0.503*		*4.728*	*Cum*
	Section 5-5	2	*2.35*	*0.677*		*3.188*	*Cum*
	Section 6-6	2	*1.05*	*0.800*		*1.671*	*Cum*
	D/S protection	2					
	Toe wall	2	*5.75*	*0.150*	*0.600*	*1.725*	*Cum*
		2	*2.00*	0.150	*0.600*	*0.360*	*Cum*
	TOTAL					**42.08**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 0.914 METER AT CH. 0.300 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.15*	*1.748*	*2.609*	*10.480*	*Cum*
	Section 2-2	*2*	*3.00*	*1.200*	*2.609*	*18.785*	*Cum*
	Section 3-3	*2*	*1.70*	*1.080*	*2.409*	*8.846*	*Cum*
	Section 5-5	*2*	*2.51*	*1.898*	*2.609*	*24.819*	*Cum*
	Section 6-6	*2*	*1.05*	*1.080*	*2.409*	*5.438*	*Cum*
	U/S Key Floor	*1*	*0.63*	*1.500*	*0.850*	*0.797*	*Cum*
	U/S Floor	*1*	*2.50*	*1.500*	*1.764*	*6.615*	*Cum*
	D/S Floor	*1*	*3.00*	*1.500*	*0.850*	*3.825*	*Cum*
		1	*2.00*	*1.500*	*0.650*	*1.950*	*Cum*
	D/S Key Floor	*1*	*0.68*	*1.500*	*1.050*	*1.063*	*Cum*
	Toe Wall D/S Portion	*1*	*5.75*	*0.750*	*0.900*	*3.881*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*1.75*	*0.600*	*0.750*	*1.575*	*Cum*
						88.07	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*1.500*	*0.150*	*0.12*	*Cum*
		1	*0.78*	*1.500*	*0.150*	*0.18*	*Cum*
		1	*0.39*	*1.500*	*0.150*	*0.09*	*Cum*
		1	*0.07*	*1.500*	*0.150*	*0.02*	*Cum*
		1	*4.39*	*1.500*	*0.150*	*0.99*	*Cum*
		1	*0.35*	*1.500*	*0.150*	*0.08*	*Cum*
		1	*0.54*	*1.500*	*0.150*	*0.12*	*Cum*
		1	*1.01*	*1.500*	*0.150*	*0.23*	*Cum*
		1	*0.54*	*1.500*	*0.150*	*0.12*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.15*	*1.748*	*0.150*	*0.60*	*Cum*
	Section 2-2	*2*	*3.00*	*1.200*	*0.150*	*1.08*	*Cum*
	Section 3-3	*2*	*1.70*	*1.080*	*0.150*	*0.55*	*Cum*
	Section 5-5	*2*	*2.51*	*1.898*	*0.150*	*1.43*	*Cum*
	Section 6-6	*2*	*1.05*	*1.080*	*0.150*	*0.34*	*Cum*
	Toe Wall D/S Portion	*1*	*5.75*	*0.750*	*0.300*	*1.29*	*Cum*
	Toe Wall D/S Portion	*1*	*5.45*	*0.450*	*0.600*	*1.47*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.75*	*0.600*	*0.150*	*0.32*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.75*	*0.300*	*0.600*	*0.63*	*Cum*
	TOTAL					**9.65**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*0.92*	*0.450*	*0.450*	*0.37*	*Cum*
		2	*0.92*	*0.949*	*1.664*	*2.92*	*Cum*
		2	*0.92*	*1.598*	*0.550*	*1.62*	*Cum*
	Section 2-2	*2*	*3.00*	*0.450*	*0.450*	*1.22*	*Cum*
		2	*3.00*	*0.675*	*0.750*	*3.04*	*Cum*
		2	*3.00*	*1.050*	*0.550*	*3.47*	*Cum*
	Section 3-3	*2*	*1.39*	*0.450*	*0.450*	*0.56*	*Cum*
		2	*1.39*	*0.615*	*0.550*	*0.94*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	1.39	0.930	0.500	1.29	Cum
	Section 5-5	2	2.46	0.450	0.450	1.00	Cum
		2	2.46	0.949	1.664	7.78	Cum
		2	2.46	1.598	0.500	3.93	Cum
	Section 6-6	2	1.51	0.450	0.450	0.61	Cum
		2	1.51	0.615	0.550	1.02	Cum
		2	1.51	0.930	0.500	1.40	Cum
	Floor	1	0.63	1.500	0.700	0.66	Cum
		1	5.50	1.500	0.500	4.13	Cum
		1	4.13	1.500	0.050	0.31	Cum
		1	0.28	1.500	0.250	0.11	Cum
		1	0.20	1.500	0.400	0.12	Cum
		1	1.80	1.500	0.500	1.35	Cum
		1	0.68	1.500	0.900	0.91	Cum
	Crest	1	0.90	1.500	1.264	1.71	Cum
	TOTAL					**40.45**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	1	0.70	1.500	0.150	0.16	Cum
	Coping over Abutment Top						
	On Abutment Top (Left Side)	1	10.23	0.450	0.050	0.23	Cum
	On Abutment Top (Right Side)	1	10.23	0.450	0.050	0.23	Cum
	TOTAL					**0.62**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**40.45**	**0.00**	**0.121**	**7850.0**	**952.68**	**Kg**
	Total Weight in Metric Tonne					**0.95**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	4	0.92		0.450	1.66	Sqm
		4		0.450	0.450	0.81	Sqm
		4	0.92		1.664	6.15	Sqm
		4		0.949	1.664	6.32	Sqm
		4	0.92		0.550	2.03	Sqm
		4		1.598	0.550	3.52	Sqm
	Section 2-2	4	3.00		0.450	5.40	Sqm
		4		0.450	0.450	0.81	Sqm
		4	3.00		0.750	9.00	Sqm
		4		0.675	0.750	2.03	Sqm
		4	3.00		0.550	6.60	Sqm
		4		1.050	0.550	2.31	Sqm
	Section 3-3	4	1.39		0.450	2.49	Sqm
		4		0.450	0.450	0.81	Sqm
		4	1.39		0.550	3.05	Sqm
		4		0.615	0.550	1.35	Sqm
		4	1.39		0.500	2.77	Sqm
		4		0.930	0.500	1.86	Sqm
	Section 5-5	4	2.46		0.450	4.43	Sqm
		4		0.450	0.450	0.81	Sqm
		4	2.46		1.664	16.39	Sqm
		4		0.949	1.664	6.32	Sqm
		4	2.46		0.500	4.92	Sqm
		4		1.598	0.500	3.20	Sqm
	Section 6-6	4	1.51		0.450	2.72	Sqm

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.51*		*0.550*	*3.32*	*Sqm*
		4		*0.615*	*0.550*	*1.35*	*Sqm*
		4	*1.51*		*0.500*	*3.02*	*Sqm*
		4		*0.930*	*0.500*	*1.86*	*Sqm*
	Floor	*2*	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*1.500*	*0.700*	*2.10*	*Sqm*
		2	*5.50*		*0.500*	*5.50*	*Sqm*
		2		*1.500*	*0.500*	*1.50*	*Sqm*
		2	*4.130*		*0.050*	*0.41*	*Sqm*
		2		*1.500*	*0.050*	*0.15*	*Sqm*
		2	*0.28*		*0.250*	*0.14*	*Sqm*
		2		*1.500*	*0.250*	*0.75*	*Sqm*
		2	*0.20*		*0.400*	*0.16*	*Sqm*
		2		*1.500*	*0.400*	*1.20*	*Sqm*
		2	*1.80*		*0.500*	*1.80*	*Sqm*
		2		*1.500*	*0.500*	*1.50*	*Sqm*
		2	*0.68*		*0.900*	*1.22*	*Sqm*
		2		*1.500*	*0.900*	*2.70*	*Sqm*
	Crest	*2*	*0.90*		*1.264*	*2.28*	*Sqm*
		2		*1.500*	*1.264*	*3.79*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.75*		*0.300*	*3.45*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.45*		*0.600*	*6.54*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.150*	*1.05*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.600*	*4.20*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**151.50**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.75*	*2.142*		*7.50*	*Sqm*
	TOTAL					**7.50**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.75*	*0.900*	*0.300*	**0.47**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.75*	*0.900*	*0.150*	**0.47**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*10.23*	*0.450*		*4.61*	*Sqm*
	On Abutment Top (Right Side)	*1*	*10.23*	*0.450*		*4.61*	*Sqm*
	TOTAL					**9.21**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1	4.598			4.60	**Cum**
	Abutment						
	Section 1-1	2	*1.15*	*2.934*		*6.742*	*Cum*
	Section 2-2	2	*3.00*	*1.730*		*10.380*	*Cum*
	Section 3-3	2	*1.70*	*0.650*		*2.210*	*Cum*
	Section 5-5	2	*2.51*	*2.934*		*14.705*	*Cum*
	Section 6-6	2	*1.05*	*0.650*		*1.359*	*Cum*
	D/S protection	2					
	Toe wall	2	*5.75*	*0.150*	*0.600*	*1.725*	*Cum*
		2	*1.75*	0.150	*0.600*	*0.315*	*Cum*
	TOTAL					**42.03**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 0.914 METER AT CH. 1.500 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.13*	*1.689*	*1.441*	*5.483*	*Cum*
	Section 2-2	*2*	*2.50*	*1.098*	*1.441*	*7.911*	*Cum*
	Section 3-3	*2*	*2.45*	*0.978*	*1.241*	*5.947*	*Cum*
	Section 5-5	*2*	*2.55*	*1.839*	*1.441*	*13.534*	*Cum*
	Section 6-6	*2*	*0.89*	*0.978*	*1.241*	*2.165*	*Cum*
	U/S Key Floor	*1*	*0.63*	*0.750*	*0.850*	*0.398*	*Cum*
	U/S Floor	*1*	*2.25*	*0.750*	*1.764*	*2.977*	*Cum*
	D/S Floor	*1*	*2.50*	*0.750*	*0.850*	*1.594*	*Cum*
	D/S Key Floor	*1*	*0.85*	*0.750*	*1.750*	*1.116*	*Cum*
	Toe Wall D/S Portion	*1*	*4.49*	*0.750*	*0.900*	*3.031*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*1.50*	*0.600*	*0.750*	*1.350*	*Cum*
						45.51	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*0.750*	*0.150*	*0.06*	*Cum*
		1	*0.78*	*0.750*	*0.150*	*0.09*	*Cum*
		1	*4.13*	*0.750*	*0.150*	*0.46*	*Cum*
		1	*0.28*	*0.750*	*0.150*	*0.03*	*Cum*
		1	*1.39*	*0.750*	*0.150*	*0.16*	*Cum*
		1	*0.78*	*0.750*	*0.150*	*0.09*	*Cum*
		1	*0.54*	*0.750*	*0.150*	*0.06*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.13*	*1.689*	*0.150*	*0.57*	*Cum*
	Section 2-2	*2*	*2.50*	*1.098*	*0.150*	*0.82*	*Cum*
	Section 3-3	*2*	*2.45*	*0.978*	*0.150*	*0.72*	*Cum*
	Section 5-5	*2*	*2.55*	*1.839*	*0.150*	*1.41*	*Cum*
	Section 6-6	*2*	*0.89*	*0.978*	*0.150*	*0.26*	*Cum*
	Toe Wall D/S Portion	*1*	*4.49*	*0.750*	*0.300*	*1.01*	*Cum*
	Toe Wall D/S Portion	*1*	*4.19*	*0.450*	*0.600*	*1.13*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.600*	*0.150*	*0.27*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.300*	*0.600*	*0.54*	*Cum*
	TOTAL					**7.69**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*0.90*	*0.450*	*0.450*	*0.37*	*Cum*
		2	*0.90*	*0.919*	*1.564*	*2.59*	*Cum*
		2	*0.90*	*1.539*	*0.500*	*1.39*	*Cum*
	Section 2-2	*2*	*2.50*	*0.450*	*0.450*	*1.01*	*Cum*
		2	*2.50*	*0.624*	*0.580*	*1.81*	*Cum*
		2	*2.50*	*0.948*	*0.500*	*2.37*	*Cum*
	Section 3-3	*2*	*2.19*	*0.450*	*0.450*	*0.89*	*Cum*
		2	*2.19*	*0.564*	*0.380*	*0.94*	*Cum*
		2	*2.19*	*0.828*	*0.500*	*1.81*	*Cum*
	Section 5-5	*2*	*2.51*	*0.450*	*0.450*	*1.02*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	2.51	0.919	1.564	7.21	Cum
		2	2.51	1.539	0.500	3.86	Cum
	Section 6-6	2	1.31	0.450	0.450	0.53	Cum
		2	1.31	0.564	0.380	0.56	Cum
		2	1.31	0.828	0.500	1.08	Cum
	Floor	1	0.63	0.750	0.700	0.33	Cum
		1	4.75	0.750	0.500	1.78	Cum
		1	0.31	0.750	0.200	0.05	Cum
		1	0.20	0.750	0.400	0.06	Cum
		1	2.55	0.750	0.500	0.96	Cum
		1	0.85	0.750	1.600	1.02	Cum
	Crest	1	1.39	0.750	2.145	2.24	Cum
	TOTAL					**33.86**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	1	0.70	0.750	0.150	0.08	Cum
	Coping over Abutment Top						
	On Abutment Top (Left Side)	1	10.10	0.450	0.050	0.23	Cum
	On Abutment Top (Right Side)	1	10.10	0.450	0.050	0.23	Cum
	TOTAL					**0.53**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**33.86**	**0.00**	**0.102**	**7850.0**	**797.41**	**Kg**
	Total Weight in Metric Tonne					**0.80**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	4	0.90		0.450	1.62	Sqm
		4		0.450	0.450	0.81	Sqm
		4	0.90		1.564	5.64	Sqm
		4		0.919	1.564	5.75	Sqm
		4	0.90		0.500	1.80	Sqm
		4		1.539	0.500	3.08	Sqm
	Section 2-2	4	2.50		0.450	4.50	Sqm
		4		0.450	0.450	0.81	Sqm
		4	2.50		0.580	5.80	Sqm
		4		0.624	0.580	1.45	Sqm
		4	2.50		0.500	5.00	Sqm
		4		0.948	0.500	1.90	Sqm
	Section 3-3	4	2.19		0.450	3.93	Sqm
		4		0.450	0.450	0.81	Sqm
		4	2.19		0.380	3.32	Sqm
		4		0.564	0.380	0.86	Sqm
		4	2.19		0.500	4.37	Sqm
		4		0.828	0.500	1.66	Sqm
	Section 5-5	4	2.51		0.450	4.52	Sqm
		4		0.450	0.450	0.81	Sqm
		4	2.51		1.564	15.70	Sqm
		4		0.919	1.564	5.75	Sqm
		4	2.51		0.500	5.02	Sqm
		4		1.539	0.500	3.08	Sqm
	Section 6-6	4	1.31		0.450	2.35	Sqm
		4		0.450	0.450	0.81	Sqm
		4	1.31		0.380	1.99	Sqm
		4		0.564	0.380	0.86	Sqm

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		4	*1.31*		*0.500*	*2.61*	*Sqm*
		4		*0.828*	*0.500*	*1.66*	*Sqm*
	Floor	*2*	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*0.750*	*0.700*	*1.05*	*Sqm*
		2	*4.75*		*0.500*	*4.75*	*Sqm*
		2		*0.750*	*0.500*	*0.75*	*Sqm*
		2	*0.31*		*0.200*	*0.12*	*Sqm*
		2		*0.750*	*0.200*	*0.30*	*Sqm*
		2	*0.20*		*0.400*	*0.16*	*Sqm*
		2		*0.750*	*0.400*	*0.60*	*Sqm*
		2	*2.55*		*0.500*	*2.55*	*Sqm*
		2		*0.750*	*0.500*	*0.75*	*Sqm*
		2	*0.85*		*1.600*	*2.72*	*Sqm*
		2		*0.750*	*1.600*	*2.40*	*Sqm*
	Crest	*2*	*1.39*		*2.145*	*5.97*	*Sqm*
		2		*0.750*	*2.145*	*3.22*	*Sqm*
	Toe Wall D/S Portion	*2*	*4.49*		*0.300*	*2.69*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*4.19*		*0.600*	*5.03*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.150*	*0.90*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.600*	*3.60*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**138.76**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.50*	*1.835*		*5.51*	*Sqm*
	TOTAL					**5.51**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.50*	*0.150*	*0.300*	**0.07**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.50*	*0.150*	*0.150*	**0.07**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*10.10*	*0.450*		*4.55*	*Sqm*
	On Abutment Top (Right Side)	*1*	*10.10*	*0.450*		*4.55*	*Sqm*
	TOTAL					**9.09**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1	2.600			2.60	**Cum**
	Abutment						
	Section 1-1	2	*1.13*	*0.500*		*1.127*	*Cum*
	Section 2-2	2	*2.50*	*0.487*		*2.435*	*Cum*
	Section 3-3	2	*2.45*	*0.344*		*1.686*	*Cum*
	Section 5-5	2	*2.55*	*0.500*		*2.554*	*Cum*
	Section 6-6	2	*0.89*	*0.344*		*0.614*	*Cum*
	D/S protection	2					
	Toe wall	2	*4.49*	*0.150*	*0.600*	*1.347*	*Cum*
		2	*1.50*	0.150	*0.600*	*0.270*	*Cum*
	TOTAL					**12.63**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF SHARDA TYPE FALL FOR DHAMANI SUB-DY.						
	SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH.3.300 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.33*	*2.082*	*1.545*	*8.553*	*Cum*
	Section 2-2	*2*	*4.00*	*1.350*	*1.545*	*16.686*	*Cum*
	Section 3-3	*2*	*3.20*	*1.230*	*1.345*	*10.588*	*Cum*
	Section 5-5	*2*	*2.97*	*2.232*	*1.545*	*20.463*	*Cum*
	Section 6-6	*2*	*1.27*	*1.230*	*1.345*	*4.202*	*Cum*
	U/S Key Floor	*1*	*0.66*	*3.300*	*1.000*	*2.186*	*Cum*
	U/S Floor	*1*	*3.50*	*3.300*	*2.320*	*26.796*	*Cum*
	D/S Floor	*1*	*4.00*	*3.300*	*0.900*	*11.880*	*Cum*
		1	*3.50*	*3.300*	*0.700*	*8.085*	*Cum*
	D/S Key Floor	*1*	*0.75*	*3.300*	*1.350*	*3.341*	*Cum*
	Toe Wall D/S Portion	*1*	*8.30*	*0.750*	*0.900*	*5.603*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*2.50*	*0.600*	*0.750*	*2.250*	*Cum*
						120.63	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*3.300*	*0.150*	*0.27*	*Cum*
		1	*0.95*	*3.300*	*0.150*	*0.47*	*Cum*
		1	*0.92*	*3.300*	*0.150*	*0.45*	*Cum*
		1	*0.28*	*3.300*	*0.150*	*0.14*	*Cum*
		1	*5.56*	*3.300*	*0.150*	*2.75*	*Cum*
		1	*0.57*	*3.300*	*0.150*	*0.28*	*Cum*
		1	*1.82*	*3.300*	*0.150*	*0.90*	*Cum*
		1	*1.34*	*3.300*	*0.150*	*0.66*	*Cum*
		1	*0.54*	*3.300*	*0.150*	*0.27*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.33*	*2.082*	*0.150*	*0.83*	*Cum*
	Section 2-2	*2*	*4.00*	*1.350*	*0.150*	*1.62*	*Cum*
	Section 3-3	*2*	*3.20*	*1.230*	*0.150*	*1.18*	*Cum*
	Section 5-5	*2*	*2.97*	*2.232*	*0.150*	*1.99*	*Cum*
	Section 6-6	*2*	*1.27*	*1.230*	*0.150*	*0.47*	*Cum*
	Toe Wall D/S Portion	*1*	*8.30*	*0.750*	*0.300*	*1.87*	*Cum*
	Toe Wall D/S Portion	*1*	*8.00*	*0.450*	*0.600*	*2.16*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*2.50*	*0.600*	*0.150*	*0.45*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*2.50*	*0.300*	*0.600*	*0.90*	*Cum*
	TOTAL					**17.66**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.18*	*0.450*	*0.450*	*0.48*	*Cum*
		2	*1.18*	*1.116*	*2.220*	*5.84*	*Cum*
		2	*1.18*	*1.932*	*0.750*	*3.42*	*Cum*
	Section 2-2	*2*	*4.00*	*0.450*	*0.450*	*1.62*	*Cum*
		2	*4.00*	*0.750*	*1.000*	*6.00*	*Cum*
		2	*4.00*	*1.200*	*0.750*	*7.20*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Section 3-3	*2*	*2.59*	*0.450*	*0.450*	*1.05*	*Cum*
		2	*2.59*	*0.690*	*0.800*	*2.85*	*Cum*
		2	*2.59*	*1.080*	*0.550*	*3.07*	*Cum*
	Section 5-5	*2*	*2.92*	*0.450*	*0.450*	*1.18*	*Cum*
		2	*2.92*	*1.116*	*2.220*	*14.48*	*Cum*
		2	*2.92*	*1.932*	*0.550*	*6.21*	*Cum*
	Section 6-6	*2*	*1.81*	*0.450*	*0.450*	*0.73*	*Cum*
		2	*1.81*	*0.690*	*0.800*	*2.00*	*Cum*
		2	*1.81*	*1.080*	*0.550*	*2.15*	*Cum*
	Floor	*1*	*0.66*	*3.300*	*0.850*	*1.86*	*Cum*
		1	*7.50*	*3.300*	*0.550*	*13.61*	*Cum*
		1	*5.46*	*3.300*	*0.200*	*3.60*	*Cum*
		1	*0.20*	*3.300*	*0.650*	*0.43*	*Cum*
		1	*0.44*	*3.300*	*0.400*	*0.58*	*Cum*
		1	*3.30*	*3.300*	*0.550*	*5.99*	*Cum*
		1	*0.75*	*3.300*	*1.200*	*2.97*	*Cum*
	Crest	*1*	*1.08*	*3.300*	*1.715*	*6.10*	*Cum*
	TOTAL					**93.43**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.80*	*3.300*	*0.150*	*0.40*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*13.89*	*0.450*	*0.050*	*0.31*	*Cum*
	On Abutment Top (Right Side)	*1*	*13.89*	*0.450*	*0.050*	*0.31*	*Cum*
	TOTAL					**1.02**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**93.43**	**0.00**	**0.280**	**7850.0**	**2200.38**	**Kg**
	Total Weight in Metric Tonne					**2.20**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.18*		*0.450*	*2.12*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.18*		*2.220*	*10.47*	*Sqm*
		4		*1.116*	*2.220*	*9.91*	*Sqm*
		4	*1.18*		*0.750*	*3.54*	*Sqm*
		4		*1.932*	*0.750*	*5.80*	*Sqm*
	Section 2-2	*4*	*4.00*		*0.450*	*7.20*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.00*		*1.000*	*16.00*	*Sqm*
		4		*0.750*	*1.000*	*3.00*	*Sqm*
		4	*4.00*		*0.750*	*12.00*	*Sqm*
		4		*1.200*	*0.750*	*3.60*	*Sqm*
	Section 3-3	*4*	*2.59*		*0.450*	*4.65*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.59*		*0.800*	*8.27*	*Sqm*
		4		*0.690*	*0.800*	*2.21*	*Sqm*
		4	*2.59*		*0.550*	*5.69*	*Sqm*
		4		*1.080*	*0.550*	*2.38*	*Sqm*
	Section 5-5	*4*	*2.92*		*0.450*	*5.26*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.92*		*2.220*	*25.96*	*Sqm*
		4		*1.116*	*2.220*	*9.91*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		4	*2.92*		*0.550*	*6.43*	*Sqm*
		4		*1.932*	*0.550*	*4.25*	*Sqm*
	Section 6-6	*4*	*1.81*		*0.450*	*3.26*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.81*		*0.800*	*5.79*	*Sqm*
		4		*0.690*	*0.800*	*2.21*	*Sqm*
		4	*1.81*		*0.550*	*3.98*	*Sqm*
		4		*1.080*	*0.550*	*2.38*	*Sqm*
	Floor	*2*	*0.66*		*0.850*	*1.13*	*Sqm*
		2		*3.300*	*0.850*	*5.61*	*Sqm*
		2	*7.50*		*0.550*	*8.25*	*Sqm*
		2		*3.300*	*0.550*	*3.63*	*Sqm*
		2	*5.46*		*0.200*	*2.18*	*Sqm*
		2		*3.300*	*0.200*	*1.32*	*Sqm*
		2	*0.20*		*0.650*	*0.26*	*Sqm*
		2		*3.300*	*0.650*	*4.29*	*Sqm*
		2	*0.44*		*0.400*	*0.35*	*Sqm*
		2		*3.300*	*0.400*	*2.64*	*Sqm*
		2	*3.30*		*0.550*	*3.63*	*Sqm*
		2		*3.300*	*0.550*	*3.63*	*Sqm*
		2	*0.75*		*1.200*	*1.80*	*Sqm*
		2		*3.300*	*1.200*	*7.92*	*Sqm*
	Crest	*2*	*1.08*		*1.715*	*3.70*	*Sqm*
		2		*3.300*	*1.715*	*11.32*	*Sqm*
	Toe Wall D/S Portion	*2*	*8.30*		*0.300*	*4.98*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*8.00*		*0.600*	*9.60*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*2.50*		*0.150*	*1.50*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*2.50*		*0.600*	*6.00*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**256.12**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*2.50*	*2.592*		*12.96*	*Sqm*
	TOTAL					**12.96**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*2.50*	*2.700*	*0.300*	**2.03**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*2.50*	*2.700*	*0.150*	**2.03**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*13.89*	*0.450*		*6.25*	*Sqm*
	On Abutment Top (Right Side)	*1*	*13.89*	*0.450*		*6.25*	*Sqm*
	TOTAL					**12.50**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1	17.558			17.56	Cum
	Abutment						
	Section 1-1	2	*1.33*	*3.070*		*8.163*	*Cum*
	Section 2-2	2	*4.00*	*1.162*		*9.296*	*Cum*
	Section 3-3	2	*3.20*	*0.905*		*5.792*	*Cum*
	Section 5-5	2	*2.97*	*3.043*		*18.057*	*Cum*
	Section 6-6	2	*1.27*	*0.905*		*2.299*	*Cum*
	Toe wall	2	*8.30*	*0.150*	*0.600*	*2.490*	*Cum*
		2	*2.50*	0.150	*0.600*	*0.450*	*Cum*
	TOTAL					**64.10**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 1.524 METER AT CH.3.800 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.54*	*2.264*	*1.550*	*10.808*	*Cum*
	Section 2-2	*2*	*4.50*	*1.350*	*1.550*	*18.833*	*Cum*
	Section 3-3	*2*	*3.95*	*1.230*	*1.350*	*13.118*	*Cum*
	Section 5-5	*2*	*2.93*	*2.414*	*1.550*	*21.919*	*Cum*
	Section 6-6	*2*	*1.27*	*1.230*	*1.350*	*4.218*	*Cum*
	U/S Key Floor	*1*	*0.65*	*3.300*	*0.950*	*2.038*	*Cum*
	U/S Floor	*1*	*3.75*	*3.300*	*2.774*	*34.328*	*Cum*
	D/S Floor	*1*	*4.50*	*3.300*	*0.950*	*14.108*	*Cum*
		1	*1.31*	*3.300*	*0.750*	*3.235*	*Cum*
		1	*2.94*	*3.300*	*0.750*	*7.281*	*Cum*
	D/S Key Floor	*1*	*0.83*	*3.300*	*1.650*	*4.492*	*Cum*
	Toe Wall D/S Portion	*1*	*8.30*	*0.750*	*0.900*	*5.603*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*2.50*	*0.600*	*0.750*	*2.250*	*Cum*
						142.23	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*3.300*	*0.150*	*0.27*	*Cum*
		1	*0.89*	*3.300*	*0.150*	*0.44*	*Cum*
		1	*0.84*	*3.300*	*0.150*	*0.42*	*Cum*
		1	*0.42*	*3.300*	*0.150*	*0.21*	*Cum*
		1	*6.31*	*3.300*	*0.150*	*3.12*	*Cum*
		1	*0.57*	*3.300*	*0.150*	*0.28*	*Cum*
		1	*0.83*	*3.300*	*0.150*	*0.41*	*Cum*
		1	*0.14*	*3.300*	*0.150*	*0.07*	*Cum*
		1	*1.49*	*3.300*	*0.150*	*0.74*	*Cum*
		1	*1.68*	*3.300*	*0.150*	*0.83*	*Cum*
		1	*0.54*	*3.300*	*0.150*	*0.27*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.54*	*2.264*	*0.150*	*1.05*	*Cum*
	Section 2-2	*2*	*4.50*	*1.350*	*0.150*	*1.82*	*Cum*
	Section 3-3	*2*	*3.95*	*1.230*	*0.150*	*1.46*	*Cum*
	Section 5-5	*2*	*2.93*	*2.414*	*0.150*	*2.12*	*Cum*
	Section 6-6	*2*	*1.27*	*1.230*	*0.150*	*0.47*	*Cum*
	Toe Wall D/S Portion	*1*	*8.30*	*0.750*	*0.300*	*1.87*	*Cum*
	Toe Wall D/S Portion	*1*	*8.00*	*0.450*	*0.600*	*2.16*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*2.50*	*0.600*	*0.150*	*0.45*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*2.50*	*0.300*	*0.600*	*0.90*	*Cum*
	TOTAL					**19.35**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.32*	*0.450*	*0.450*	*0.53*	*Cum*
		2	*1.32*	*1.207*	*2.524*	*8.01*	*Cum*
		2	*1.32*	*2.114*	*0.750*	*4.17*	*Cum*
	Section 2-2	*2*	*4.50*	*0.450*	*0.450*	*1.82*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	*4.50*	*0.750*	*1.000*	*6.75*	*Cum*
		2	*4.50*	*1.200*	*0.750*	*8.10*	*Cum*
	Section 3-3	*2*	*3.56*	*0.450*	*0.450*	*1.44*	*Cum*
		2	*3.56*	*0.690*	*0.800*	*3.93*	*Cum*
		2	*3.56*	*1.080*	*0.550*	*4.23*	*Cum*
	Section 5-5	*2*	*2.89*	*0.450*	*0.450*	*1.17*	*Cum*
		2	*2.89*	*1.207*	*2.524*	*17.58*	*Cum*
		2	*2.89*	*2.114*	*0.650*	*7.93*	*Cum*
	Section 6-6	*2*	*1.81*	*0.450*	*0.450*	*0.73*	*Cum*
		2	*1.81*	*0.690*	*0.800*	*2.00*	*Cum*
		2	*1.81*	*1.080*	*0.700*	*2.74*	*Cum*
	Floor	*1*	*0.65*	*3.300*	*0.800*	*1.72*	*Cum*
		1	*8.25*	*3.300*	*0.600*	*16.34*	*Cum*
		1	*6.25*	*3.300*	*0.300*	*6.19*	*Cum*
		1	*0.20*	*3.300*	*0.600*	*0.40*	*Cum*
		1	*0.62*	*3.300*	*0.400*	*0.82*	*Cum*
		1	*1.11*	*3.300*	*0.700*	*2.56*	*Cum*
		1	*0.10*	*3.300*	*0.650*	*0.21*	*Cum*
		1	*2.84*	*3.300*	*0.600*	*5.63*	*Cum*
		1	*0.83*	*3.300*	*1.500*	*4.08*	*Cum*
	Crest	*1*	*1.28*	*3.300*	*2.009*	*8.46*	*Cum*
	TOTAL					**117.54**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.95*	*3.300*	*0.150*	*0.47*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*15.39*	*0.450*	*0.050*	*0.35*	*Cum*
	On Abutment Top (Right Side)	*1*	*15.39*	*0.450*	*0.050*	*0.35*	*Cum*
	TOTAL					**1.16**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**117.54**	**0.00**	**0.353**	**7850.0**	**2768.01**	**Kg**
	Total Weight in Metric Tonne					**2.77**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.32*		*0.450*	*2.37*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.32*		*2.524*	*13.28*	*Sqm*
		4		*1.207*	*2.524*	*12.19*	*Sqm*
		4	*1.32*		*0.750*	*3.95*	*Sqm*
		4		*2.114*	*0.750*	*6.34*	*Sqm*
	Section 2-2	*4*	*4.50*		*0.450*	*8.10*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.50*		*1.000*	*18.00*	*Sqm*
		4		*0.750*	*1.000*	*3.00*	*Sqm*
		4	*4.50*		*0.750*	*13.50*	*Sqm*
		4		*1.200*	*0.750*	*3.60*	*Sqm*
	Section 3-3	*4*	*3.56*		*0.450*	*6.41*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.56*		*0.800*	*11.39*	*Sqm*
		4		*0.690*	*0.800*	*2.21*	*Sqm*
		4	*3.56*		*0.550*	*7.83*	*Sqm*
		4		*1.080*	*0.550*	*2.38*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Section 5-5	*4*	*2.89*		*0.450*	*5.19*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.89*		*2.524*	*29.13*	*Sqm*
		4		*1.207*	*2.524*	*12.19*	*Sqm*
		4	*2.89*		*0.650*	*7.50*	*Sqm*
		4		*2.114*	*0.650*	*5.50*	*Sqm*
	Section 6-6	*4*	*1.81*		*0.450*	*3.26*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.81*		*0.800*	*5.79*	*Sqm*
		4		*0.690*	*0.800*	*2.21*	*Sqm*
		4	*1.81*		*0.700*	*5.07*	*Sqm*
		4		*1.080*	*0.700*	*3.02*	*Sqm*
	Floor	*2*	*0.65*		*0.800*	*1.04*	*Sqm*
		2		*3.300*	*0.800*	*5.28*	*Sqm*
		2	*8.25*		*0.600*	*9.90*	*Sqm*
		2		*3.300*	*0.600*	*3.96*	*Sqm*
		2	*6.25*		*0.300*	*3.75*	*Sqm*
		2		*3.300*	*0.300*	*1.98*	*Sqm*
		2	*0.20*		*0.600*	*0.24*	*Sqm*
		2		*3.300*	*0.600*	*3.96*	*Sqm*
		2	*0.62*		*0.400*	*0.50*	*Sqm*
		2		*3.300*	*0.400*	*2.64*	*Sqm*
		2	*1.11*		*0.700*	*1.55*	*Sqm*
		2		*3.300*	*0.700*	*4.62*	*Sqm*
		2	*0.10*		*0.650*	*0.13*	*Sqm*
		2		*3.300*	*0.650*	*4.29*	*Sqm*
		2	*2.84*		*0.600*	*3.41*	*Sqm*
		2		*3.300*	*0.600*	*3.96*	*Sqm*
		2	*0.83*		*1.500*	*2.48*	*Sqm*
		2		*3.300*	*1.500*	*9.90*	*Sqm*
	Crest	*2*	*1.28*		*2.009*	*5.13*	*Sqm*
		2		*3.300*	*2.009*	*13.26*	*Sqm*
	Toe Wall D/S Portion	*2*	*8.30*		*0.300*	*4.98*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*8.00*		*0.600*	*9.60*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*2.50*		*0.150*	*1.50*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*2.50*		*0.600*	*6.00*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**303.56**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*2.50*	*2.592*		*12.96*	*Sqm*
	TOTAL					**12.96**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*2.50*	*2.700*	*0.300*	**2.03**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*2.50*	*2.700*	*0.150*	**2.03**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*15.39*	*0.450*		*6.92*	*Sqm*
	On Abutment Top (Right Side)	*1*	*15.39*	*0.450*		*6.92*	*Sqm*
	TOTAL					**13.85**	**Sqm**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	*2.00*			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	*1*	*27.805*			*27.80*	Cum
	Abutment						
	Section 1-1	*2*	*1.54*	*3.687*		*11.356*	*Cum*
	Section 2-2	*2*	*4.50*	*1.162*		*10.458*	*Cum*
	Section 3-3	*2*	*3.95*	*0.904*		*7.142*	*Cum*
	Section 5-5	*2*	*2.93*	*3.687*		*21.598*	*Cum*
	Section 6-6	*2*	*1.27*	*0.904*		*2.296*	*Cum*
	Toe wall	*2*	*8.30*	*0.150*	*0.600*	*2.490*	*Cum*
		2	*2.50*	*0.150*	*0.600*	*0.450*	*Cum*
	TOTAL					**83.59**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 1.524 METER AT CH.3.950 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.54*	*2.264*	*2.000*	*13.946*	*Cum*
	Section 2-2	*2*	*4.50*	*1.350*	*2.000*	*24.300*	*Cum*
	Section 3-3	*2*	*3.95*	*1.230*	*1.800*	*17.491*	*Cum*
	Section 5-5	*2*	*2.93*	*2.414*	*2.000*	*28.282*	*Cum*
	Section 6-6	*2*	*1.27*	*1.230*	*1.800*	*5.624*	*Cum*
	U/S Key Floor	*1*	*0.65*	*3.300*	*0.950*	*2.038*	*Cum*
	U/S Floor	*1*	*3.75*	*3.300*	*2.774*	*34.328*	*Cum*
	D/S Floor	*1*	*4.50*	*3.300*	*0.950*	*14.108*	*Cum*
		1	*1.31*	*3.300*	*0.750*	*3.235*	*Cum*
		1	*2.94*	*3.300*	*0.750*	*7.281*	*Cum*
	D/S Key Floor	*1*	*0.83*	*3.300*	*1.650*	*4.492*	*Cum*
	Toe Wall D/S Portion	*1*	*8.30*	*0.750*	*0.900*	*5.603*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*2.50*	*0.600*	*0.750*	*2.250*	*Cum*
						162.98	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*3.300*	*0.150*	*0.27*	*Cum*
		1	*0.89*	*3.300*	*0.150*	*0.44*	*Cum*
		1	*0.84*	*3.300*	*0.150*	*0.42*	*Cum*
		1	*0.42*	*3.300*	*0.150*	*0.21*	*Cum*
		1	*6.31*	*3.300*	*0.150*	*3.12*	*Cum*
		1	*0.57*	*3.300*	*0.150*	*0.28*	*Cum*
		1	*0.83*	*3.300*	*0.150*	*0.41*	*Cum*
		1	*0.14*	*3.300*	*0.150*	*0.07*	*Cum*
		1	*1.49*	*3.300*	*0.150*	*0.74*	*Cum*
		1	*1.68*	*3.300*	*0.150*	*0.83*	*Cum*
		1	*0.54*	*3.300*	*0.150*	*0.27*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.54*	*2.264*	*0.150*	*1.05*	*Cum*
	Section 2-2	*2*	*4.50*	*1.350*	*0.150*	*1.82*	*Cum*
	Section 3-3	*2*	*3.95*	*1.230*	*0.150*	*1.46*	*Cum*
	Section 5-5	*2*	*2.93*	*2.414*	*0.150*	*2.12*	*Cum*
	Section 6-6	*2*	*1.27*	*1.230*	*0.150*	*0.47*	*Cum*
	Toe Wall D/S Portion	*1*	*8.30*	*0.750*	*0.300*	*1.87*	*Cum*
	Toe Wall D/S Portion	*1*	*8.00*	*0.450*	*0.600*	*2.16*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*2.50*	*0.600*	*0.150*	*0.45*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*2.50*	*0.300*	*0.600*	*0.90*	*Cum*
	TOTAL					**19.35**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.32*	*0.450*	*0.450*	*0.53*	*Cum*
		2	*1.32*	*1.207*	*2.524*	*8.01*	*Cum*
		2	*1.32*	*2.114*	*0.750*	*4.17*	*Cum*
	Section 2-2	*2*	*4.50*	*0.450*	*0.450*	*1.82*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	*4.50*	*0.750*	*1.000*	*6.75*	*Cum*
		2	*4.50*	*1.200*	*0.750*	*8.10*	*Cum*
	Section 3-3	*2*	*3.56*	*0.450*	*0.450*	*1.44*	*Cum*
		2	*3.56*	*0.690*	*0.800*	*3.93*	*Cum*
		2	*3.56*	*1.080*	*0.550*	*4.23*	*Cum*
	Section 5-5	*2*	*2.89*	*0.450*	*0.450*	*1.17*	*Cum*
		2	*2.89*	*1.207*	*2.524*	*17.58*	*Cum*
		2	*2.89*	*2.114*	*0.650*	*7.93*	*Cum*
	Section 6-6	*2*	*1.81*	*0.450*	*0.450*	*0.73*	*Cum*
		2	*1.81*	*0.690*	*0.800*	*2.00*	*Cum*
		2	*1.81*	*1.080*	*0.700*	*2.74*	*Cum*
	Floor	*1*	*0.65*	*3.300*	*0.800*	*1.72*	*Cum*
		1	*8.25*	*3.300*	*0.600*	*16.34*	*Cum*
		1	*6.25*	*3.300*	*0.300*	*6.19*	*Cum*
		1	*0.20*	*3.300*	*0.600*	*0.40*	*Cum*
		1	*0.62*	*3.300*	*0.400*	*0.82*	*Cum*
		1	*1.11*	*3.300*	*0.700*	*2.56*	*Cum*
		1	*0.10*	*3.300*	*0.650*	*0.21*	*Cum*
		1	*2.84*	*3.300*	*0.600*	*5.63*	*Cum*
		1	*0.83*	*3.300*	*1.500*	*4.08*	*Cum*
	Crest	*1*	*1.28*	*3.300*	*2.009*	*8.46*	*Cum*
	TOTAL					**117.54**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.95*	*3.300*	*0.150*	*0.47*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*15.39*	*0.450*	*0.050*	*0.35*	*Cum*
	On Abutment Top (Right Side)	*1*	*15.39*	*0.450*	*0.050*	*0.35*	*Cum*
	TOTAL					**1.16**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**117.54**	**0.00**	**0.353**	**7850.0**	**2768.01**	**Kg**
	Total Weight in Metric Tonne					**2.77**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.32*		*0.450*	*2.37*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.32*		*2.524*	*13.28*	*Sqm*
		4		*1.207*	*2.524*	*12.19*	*Sqm*
		4	*1.32*		*0.750*	*3.95*	*Sqm*
		4		*2.114*	*0.750*	*6.34*	*Sqm*
	Section 2-2	*4*	*4.50*		*0.450*	*8.10*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.50*		*1.000*	*18.00*	*Sqm*
		4		*0.750*	*1.000*	*3.00*	*Sqm*
		4	*4.50*		*0.750*	*13.50*	*Sqm*
		4		*1.200*	*0.750*	*3.60*	*Sqm*
	Section 3-3	*4*	*3.56*		*0.450*	*6.41*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.56*		*0.800*	*11.39*	*Sqm*
		4		*0.690*	*0.800*	*2.21*	*Sqm*
		4	*3.56*		*0.550*	*7.83*	*Sqm*
		4		*1.080*	*0.550*	*2.38*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Section 5-5	*4*	*2.89*		*0.450*	*5.19*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.89*		*2.524*	*29.13*	*Sqm*
		4		*1.207*	*2.524*	*12.19*	*Sqm*
		4	*2.89*		*0.650*	*7.50*	*Sqm*
		4		*2.114*	*0.650*	*5.50*	*Sqm*
	Section 6-6	*4*	*1.81*		*0.450*	*3.26*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.81*		*0.800*	*5.79*	*Sqm*
		4		*0.690*	*0.800*	*2.21*	*Sqm*
		4	*1.81*		*0.700*	*5.07*	*Sqm*
		4		*1.080*	*0.700*	*3.02*	*Sqm*
	Floor	*2*	*0.65*		*0.800*	*1.04*	*Sqm*
		2		*3.300*	*0.800*	*5.28*	*Sqm*
		2	*8.25*		*0.600*	*9.90*	*Sqm*
		2		*3.300*	*0.600*	*3.96*	*Sqm*
		2	*6.25*		*0.300*	*3.75*	*Sqm*
		2		*3.300*	*0.300*	*1.98*	*Sqm*
		2	*0.20*		*0.600*	*0.24*	*Sqm*
		2		*3.300*	*0.600*	*3.96*	*Sqm*
		2	*0.62*		*0.400*	*0.50*	*Sqm*
		2		*3.300*	*0.400*	*2.64*	*Sqm*
		2	*1.11*		*0.700*	*1.55*	*Sqm*
		2		*3.300*	*0.700*	*4.62*	*Sqm*
		2	*0.10*		*0.650*	*0.13*	*Sqm*
		2		*3.300*	*0.650*	*4.29*	*Sqm*
		2	*2.84*		*0.600*	*3.41*	*Sqm*
		2		*3.300*	*0.600*	*3.96*	*Sqm*
		2	*0.83*		*1.500*	*2.48*	*Sqm*
		2		*3.300*	*1.500*	*9.90*	*Sqm*
	Crest	*2*	*1.28*		*2.009*	*5.13*	*Sqm*
		2		*3.300*	*2.009*	*13.26*	*Sqm*
	Toe Wall D/S Portion	*2*	*8.30*		*0.300*	*4.98*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*8.00*		*0.600*	*9.60*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*2.50*		*0.150*	*1.50*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*2.50*		*0.600*	*6.00*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**303.56**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*2.50*	*2.592*		*12.96*	*Sqm*
	TOTAL					**12.96**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*2.50*	*2.700*	*0.300*	**2.03**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*2.50*	*2.700*	*0.150*	**2.03**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*15.39*	*0.450*		*6.92*	*Sqm*
	On Abutment Top (Right Side)	*1*	*15.39*	*0.450*		*6.92*	*Sqm*
	TOTAL					**13.85**	**Sqm**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	*2.00*			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	*1*	*27.805*			*27.80*	Cum
	Abutment						
	Section 1-1	*2*	*1.54*	*3.687*		*11.356*	*Cum*
	Section 2-2	*2*	*4.50*	*1.162*		*10.458*	*Cum*
	Section 3-3	*2*	*3.95*	*0.904*		*7.142*	*Cum*
	Section 5-5	*2*	*2.93*	*3.687*		*21.598*	*Cum*
	Section 6-6	*2*	*1.27*	*0.904*		*2.296*	*Cum*
	Toe wall	*2*	*8.30*	*0.150*	*0.600*	*2.490*	*Cum*
		2	*2.50*	*0.150*	*0.600*	*0.450*	*Cum*
	TOTAL					**83.59**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 0.915 METER AT CH 4.595 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.79*	*1.929*	*3.151*	*21.736*	*Cum*
	Section 2-2	*2*	*3.50*	*1.380*	*3.151*	*30.439*	*Cum*
	Section 3-3	*2*	*1.95*	*1.230*	*2.951*	*14.156*	*Cum*
	Section 5-5	*2*	*3.00*	*2.079*	*3.151*	*39.286*	*Cum*
	Section 6-6	*2*	*1.27*	*1.230*	*2.951*	*9.220*	*Cum*
	U/S Key Floor	*1*	*0.63*	*3.300*	*0.850*	*1.753*	*Cum*
	U/S Floor	*1*	*2.75*	*3.300*	*1.915*	*17.379*	*Cum*
	D/S Floor	*1*	*3.50*	*3.300*	*0.850*	*9.818*	*Cum*
		1	*2.25*	*3.300*	*0.650*	*4.826*	*Cum*
	D/S Key Floor	*1*	*0.70*	*3.300*	*1.150*	*2.657*	*Cum*
	Toe Wall D/S Portion	*1*	*8.30*	*0.750*	*0.900*	*5.603*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*2.50*	*0.600*	*0.750*	*2.250*	*Cum*
						159.12	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*3.300*	*0.150*	*0.27*	*Cum*
		1	*0.78*	*3.300*	*0.150*	*0.39*	*Cum*
		1	*0.49*	*3.300*	*0.150*	*0.24*	*Cum*
		1	*0.14*	*3.300*	*0.150*	*0.07*	*Cum*
		1	*4.94*	*3.300*	*0.150*	*2.44*	*Cum*
		1	*0.49*	*3.300*	*0.150*	*0.24*	*Cum*
		1	*0.69*	*3.300*	*0.150*	*0.34*	*Cum*
		1	*1.12*	*3.300*	*0.150*	*0.55*	*Cum*
		1	*0.54*	*3.300*	*0.150*	*0.27*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.79*	*1.929*	*0.150*	*1.03*	*Cum*
	Section 2-2	*2*	*3.50*	*1.380*	*0.150*	*1.45*	*Cum*
	Section 3-3	*2*	*1.95*	*1.230*	*0.150*	*0.72*	*Cum*
	Section 5-5	*2*	*3.00*	*2.079*	*0.150*	*1.87*	*Cum*
	Section 6-6	*2*	*1.27*	*1.230*	*0.150*	*0.47*	*Cum*
	Toe Wall D/S Portion	*1*	*8.30*	*0.750*	*0.300*	*1.87*	*Cum*
	Toe Wall D/S Portion	*1*	*8.00*	*0.450*	*0.600*	*2.16*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*2.50*	*0.600*	*0.150*	*0.45*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*2.50*	*0.300*	*0.600*	*0.90*	*Cum*
	TOTAL					**15.74**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*0.99*	*0.450*	*0.450*	*0.40*	*Cum*
		2	*0.99*	*1.040*	*1.965*	*4.03*	*Cum*
		2	*0.99*	*1.779*	*0.600*	*2.11*	*Cum*
	Section 2-2	*2*	*3.50*	*0.450*	*0.450*	*1.42*	*Cum*
		2	*3.50*	*0.765*	*1.050*	*5.62*	*Cum*
		2	*3.50*	*1.230*	*0.600*	*5.17*	*Cum*
	Section 3-3	*2*	*1.59*	*0.450*	*0.450*	*0.64*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	*1.59*	*0.690*	*0.800*	*1.76*	*Cum*
		2	*1.59*	*1.080*	*0.500*	*1.72*	*Cum*
	Section 5-5	*2*	*2.95*	*0.450*	*0.450*	*1.20*	*Cum*
		2	*2.95*	*1.040*	*1.965*	*12.07*	*Cum*
		2	*2.95*	*1.779*	*0.500*	*5.26*	*Cum*
	Section 6-6	*2*	*1.81*	*0.450*	*0.450*	*0.73*	*Cum*
		2	*1.81*	*0.690*	*0.800*	*2.00*	*Cum*
		2	*1.81*	*1.080*	*0.550*	*2.15*	*Cum*
	Floor	*1*	*0.63*	*3.300*	*0.700*	*1.44*	*Cum*
		1	*6.25*	*3.300*	*0.500*	*10.31*	*Cum*
		1	*4.76*	*3.300*	*0.200*	*3.14*	*Cum*
		1	*0.25*	*3.300*	*0.550*	*0.45*	*Cum*
		1	*0.28*	*3.300*	*0.350*	*0.33*	*Cum*
		1	*2.00*	*3.300*	*0.500*	*3.30*	*Cum*
		1	*0.70*	*3.300*	*1.000*	*2.31*	*Cum*
	Crest	*1*	*0.98*	*3.300*	*1.465*	*4.73*	*Cum*
	TOTAL					**72.27**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.75*	*3.300*	*0.150*	*0.37*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*11.99*	*0.450*	*0.050*	*0.27*	*Cum*
	On Abutment Top (Right Side)	*1*	*11.99*	*0.450*	*0.050*	*0.27*	*Cum*
	TOTAL					**0.91**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**72.27**	**0.00**	**0.217**	**7850.0**	**1702.01**	**Kg**
	Total Weight in Metric Tonne					**1.70**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*0.99*		*0.450*	*1.78*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*0.99*		*1.965*	*7.75*	*Sqm*
		4		*1.040*	*1.965*	*8.17*	*Sqm*
		4	*0.99*		*0.600*	*2.37*	*Sqm*
		4		*1.779*	*0.600*	*4.27*	*Sqm*
	Section 2-2	*4*	*3.50*		*0.450*	*6.30*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.50*		*1.050*	*14.70*	*Sqm*
		4		*0.765*	*1.050*	*3.21*	*Sqm*
		4	*3.50*		*0.600*	*8.40*	*Sqm*
		4		*1.230*	*0.600*	*2.95*	*Sqm*
	Section 3-3	*4*	*1.59*		*0.450*	*2.86*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.59*		*0.800*	*5.09*	*Sqm*
		4		*0.690*	*0.800*	*2.21*	*Sqm*
		4	*1.59*		*0.500*	*3.18*	*Sqm*
		4		*1.080*	*0.500*	*2.16*	*Sqm*
	Section 5-5	*4*	*2.95*		*0.450*	*5.32*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.95*		*1.965*	*23.22*	*Sqm*
		4		*1.040*	*1.965*	*8.17*	*Sqm*
		4	*2.95*		*0.500*	*5.91*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		4		*1.779*	*0.500*	*3.56*	*Sqm*
	Section 6-6	*4*	*1.81*		*0.450*	*3.26*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.81*		*0.800*	*5.79*	*Sqm*
		4		*0.690*	*0.800*	*2.21*	*Sqm*
		4	*1.81*		*0.550*	*3.98*	*Sqm*
		4		*1.080*	*0.550*	*2.38*	*Sqm*
	Floor	*2*	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*3.300*	*0.700*	*4.62*	*Sqm*
		2	*6.25*		*0.500*	*6.25*	*Sqm*
		2		*3.300*	*0.500*	*3.30*	*Sqm*
		2	*4.76*		*0.200*	*1.90*	*Sqm*
		2		*3.300*	*0.200*	*1.32*	*Sqm*
		2	*0.25*		*0.550*	*0.28*	*Sqm*
		2		*3.300*	*0.550*	*3.63*	*Sqm*
		2	*0.28*		*0.350*	*0.20*	*Sqm*
		2		*3.300*	*0.350*	*2.31*	*Sqm*
		2	*2.00*		*0.500*	*2.00*	*Sqm*
		2		*3.300*	*0.500*	*3.30*	*Sqm*
		2	*0.70*		*1.000*	*1.40*	*Sqm*
		2		*3.300*	*1.000*	*6.60*	*Sqm*
	Crest	*2*	*0.98*		*1.465*	*2.86*	*Sqm*
		2		*3.300*	*1.465*	*9.67*	*Sqm*
	Toe Wall D/S Portion	*2*	*8.30*		*0.300*	*4.98*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*8.00*		*0.600*	*9.60*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*2.50*		*0.150*	*1.50*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*2.50*		*0.600*	*6.00*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**217.91**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*2.50*	*2.592*		*12.96*	*Sqm*
	TOTAL					**12.96**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*2.50*	*2.700*	*0.300*	**2.03**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*2.50*	*2.700*	*0.150*	**2.03**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*11.99*	*0.450*		*5.39*	*Sqm*
	On Abutment Top (Right Side)	*1*	*11.99*	*0.450*		*5.39*	*Sqm*
	TOTAL					**10.79**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Under U/S floor	1		8.975		8.97	Cum
	Abutment						
	Section 1-1	2	*1.79*	*2.577*		*9.215*	*Cum*
	Section 2-2	2	*3.50*	*1.200*		*8.400*	*Cum*
	Section 3-3	2	*1.95*	*0.897*		*3.498*	*Cum*
	Section 5-5	2	*3.00*	*2.562*		*15.364*	*Cum*
	Section 6-6	2	*1.27*	*0.897*		*2.278*	*Cum*
	Toe wall	2	*8.30*	*0.150*	*0.600*	*2.490*	*Cum*
		2	*2.50*	0.150	*0.600*	*0.450*	*Cum*
	TOTAL					**50.67**	**Cum**

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND									
ABSTRACT OF COST FOR CROSS DRAINAGE WORKS OF PARANPUR MINOR									
S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
Cross Drainage at Ch. 1.660 Km									
1	**WRD 5.1.31**	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	95.16	Cum	**149.30**	14207.58			
3	**5.3.4**	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	42.71	Cum	**6381.70**	272548.24	13.84	19.22	38.44
4	**5.3.10**	Providing & laying **P.C.C. or R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	125.11	Cum	**6914.20**	865040.39	51.61	53.80	107.60
5	**WRD 5.3.19**	Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.	489.43	Sqm	**578.60**	283181.65			
7	**WRD M-1710**	Providing RCC Pipe NP 4 heavy duty non pressure pipe 1000 mm dia with spigot	12.50	RM	**6002.82**	75035.25			
8	**WRD 5.6.1.7**	Labour for laying 1000mm NP3 RCC Hume Pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .	12.50	RM	**1713.33**	21416.63			
9	**WRD 5.3.22**	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	2.46	MT	**73574.90**	180648.27			
10	**WRD 5.1.27**	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	275.16	Cum	**195.20**	53710.40			
11		**Carriage of materials**							
		Coarse Sand 30 Km lead)	73.02	Cum	**1075.00**	78492.31			
		Coarse Aggregates (100 Km lead)	146.03	Cum	**1398.00**	204153.02			
		Cement (30 km lead)	65.45	MT	**742.00**	48560.55			
		Steel (30 Km lead)	2.46	MT	**742.00**	1821.83			
		Hume Pipe (30 Km)	12.50	RM	**1470.00**	18375.00			
TOTAL (In Rs.)						**₹ 21,17,191.12**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	73.02	Cum	**584.64**	42688.13	4268.81		
		Coarse Aggregate	146.03	Cum	**944.26**	137892.37	13789.24		
		Total					**18058.05**		

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND							
DETAILED ESTIMATE FOR CROSS DRAINAGE WORKS OF PARANPUR MINOR							
Cross Drainage at Ch. 1.660 Km							
S. No.	**Item of Works**	**No.**		**Width**	**Height**	**Qty.**	**Unit**
1	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Left Portion	*1*	*10.29*	*1.61*		*16.52*	*Cum*
		1	*6.04*	*1.32*		*7.98*	*Cum*
	Middle Portion	*1*	*3.66*	*12.94*		*47.36*	*Cum*
	Right Portion	*1*	*10.33*	*1.48*		*15.33*	*Cum*
		1	*6.04*	*1.32*		*7.98*	*Cum*
	TOTAL					**95.16**	**Cum**
3	Providing & laying **P.C.C. or R.C.C. M-150** with nominal mix of (1:2:4) in superstructure of various components of canal or embankment structures with approved quality of graded coarse aggregate of required grade and approved quality sand of requisite F.M. washed and screened including necessary tools and plants, vibrating, curing,royalty etc. excluding cost of form work as well reinforcement its cutting, bending. binding, and placing complete job as per specification & direction of E/I.						
	300 mm Thick Left Abutment	*1*	*10.29*	*1.38*	*0.30*	*4.27*	*Cum*
		1	*6.06*	*3.59*	*0.30*	*6.52*	*Cum*
	300 mm Thick Right Abutment	*1*	*10.33*	*1.41*	*0.30*	*4.36*	*Cum*
		1	*6.07*	*3.59*	*0.30*	*6.55*	*Cum*
	Below Pipe Section	*1*	*12.50*	*1.83*	*0.30*	*6.86*	*Cum*
		1	*12.50*	*0.63*	*0.37*	*7.93*	*Cum*
	200 mm Thick Left and Right Portion Well	*2*	*4.33*	*2.50*	*0.20*	*4.33*	*Cum*
	Pipe Section	*4*	*0.30*	*1.73*	*1.60*	*3.32*	*Cum*
	Deduct Area of Pipe	*4*	*0.30*	*1.19*		*-1.43*	*Cum*
	TOTAL					**42.71**	**Cum**
4	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	U/S Portion Retaining Wall (Section C-C)	*2*	*9.99*	*0.30*	*0.20*	*1.20*	*Cum*
		2	*9.99*	*0.69*	*2.62*	*36.16*	*Cum*
	U/S Portion Retaining Wall (Section D-D)	*2*	*2.33*	*0.30*	*0.50*	*0.70*	*Cum*
		2	*2.33*	*0.69*	*2.63*	*8.50*	*Cum*
	U/S Portion Retaining Wall (Avg. section)	*2*	*4.13*	*0.30*	*0.35*	*0.87*	*Cum*
		2	*4.13*	*0.69*	*2.62*	*15.03*	*Cum*
	D/S Portion Retaining Wall (Section F-F)	*2*	*10.03*	*0.30*	*0.20*	*1.20*	*Cum*
		2	*10.03*	*0.70*	*2.68*	*37.82*	*Cum*
	D/S Portion Retaining Wall (Section E-E)	*2*	*2.33*	*0.30*	*0.50*	*0.70*	*Cum*
		2	*2.33*	*0.70*	*2.64*	*8.57*	*Cum*
	D/S Portion Retaining Wall (Avg. section)	*2*	*4.14*	*0.70*	*2.66*	*15.43*	*Cum*
		2	*4.14*	*0.30*	*0.35*	*0.87*	*Cum*
	Deduct Area of Pipe (Section D-D & Section E-E)	*2*	*0.81*	*1.188*		*-1.93*	*Cum*
	TOTAL					**125.11**	**Cum**

S. No.	Item of Works	No.		Width	Height	Qty.	Unit
5	Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.						
	300 mm Thick Left Abutment	*2*	*10.29*		*0.30*	*6.18*	*Sqm*
		2		*1.38*	*0.30*	*0.83*	*Sqm*
		2	*6.06*		*0.30*	*3.64*	*Sqm*
		2		*3.59*	*0.30*	*2.15*	*Sqm*
	300 mm Thick Right Abutment	*2*	*10.33*		*0.30*	*6.20*	*Sqm*
		2		*1.41*	*0.30*	*0.84*	*Sqm*
		2	*6.07*		*0.30*	*3.64*	*Sqm*
		2		*3.59*	*0.30*	*2.16*	*Sqm*
	200 mm Thick Left and Right Portion Well	*4*	*4.33*		*0.20*	*3.46*	*Sqm*
		4		*2.50*	*0.20*	*2.00*	*Sqm*
	Pipe Section	*8*	*0.30*		*1.60*	*3.84*	*Sqm*
		8		*1.73*	*1.60*	*22.14*	*Sqm*
	U/S Portion Retaining Wall (Section C-C)	*4*	*9.99*		*0.20*	*7.99*	*Sqm*
		4		*0.30*	*0.20*	*0.24*	*Sqm*
		4	*9.99*		*2.62*	*104.52*	*Sqm*
		4		*0.69*	*2.62*	*7.24*	*Sqm*
	U/S Portion Retaining Wall (Section D-D)	*4*	*2.33*		*0.50*	*4.65*	*Sqm*
		4		*0.30*	*0.50*	*0.60*	*Sqm*
		4	*2.33*		*2.63*	*24.48*	*Sqm*
		4		*0.69*	*2.63*	*7.31*	*Sqm*
	U/S Porion Retaining Wall (Avg. section)	*4*	*4.13*		*0.35*	*5.79*	*Sqm*
		4		*0.30*	*0.35*	*0.42*	*Sqm*
		4	*4.13*		*2.62*	*43.35*	*Sqm*
		4		*0.69*	*2.62*	*7.27*	*Sqm*
	D/S Portion Retaining Wall (Section E-E)	*4*	*2.33*		*2.64*	*24.60*	*Sqm*
		4		*0.70*	*2.64*	*7.36*	*Sqm*
		4	*2.33*		*0.50*	*4.65*	*Sqm*
		4		*0.30*	*0.50*	*0.60*	*Sqm*
	D/S Portion Retaining Wall (Section F-F)	*4*	*10.03*		*2.68*	*107.68*	*Sqm*
		4		*0.70*	*2.68*	*7.54*	*Sqm*
		4	*10.03*		*0.20*	*8.03*	*Sqm*
		4		*0.30*	*0.20*	*0.24*	*Sqm*
	D/S Portion Retaining Wall (Avg. section)	*4*	*4.14*		*2.66*	*44.11*	*Sqm*
		4		*0.70*	*2.66*	*7.45*	*Sqm*
		4	*4.14*		*0.35*	*5.80*	*Sqm*
		4		*0.30*	*0.35*	*0.42*	*Sqm*
	TOTAL					**489.43**	***Sqm***
6	Providing 1000mm NP2 RCC Hume Pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I						
	1 m dia pipe	*5*	*2.50*			*12.50*	*RM*
	TOTAL					**12.50**	**RM**
7	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	RCC M-20 (Providing Skin Reinforcement @0.25%)	*125.11*	*0.0025*	*0.313*	*7850.00*	*2455.297*	*Kg*
	TOTAL					*2455.297*	*Kg*
	TOTAL					**2.46**	**M.T.**

S. No.	Item of Works	No.		Width	Height	Qty.	Unit
8	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Left Portion	*1*	*10.29*	*1.38*	*2.96*	*42.19*	*Cum*
		1	*6.06*	*3.59*	*3.23*	*70.22*	*Cum*
	Middle Portion	*1*	*1.83*	*26.25*		*48.04*	*Cum*
	Right Portion	*1*	*10.33*	*1.41*	*3.39*	*49.15*	*Cum*
		1	*6.07*	*3.59*	*3.01*	*65.56*	*Cum*
	TOTAL					**275.16**	**Cum**

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND			
DETAILED ESTIMATE FOR REPAIR STRUCTURES WORK OF CHAIN NAWADA SUB DY.			
Sl. No.	**Structure Type**	**Chainage In Km**	**Amount (In Rs.)**
1	FALL (1.220 M)/ BRIDGE	0.475	₹ 48,038.73
2	PIPE CULVERT (0.80 M DIA)	0.720	₹ 9,509.41
3	FALL (0.610 M)	1.320	₹ 6,950.69
4	SYPHON	1.760	₹ 2,92,500.20
5	PIPE CULVERT (0.80 M DIA)	2.075	₹ 24,632.77
6	CROSS DRAINAGE	2.215	₹ 0.00
7	SYPHON	2.600	₹ 2,46,943.02
8	CULVERT	3.010	₹ 12,231.27
9	CROSS DRAINAGE	3.060	₹ 0.00
10	PIPE CULVERT (0.80 M DIA)	3.675	₹ 26,049.30
11	CROSS DRAINAGE	4.250	₹ 1,416.53
12	CROSS DRAINAGE	4.580	₹ 0.00
13	CROSS DRAINAGE	4.900	₹ 0.00
14	PIPE CULVERT (0.80 M DIA)	5.420	₹ 13,496.83
15	CROSS DRAINAGE	5.465	₹ 0.00
16	CROSS DRAINAGE	5.625	₹ 0.00
17	PIPE CULVERT (0.80 M DIA)	6.005	₹ 83,525.78
18	CROSS DRAINAGE	6.190	₹ 27,809.11
19	CROSS DRAINAGE	6.630	₹ 0.00
20	PIPE CULVERT (0.80 M DIA)	6.795	₹ 95,369.99
21	CROSS DRAINAGE	7.120	₹ 44,494.58
22	CROSS DRAINAGE	7.825	₹ 0.00
23	PIPE CULVERT (0.80 M DIA)	7.985	₹ 0.00
24	CULVERT	8.180	₹ 0.00
25	CULVERT	8.790	₹ 41,054.62
26	FALL (0.762 M)	9.320	₹ 45,090.77
27	HR FOR PARANPUR MR.	9.325	₹ 44,393.78
28	CULVERT	9.470	₹ 43,105.77
29	SYPHON	9.770	₹ 55,618.23
30	CROSS DRAINAGE	10.270	₹ 0.00
31	HR FOR SALAIYA MR.	11.070	₹ 20,809.51
32	CROSS DRAINAGE	11.140	₹ 1,11,236.46
33	PIPE CULVERT (0.80 M DIA)	11.475	₹ 46,104.44
34	CROSS DRAINAGE	12.100	₹ 27,034.24
35	CULVERT	12.220	₹ 55,618.23
36	CROSS DRAINAGE	12.470	₹ 0.00
37	FALL (1.520 M)	12.650	₹ 2,52,972.92
38	FALL (1.520 M)	12.900	₹ 0.00
39	PIPE CULVERT (1.20 M DIA)	13.025	₹ 0.00
40	FALL (1.220 M)	13.200	₹ 1,81,620.18
41	PIPE CULVERT (1.20 M DIA)	13.540	₹ 1,770.66
42	FALL (0.914 M)/ BRIDGE / HR. FOR DHAMANI SUB DY.	13.800	₹ 43,620.15
Total In Rs.			**₹ 19,03,018.18**
Total In Lakhs.			**₹ 19.03**

DETAILED ESTIMATE FOR REPAIR STRUCTURES WORK OF PARANPUR MR.			
Sl. No.	**Structure Type**	**Chainage In Km**	**Amount (In Rs.)**
1	CULVERT + FALL (0.762 M)	0.200	₹ 6,460.77
2	CULVERT + FALL (1.220 M)	0.400	₹ 6,460.77
3	CULVERT + FALL (1.220 M)	0.550	₹ 6,460.77
4	CULVERT + FALL (0.914 M)	0.950	₹ 6,460.77
5	CULVERT + FALL (1.220 M)	1.050	₹ 6,460.77
6	CULVERT + FALL (1.524 M)	1.150	₹ 6,460.77
7	CROSS DRAINAGE	1.660	₹ 37,687.81
8	PIPE CULVERT	1.990	₹ 1,416.53
9	CULVERT + FALL (1.828 M)	2.215	₹ 31,294.34
10	PIPE CULVERT	2.435	₹ 0.00
11	PIPE CULVERT	2.520	₹ 0.00
12	PIPE CULVERT	2.800	₹ 1,180.44
Total In Rs.			**₹ 77,868.94**
Total In Lakhs.			**₹ 0.78**

DETAILED ESTIMATE FOR REPAIR STRUCTURES WORK OF SALAIYA MINOR			
Sl. No.	**Structure Type**	**Chainage In Km**	**Amount (In Rs.)**
1	FALL (2.134 M)	0.030	₹ 20,862.89
2	FALL (1.830 M)	0.145	₹ 0.00
3	CROSS DRAINAGE	0.505	₹ 0.00
4	FALL (1.524 M)	0.610	₹ 1,13,140.37
5	FALL (1.220 M)/ CULVERT	0.810	₹ 0.00
6	FALL (1.830 M)	1.060	₹ 1,33,290.87
7	CROSS DRAINAGE	1.150	₹ 0.00
8	FALL (0.610 M)/ CULVERT	1.260	₹ 59,733.76
9	CROSS DRAINAGE	1.780	₹ 0.00
10	FALL (1.524 M)/ CULVERT	1.885	₹ 0.00
Total In Rs.			**₹ 3,27,027.90**
Total In Lakhs.			**₹ 3.27**

DETAILED ESTIMATE FOR REPAIR STRUCTURES WORK OF DHAMNI SUB DY.			
Sl. No.	**Structure Type**	**Chainage In Km**	**Amount (In Rs.)**
1	CROSS DRAINAGE	0.375	₹ 0.00
2	PIPE CULVERT (1.20 M DIA)	0.430	₹ 5,759.16
3	CULVERT	1.595	₹ 0.00
4	BRIDGE	2.800	₹ 9,476.39
5	FALL (1.220 M)	3.040	₹ 1,770.66
6	FALL (1.220 M)	3.300	₹ 47,782.76
7	BRIDGE	3.625	₹ 17,536.25
8	FALL (1.524 M)	3.800	₹ 35,668.82
9	FALL (1.524 M)	3.950	₹ 26,246.87
10	FALL (1.524 M)	4.150	₹ 0.00
11	FALL (1.524 M)	4.312	₹ 0.00
12	FALL (1.52 M)	4.490	₹ 1,36,569.12
13	FALL (0.914 M)	4.595	₹ 27,592.86
Total In Rs.			**₹ 3,08,402.89**
Total In Lakhs.			**₹ 3.08**

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND									
ABSTRACT OF COST OF REPAIRED STRUCTURES OF CHAIN NAWADA SUB DY.									
S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		AOC FOR BRIDGE/ FALL (Ch.-0.475 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	1.37	Cum	**5021.30**	6887.22	0.16	0.44	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	4.420	Sqm	**340.20**	1503.55	4.582	0.065	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	4.420	Sqm	**63.20**	279.32	0.01		
4	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	2.400	Cum	**6914.20**	16594.08	0.99	1.03	2.06
5	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	20.400	Sqm	**578.60**	11803.44			
6		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.535	Cum	**1075.00**	1650.60			
		Coarse Aggregates (100 Km lead)	2.064	Cum	**1398.00**	2885.47			
		Cement (30 km lead)	5.737	MT	**742.00**	4256.76			
		Brick (15 km lead)	685.00	No.	**3.18**	2178.30			
		TOTAL (In Rs.)				**48038.73**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.54	Cum	**584.64**	897.68	89.77		
		Coarse Aggregate	2.06	Cum	**944.26**	1948.95	194.90		
		Total					**284.66**		
		AOC FOR PIPE CULVERT (Ch.-0.720 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	110.000	Sqm	**11.80**	1298.48			
2	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	0.46	Cum	**5021.30**	2309.80	0.05	0.15	
3	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	4.180	Sqm	**340.20**	1422.04	4.334	0.061	
4	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	4.180	Sqm	**63.20**	264.18	0.01		
5		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.208	Cum	**1075.00**	223.85			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	4.393	MT	**742.00**	3259.67			
		Brick (15 km lead)	230.00	No.	**3.18**	731.40			
		TOTAL (In Rs.)				**9509.41**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.21	Cum	**584.64**	121.74	12.17		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**12.17**		
		AOC FOR FALL (Ch.-1.320 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	0.38	Cum	**5021.30**	1882.99	0.04	0.12	

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	3.625	Sqm	**340.20**	1233.23	3.758	0.053	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	3.625	Sqm	**63.20**	229.10	0.01		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.173	Cum	**1075.00**	185.89			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	3.807	MT	**742.00**	2824.82			
		Brick (15 km lead)	187.00	No.	**3.18**	594.66			
		TOTAL (In Rs.)				**6950.69**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.17	Cum	**584.64**	101.10	10.11		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**10.11**		
		AOC FOR SYPHON (Ch.-1.760 Km)							
1	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	245.899	Sqm	**340.20**	83654.84	254.948	3.590	
2	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	245.899	Sqm	**63.20**	15540.82	0.37		
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	3.590	Cum	**1075.00**	3859.38			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	255.317	MT	**742.00**	189445.16			
		TOTAL (In Rs.)				**292500.20**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	3.59	Cum	**584.64**	2098.93	209.89		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**209.89**		
		AOC FOR PIPE CULVERT (Ch.-2.075 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	100.000	Sqm	**11.80**	1180.44			
2	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	1.38	Cum	**5021.30**	6929.39	0.16	0.44	
3	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	12.540	Sqm	**340.20**	4266.11	13.001	0.183	
4	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	12.540	Sqm	**63.20**	792.53	0.02		
5		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.625	Cum	**1075.00**	671.54			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	13.179	MT	**742.00**	9779.01			
		Brick (15 km lead)	690.00	No.	**3.18**	2194.20			
		TOTAL (In Rs.)				**24632.77**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.62	Cum	**584.64**	365.22	36.52		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**36.52**		
		AOC FOR CROSS DRAINAGE (Ch.-2.215 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR SYPHON (Ch.-2.600 Km)							

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
1	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	207.600	Sqm	**340.20**	70625.52	215.240	3.031	
2	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	207.600	Sqm	**63.20**	13120.32	0.31		
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	3.031	Cum	**1075.00**	3258.28			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	215.551	MT	**742.00**	159938.90			
		Brick (15 km lead)	0.00	No.	**3.18**	0.00			
		TOTAL (In Rs.)				**246943.02**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	3.03	Cum	**584.64**	1772.02	177.20		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**177.20**		
		AOC FOR CULVERT (Ch.-3.010 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	1.13	Cum	**5021.30**	5648.96	0.13	0.36	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	3.625	Sqm	**340.20**	1233.23	3.758	0.053	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	3.625	Sqm	**63.20**	229.10	0.01		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.413	Cum	**1075.00**	443.89			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	3.893	MT	**742.00**	2888.93			
		Brick (15 km lead)	562.00	No.	**3.18**	1787.16			
		TOTAL (In Rs.)				**12231.27**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.41	Cum	**584.64**	241.41	24.14		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**24.14**		
		AOC FOR CD WORK (Ch.-3.060 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR PIPE CULVERT (CH. 3.675 KM)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	120.000	Sqm	**11.80**	1416.53			
2	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	1.38	Cum	**5021.30**	6929.39	0.16	0.44	
3	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	12.540	Sqm	**340.20**	4266.11	13.001	0.183	
4	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	12.540	Sqm	**63.20**	792.53	0.02		
5		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.625	Cum	**1075.00**	671.54			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	13.179	MT	**742.00**	9779.01			
		Brick (15 km lead)	690.00	No.	**3.18**	2194.20			
		TOTAL (In Rs.)				**26049.30**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		Coarse Sand	0.62	Cum	**584.64**	365.22	36.52		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**36.52**		
AOC FOR CROSS DRAINAGE WORK (CH. 4.025 KM)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	120.000	Sqm	**11.80**	1416.53			
TOTAL (In Rs.)						**1416.53**			
AOC FOR CROSS DRAINAGE WORK (Ch.-4.580 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR CROSS DRAINAGE WORK (Ch.-4.900 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR PIPE CULVERT (Ch.-5.420 Km)									
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	0.69	Cum	**5021.30**	3464.70	0.08	0.22	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	6.270	Sqm	**340.20**	2133.05	6.501	0.092	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	6.270	Sqm	**63.20**	396.26	0.01		
4	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	100.000	Sqm	**11.80**	1180.44			
5		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.312	Cum	**1075.00**	335.77			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	6.590	MT	**742.00**	4889.50			
		Brick (15 km lead)	345.00	No.	**3.18**	1097.10			
TOTAL (In Rs.)						**13496.83**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.31	Cum	**584.64**	182.61	18.26		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**18.26**		
AOC FOR CROSS DRAINAGE WORK (Ch.-5.625 Km)									
1	**Structure is in good condition and does not requir any repair works.**								

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		AOC FOR PIPE CULVERT (Ch.-6.005 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	120.000	Sqm	**11.80**	1416.53			
2	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	4.60	Cum	**5021.30**	23097.98	0.53	1.47	
3	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	41.800	Sqm	**340.20**	14220.36	43.338	0.610	
4	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	41.800	Sqm	**63.20**	2641.76	0.06		
5		**Carriage of materials**							
		Coarse Sand (60 Km lead)	2.082	Cum	**1075.00**	2238.45			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	43.931	MT	**742.00**	32596.70			
		Brick (15 km lead)	2300.00	No.	**3.18**	7314.00			
		TOTAL (In Rs.)				**83525.78**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	2.08	Cum	**584.64**	1217.38	121.74		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**121.74**		
		AOC FOR CROSS DRAINAGE WORK (Ch.-6.190 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	1.50	Cum	**5021.30**	7531.95	0.17	0.48	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	14.500	Sqm	**340.20**	4932.90	15.034	0.212	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	14.500	Sqm	**63.20**	916.40	0.02		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.692	Cum	**1075.00**	743.58			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	15.228	MT	**742.00**	11299.29			
		Brick (15 km lead)	750.00	No.	**3.18**	2385.00			
		TOTAL (In Rs.)				**27809.11**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.69	Cum	**584.64**	404.40	40.44		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**40.44**		
		AOC FOR CROSS DRAINAGE WORK (Ch.-6.630 Km)							
1		**Structure is in good condition and does not requir any repair works.**							
		AOC FOR PIPE CULVERT (Ch.-6.795 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	80.000	Sqm	**11.80**	944.35			
2	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	5.29	Cum	**5021.30**	26562.68	0.61	1.69	
3	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	48.070	Sqm	**340.20**	16353.41	49.839	0.702	
4	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	48.070	Sqm	**63.20**	3038.02	0.07		

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5		**Carriage of materials**							
		Coarse Sand (60 Km lead)	2.395	Cum	**1075.00**	2574.22			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	50.520	MT	**742.00**	37486.20			
		Brick (15 km lead)	2645.00	No.	**3.18**	8411.10			
		TOTAL (In Rs.)				**95369.99**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	2.39	Cum	**584.64**	1399.99	140.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**140.00**		
		AOC FOR CROSS DRAINAGE WORK (Ch.-7.120 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	2.40	Cum	**5021.30**	12051.12	0.28	0.77	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	23.200	Sqm	**340.20**	7892.64	24.054	0.339	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	23.200	Sqm	**63.20**	1466.24	0.03		
4		**Carriage of materials**			**1075.00**				
		Coarse Sand (60 Km lead)	1.107	Cum		1189.72			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	24.365	MT	**742.00**	18078.86			
		Brick (15 km lead)	1200.00	No.	**3.18**	3816.00			
		TOTAL (In Rs.)				**44494.58**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.11	Cum	**584.64**	647.03	64.70		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**64.70**		
		AOC FOR CROSS DRAINAGE WORK (Ch.-7.825 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR PIPE CULVERT (Ch.-7.985 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR CULVERT (Ch.-8.180 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR CULVERT (Ch.-8.790 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	2.30	Cum	**5021.30**	11548.99	0.26	0.74	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	20.900	Sqm	**340.20**	7110.18	21.669	0.305	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	20.900	Sqm	**63.20**	1320.88	0.03		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.041	Cum	**1075.00**	1119.23			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	21.965	MT	**742.00**	16298.35			
		Brick (15 km lead)	1150.00	No.	**3.18**	3657.00			
		TOTAL (In Rs.)				**41054.62**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.04	Cum	**584.64**	608.69	60.87		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**60.87**		
		AOC FOR FALL (Ch.-9.320 Km)							

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	18.090	Cum	**2492.58**	45090.77			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		TOTAL (In Rs.)				**45090.77**			
		AOC FOR HR PARANPUR MR. (9.325 KM)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	150.000	Sqm	**11.80**	1770.66			
2	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	17.100	Cum	**2492.58**	42623.12			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		TOTAL (In Rs.)				**44393.78**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
		AOC FOR CULVERT (Ch.-9.470 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	2.42	Cum	**5021.30**	12126.44	0.28	0.77	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	21.945	Sqm	**340.20**	7465.69	22.753	0.320	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	21.945	Sqm	**63.20**	1386.92	0.03		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.093	Cum	**1075.00**	1175.19			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	23.064	MT	**742.00**	17113.27			
		Brick (15 km lead)	1207.00	No.	**3.18**	3838.26			
		TOTAL (In Rs.)				**43105.77**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.09	Cum	**584.64**	639.13	63.91		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**63.91**		
		AOC FOR SYPHON (Ch.-9.770 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	3.00	Cum	**5021.30**	15063.90	0.35	0.96	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	29.000	Sqm	**340.20**	9865.80	30.067	0.423	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	29.000	Sqm	**63.20**	1832.80	0.04		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.383	Cum	**1075.00**	1487.16			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	30.456	MT	**742.00**	22598.57			
		Brick (15 km lead)	1500.00	No.	**3.18**	4770.00			

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		TOTAL (In Rs.)				**55618.23**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.38	Cum	**584.64**	808.79	80.88		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**80.88**		
		AOC FOR CROSS DRAINAGE WORK (Ch.-10.270 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR HR SALAIYA MR. (11.070 KM)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	100.000	Sqm	**11.80**	1180.44			
2	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	7.875	Cum	**2492.58**	19629.07			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		TOTAL (In Rs.)				**20809.51**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
		AOC FOR CROSS DRAINAGE WORK (Ch.-11.140 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	6.00	Cum	**5021.30**	30127.80	0.69	1.92	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	58.000	Sqm	**340.20**	19731.60	60.134	0.847	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	58.000	Sqm	**63.20**	3665.60	0.09		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	2.767	Cum	**1075.00**	2974.31			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	60.913	MT	**742.00**	45197.15			
		Brick (15 km lead)	3000.00	No.	**3.18**	9540.00			
		TOTAL (In Rs.)				**111236.46**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	2.77	Cum	**584.64**	1617.58	161.76		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**161.76**		
		AOC FOR PIPE CULVERT AT (CH.-11.475) KM							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	2.53	Cum	**5021.30**	12703.89	0.29	0.81	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	22.990	Sqm	**340.20**	7821.20	23.836	0.336	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	22.990	Sqm	**63.20**	1452.97	0.03		
4	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	80.000	Sqm	**11.80**	944.35			
5		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.145	Cum	**1075.00**	1231.15			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		Cement (30 km lead)	24.162	MT	**742.00**	17928.18			
		Brick (15 km lead)	1265.00	No.	**3.18**	4022.70			
		TOTAL (In Rs.)				**46104.44**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.15	Cum	**584.64**	669.56	66.96		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**66.96**		
		AOC FOR CROSS DRAINAGE WORK (Ch.-12.100 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	0.90	Cum	**5021.30**	4519.17	0.10	0.29	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	17.400	Sqm	**340.20**	5919.48	18.040	0.254	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	17.400	Sqm	**63.20**	1099.68	0.03		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.542	Cum	**1075.00**	582.69			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	18.170	MT	**742.00**	13482.21			
		Brick (15 km lead)	450.00	No.	**3.18**	1431.00			
		TOTAL (In Rs.)				**27034.24**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.54	Cum	**584.64**	316.90	31.69		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**31.69**		
		AOC FOR CULVERT (Ch.-12.220 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	3.00	Cum	**5021.30**	15063.90	0.35	0.96	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	29.000	Sqm	**340.20**	9865.80	30.067	0.423	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	29.000	Sqm	**63.20**	1832.80	0.04		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.383	Cum	**1075.00**	1487.16			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	30.456	MT	**742.00**	22598.57			
		Brick (15 km lead)	1500.00	No.	**3.18**	4770.00			
		TOTAL (In Rs.)				**55618.23**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.38	Cum	**584.64**	808.79	80.88		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**80.88**		
		AOC FOR CROSS DRAINAGE WORK (Ch.-12.470 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR FALL (Ch.-12.650 Km)							
1	5.3.4	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	28.79	Cum	**6381.70**	183735.52	9.33	12.96	25.91
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	21.022	Sqm	**578.60**	12163.33			

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	12.956	Cum	**1075.00**	13927.65			
		Coarse Aggregates (100 Km lead)	25.912	Cum	**1398.00**	36224.84			
		Cement (30 km lead)	9.328	MT	**742.00**	6921.59			
		Brick (15 km lead)	0.00	No.	**3.18**	0.00			
		TOTAL (In Rs.)				**252972.92**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	12.96	Cum	**584.64**	7574.57	757.46		
		Coarse Aggregate	25.91	Cum	**944.26**	24467.57	2446.76		
		Total					**3204.21**		
		AOC FOR FALL (CH.-12.900 KM)							
1		**NEW FALL IS TO BE PROPOSED AT THIS LOCATION, EXISTING DESTROYED.**							
		AOC FOR PIPE CULVERT (Ch.-13.025 Km)							
1		**Structure is in good condition and does not requir any repair works.**							
		AOC FOR FALL (Ch.-13.200 Km)							
1	5.3.4	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	20.40	Cum	**6381.70**	130186.68	6.61	9.18	18.36
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	19.000	Sqm	**578.60**	10993.40			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	9.180	Cum	**1075.00**	9868.50			
		Coarse Aggregates (100 Km lead)	18.360	Cum	**1398.00**	25667.28			
		Cement (30 km lead)	6.610	MT	**742.00**	4904.32			
		Brick (15 km lead)	0.00	No.	**3.18**	0.00			
		TOTAL (In Rs.)				**181620.18**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	9.18	Cum	**584.64**	5367.00	536.70		
		Coarse Aggregate	18.36	Cum	**944.26**	17336.61	1733.66		
		Total					**2270.36**		
		AOC FOR PIPE CULVERT (Ch.-13.540 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	150.000	Sqm	**11.80**	1770.66			
		TOTAL (In Rs.)				**1770.66**			
		AOC FOR HR OF DHAMINI SUB DY (CH.-13.800 KM)							
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	17.500	Cum	**2492.58**	43620.15			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		TOTAL (In Rs.)				**43620.15**			
		ABSTRACT OF COST OF REPAIRED STRUCTURES OF PARANPUR MR							
		AOC FOR PIPE CULVERT (Ch.-0.200 Km)							
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	2.592	Cum	**2492.58**	6460.77			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		TOTAL (In Rs.)				**6460.77**			
		AOC FOR PIPE CULVERT (Ch.-0.400 Km)							

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	2.592	Cum	**2492.58**	6460.77			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
TOTAL (In Rs.)						**6460.77**			
AOC FOR PIPE CULVERT (Ch.-0.550 Km)									
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	2.592	Cum	**2492.58**	6460.77			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
TOTAL (In Rs.)						**6460.77**			
AOC FOR PIPE CULVERT (Ch.-0.950 Km)									
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	2.592	Cum	**2492.58**	6460.77			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
TOTAL (In Rs.)						**6460.77**			
AOC FOR PIPE CULVERT (Ch.-1.050 Km)									
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	2.592	Cum	**2492.58**	6460.77			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
TOTAL (In Rs.)						**6460.77**			
AOC FOR PIPE CULVERT (Ch.-1.150 Km)									
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	2.592	Cum	**2492.58**	6460.77			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
TOTAL (In Rs.)						**6460.77**			
AOC FOR CROSS DRAINAGE WORK (Ch.-1.660 Km)									
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	15.120	Cum	**2492.58**	37687.81			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
TOTAL (In Rs.)						**37687.81**			
AOC FOR PIPE CULVERT (Ch.-1.990 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	120.000	Sqm	**11.80**	1416.53			
TOTAL (In Rs.)						**1416.53**			
AOC FOR FALL + CULVERT (Ch.-2.215 Km)									

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	12.555	Cum	**2492.58**	31294.34			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
TOTAL (In Rs.)						**31294.34**			
AOC FOR PIPE CULVERT (Ch.-2.435 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR PIPE CULVERT (Ch.-2.520 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR PIPE CULVERT (Ch.-2.800 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	100.000	Sqm	**11.80**	1180.44			
TOTAL (In Rs.)						**1180.44**			

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST OF REPAIRED STRUCTURES OF SALAIYA MINOR									
AOC FOR FALL (Ch.-0.030 Km)									
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	8.370	Cum	**2492.58**	20862.89			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
TOTAL (In Rs.)						**20862.89**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
AOC FOR FALL (Ch.-0.145 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR CROSS DRAINAGE WORK (Ch.-0.505 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR FALL(Ch.-0.610 Km)									
1	5.3.4	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	12.60	Cum	**6381.70**	80409.42	4.08	5.67	11.34
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	13.400	Sqm	**578.60**	7753.24			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	5.670	Cum	**1075.00**	6095.25			
		Coarse Aggregates (100 Km lead)	11.340	Cum	**1398.00**	15853.32			
		Cement (30 km lead)	4.082	MT	**742.00**	3029.14			
		Brick (15 km lead)	0.00	No.	**3.18**	0.00			
TOTAL (In Rs.)						**113140.37**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	5.67	Cum	**584.64**	3314.91	331.49		
		Coarse Aggregate	11.34	Cum	**944.26**	10707.91	1070.79		
		Total					**1402.28**		
AOC FOR CULVERT+FALL (Ch.-0.810 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR FALL (Ch.-1.060 Km)									
1	5.3.4	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	14.94	Cum	**6381.70**	95342.60	4.84	6.72	13.45
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	14.400	Sqm	**578.60**	8331.84			
5		**Carriage of materials**							
		Coarse Sand (60 Km lead)	6.723	Cum	**1075.00**	7227.23			
		Coarse Aggregates (100 Km lead)	13.446	Cum	**1398.00**	18797.51			
		Cement (30 km lead)	4.841	MT	**742.00**	3591.70			
TOTAL (In Rs.)						**133290.87**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	6.72	Cum	**584.64**	3930.53	393.05		
		Coarse Aggregate	13.45	Cum	**944.26**	12696.52	1269.65		
		Total					**1662.71**		
AOC FOR CROSS DRAINAGE WORK (Ch.-1.150 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR CULVERT+FALL (Ch.-1.260 Km)									

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	100.000	Sqm	**11.80**	1180.44			
2	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	2.58	Cum	**5021.30**	12954.95	0.30	0.83	
3	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	24.140	Sqm	**340.20**	8212.43	25.028	0.352	
4	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	24.140	Sqm	**63.20**	1525.65	0.04		
5	5.3.4	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	1.35	Cum	**6381.70**	8615.30	0.44	0.61	1.22
6	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	2.700	Sqm	**578.60**	1562.22			
7		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.786	Cum	**1075.00**	1919.46			
		Coarse Aggregates (100 Km lead)	1.215	Cum	**1398.00**	1698.57			
		Cement (30 km lead)	25.799	MT	**742.00**	19142.99			
		Brick (15 km lead)	1290.00	No.	**3.18**	4102.20			
		TOTAL (In Rs.)				**59733.76**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.79	Cum	**584.64**	1043.90	104.39		
		Coarse Aggregate	1.22	Cum	**944.26**	1147.28	114.73		
		Total					**219.12**		
		AOC FOR CROSS DRAINAGE WORK (Ch.-1.780 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR CULVERT+FALL (Ch.-1.885 Km)							
1	**Structure is in good condition and does not requir any repair works.**								

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST OF REPAIRED STRUCTURES OF DHAMINI SUB DY.									
AOC FOR CROSS DRAINAGE (Ch.-0.375 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR PIPE CULVERT (Ch.-0.430 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	110.000	Sqm	**11.80**	1298.48			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	3.750	Sqm	**340.20**	1275.75	3.888	0.055	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	3.750	Sqm	**63.20**	237.00	0.01		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.055	Cum	**1075.00**	58.86			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	3.894	MT	**742.00**	2889.07			
		Brick (15 km lead)	0.00	No.	**3.18**	0.00			
TOTAL (In Rs.)						**5759.16**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.05	Cum	**584.64**	32.01	3.20		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**3.20**		
AOC FOR CULVERT (Ch.-1.595 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR CULVERT (Ch.-2.800 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	110.000	Sqm	**11.80**	1298.48			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	6.875	Sqm	**340.20**	2338.88	7.128	0.100	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	6.875	Sqm	**63.20**	434.50	0.01		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.100	Cum	**1075.00**	107.90			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	7.138	MT	**742.00**	5296.63			
		Brick (15 km lead)	0.00	No.	**3.18**	0.00			
TOTAL (In Rs.)						**9476.39**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.10	Cum	**584.64**	58.68	5.87		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**5.87**		
AOC FOR FALL (Ch.-3.040 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	150.000	Sqm	**11.80**	1770.66			
TOTAL (In Rs.)						**1770.66**			
AOC FOR FALL (Ch.-3.300 Km)									
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	19.170	Cum	**2492.58**	47782.76			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
TOTAL (In Rs.)						**47782.76**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		New Fall has been Proposed							
		AOC FOR CULVERT/FALL (Ch.-3.625 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	100.000	Sqm	**11.80**	1180.44			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	13.750	Sqm	**340.20**	4677.75	14.256	0.201	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	13.750	Sqm	**63.20**	869.00	0.02		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.201	Cum	**1075.00**	215.81			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	14.277	MT	**742.00**	10593.26			
		Brick (15 km lead)	0.00	No.	**3.18**	0.00			
		TOTAL (In Rs.)				**17536.25**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.20	Cum	**584.64**	117.37	11.74		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**11.74**		
		AOC FOR FALL (Ch.-3.800 Km)							
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	14.310	Cum	**2492.58**	35668.82			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		TOTAL (In Rs.)				**35668.82**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
		New Fall has been Proposed							
		AOC FOR FALL (Ch.-3.950 Km)							
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	10.530	Cum	**2492.58**	26246.87			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		TOTAL (In Rs.)				**26246.87**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
		AOC FOR FALL (Ch.-4.150 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR FALL (Ch.-4.312 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR FALL (Ch.-4.490 Km)							
1	5.3.4	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	13.68	Cum	**6381.70**	87301.66	4.43	6.16	12.31
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	38.280	Sqm	**578.60**	22148.81			

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	6.156	Cum	**1075.00**	6617.70			
		Coarse Aggregates (100 Km lead)	12.312	Cum	**1398.00**	17212.18			
		Cement (30 km lead)	4.432	MT	**742.00**	3288.78			
		TOTAL (In Rs.)				**136569.12**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	6.16	Cum	**584.64**	3599.04	359.90		
		Coarse Aggregate	12.31	Cum	**944.26**	11625.73	1162.57		
		Total					**1522.48**		
		AOC FOR FALL (Ch.-4.595 Km)							
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	11.070	Cum	**2492.58**	27592.86			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		TOTAL (In Rs.)				**27592.86**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND								
DETAILS OF QUANTITIES OF REPAIRED STRUCTURES OF CHAIN NAWADA DISTRIBUTARY								
S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
QUANTITIES OF REPAIRING WORK FOR BRIDGE/ FALL (Ch.-0.475 Km)								
1	5.4.6	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	3.048	0.45	0.5	*1.37*	*Cum*
		TOTAL					**1.37**	**Cum**
2	5.5.5	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	1	3.05		1.45	*4.42*	*Sqm*
		TOTAL					**4.42**	***Sqm***
3	5.5.10	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	1	3.05		1.45	*4.42*	*Sqm*
		TOTAL					**4.42**	***Sqm***
4	5.3.5	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		Wing wall D/S	2	4.00	0.25	1.2	*2.40*	*Cum*
		TOTAL					***2.40***	***Cum***
5	5.3.19	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		Wing wall D/S	4	4.00		1.2	*19.20*	Sqm
			4		0.25	1.2	*1.20*	Sqm
		TOTAL					**20.40**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-0.720 Km)								
1	5.1.3	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**110.00**	**Sqm**
2	5.4.6	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	1	2	0.25	0.92	*0.46*	*Cum*
		TOTAL					**0.46**	**Cum**

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
3	5.5.5	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	1	2.00		2.09	*4.18*	*Sqm*
		TOTAL					**4.18**	***Sqm***
4	5.5.10	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	1	2.00		2.09	*4.18*	*Sqm*
		TOTAL					**4.18**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-1.320 Km)								
1	5.4.6	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Wing wall	1	2.5	0.25	0.6	*0.38*	*Cum*
		TOTAL					**0.38**	**Cum**
2	5.5.5	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	1	2.50		1.45	*3.63*	*Sqm*
		TOTAL					**3.63**	***Sqm***
3	5.5.10	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	1	2.50		1.45	*3.63*	*Sqm*
		TOTAL					**3.63**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR SYPHON (Ch.-1.760 Km)								
1	5.5.5	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	50.31		1.45	*145.90*	*Sqm*
		Wing Wall	4	20.00		1.25	*100.00*	*Sqm*
		TOTAL					**245.90**	***Sqm***
2	5.5.10	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	50.31		1.45	*145.90*	*Sqm*
		Wing Wall	4	20.00		1.25	*100.00*	*Sqm*
		TOTAL					**245.90**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-2.075 Km)								
1	5.1.3	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**100.00**	**Sqm**
2	5.4.6	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
		Parapet Wall	1	6	0.25	0.92	*1.38*	*Cum*
		TOTAL					**1.38**	**Cum**
3	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	1	6.00		2.09	*12.54*	*Sqm*
		TOTAL					**12.54**	***Sqm***
4	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	1	6.00		2.09	*12.54*	*Sqm*
		TOTAL					**12.54**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CROSS DRAINAGE (Ch.-2.215 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR SYPHON (Ch.-2.600 Km)								
1	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	44.00		1.45	*127.60*	*Sqm*
		Wing Wall	4	16.00		1.25	*80.00*	*Sqm*
		TOTAL					**207.60**	***Sqm***
2	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	44.00		1.45	*127.60*	*Sqm*
		Wing Wall	4	16.00		1.25	*80.00*	*Sqm*
		TOTAL					**207.60**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CULVERT (Ch.-3.010 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	2.5	0.45	0.5	*1.13*	*Cum*
		TOTAL					**1.13**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	1	2.50		1.45	*3.63*	*Sqm*
		TOTAL					**3.63**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	1	2.50		1.45	*3.63*	*Sqm*
		TOTAL					**3.63**	***Sqm***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
QUANTITIES OF REPAIRING WORK FOR CROSS DRAINAGE WORK (Ch.-3.060 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-3.675 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**120.00**	**Sqm**
2	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	1	6	0.25	0.92	*1.38*	*Cum*
		TOTAL					**1.38**	**Cum**
3	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	1	6.00		2.09	*12.54*	*Sqm*
		TOTAL					**12.54**	***Sqm***
4	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	1	6.00		2.09	*12.54*	*Sqm*
		TOTAL					**12.54**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CROSS DRAINAGE WORK (Ch.-4.025 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**120.00**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR CROSS DRAINAGE WORK (Ch.-4.580 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR CROSS DRAINAGE WORK (Ch.-4.900 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-5.420 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**100.00**	**Sqm**
2	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	1	3	0.25	0.92	*0.69*	*Cum*
		TOTAL					**0.69**	**Cum**
3	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	1	3.00		2.09	*6.27*	*Sqm*

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
		TOTAL					**6.27**	***Sqm***
4	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	1	3.00		2.09	*6.27*	*Sqm*
		TOTAL					**6.27**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CROSS DRAINAGE WORK (Ch.-5.625 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-6.005 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**120.00**	**Sqm**
2	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	10	0.25	0.92	*4.60*	*Cum*
		TOTAL					**4.60**	**Cum**
3	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	10.00		2.09	*41.80*	*Sqm*
		TOTAL					**41.80**	***Sqm***
4	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	10.00		2.09	*41.80*	*Sqm*
		TOTAL					**41.80**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CROSS DRAINAGE WORK (Ch.-6.190 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Wing wall	2	5.00	0.25	0.6	*1.50*	*Cum*
		TOTAL					**1.50**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	2	5.00		1.45	*14.50*	*Sqm*
		TOTAL					**14.50**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	2	5.00		1.45	*14.50*	*Sqm*
		TOTAL					**14.50**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CROSS DRAINAGE WORK (Ch.-6.630 Km)								
1		**Structure requires no repair work.**						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-6.795 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**80.00**	**Sqm**
2	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	11.5	0.25	0.92	*5.29*	*Cum*
		TOTAL					**5.29**	**Cum**
3	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	11.50		2.09	*48.07*	*Sqm*
		TOTAL					**48.07**	***Sqm***
4	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	11.50		2.09	*48.07*	*Sqm*
		TOTAL					**48.07**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CROSS DRAINAGE WORK (Ch.-7.120 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Wing wall	1	16.00	0.25	0.6	*2.40*	*Cum*
		TOTAL					**2.40**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	1	16.00		1.45	*23.20*	*Sqm*
		TOTAL					**23.20**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	1	16.00		1.45	*23.20*	*Sqm*
		TOTAL					**23.20**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CROSS DRAINAGE WORK (Ch.-7.825 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-7.985 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR CULVERT (Ch.-8.180 Km)								
1		**Structure requires no repair work.**						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
QUANTITIES OF REPAIRING WORK FOR CULVERT (Ch.-8.790 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	1	10	0.25	0.92	*2.30*	*Cum*
		TOTAL					**2.30**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	1	10.00		2.09	*20.90*	*Sqm*
		TOTAL					**20.90**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	1	10.00		2.09	*20.90*	*Sqm*
		TOTAL					**20.90**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-9.320 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		U/S Wing wall	*2*	*10.00*	*0.45*	*1.20*	*10.80*	*Cum*
		U/S Abutment	*1*	*5.00*	*0.45*	*0.90*	*2.03*	*Cum*
		D/S Abutment	*1*	*13.00*	*0.45*	*0.90*	*5.27*	*Cum*
		TOTAL					***18.09***	***Cum***
QUANTITIES OF REPAIRING WORK FOR HR PARANPUR MR. (9.325 KM)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**150.00**	**Sqm**
2	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		HR GATE TOP	2	2.50	1.00	1.5	*7.50*	*Cum*
		Wing wall	2	4.00	1.00	1.2	*9.60*	*Cum*
		TOTAL					**17.10**	***Cum***
QUANTITIES OF REPAIRING WORK FOR CULVERT (Ch.-9.470 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	1	10.50	0.25	0.92	*2.42*	*Cum*
		TOTAL					**2.42**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
		Parapet Wall	1	10.50		2.09	*21.95*	*Sqm*
		TOTAL					**21.95**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	1	10.50		2.09	*21.95*	*Sqm*
		TOTAL					**21.95**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR SYPHON (Ch.-9.770 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Wing wall	2	10.00	0.25	0.6	*3.00*	*Cum*
		TOTAL					**3.00**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	2	10.00		1.45	*29.00*	*Sqm*
		TOTAL					**29.00**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	2	10.00		1.45	*29.00*	*Sqm*
		TOTAL					**29.00**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CROSS DRAINAGE WORK (Ch.-10.270 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR HR SALAIYA MR. (11.070 KM)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**100.00**	**Sqm**
2	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Side wall	2	1.50	0.50	1.50	*2.25*	*Cum*
		HR Gate Top	1	3.00	1.25	1.50	*5.63*	*Cum*
		TOTAL					**7.88**	***Cum***
QUANTITIES OF REPAIRING WORK FOR CROSS DRAINAGE WORK (Ch.-11.140 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Wing wall	2	20.00	0.25	0.6	*6.00*	*Cum*
		TOTAL					**6.00**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	2	20.00		1.45	*58.00*	*Sqm*
		TOTAL					**58.00**	***Sqm***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	2	20.00		1.45	*58.00*	*Sqm*
		TOTAL					**58.00**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT AT (CH.-11.475) KM								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**80.00**	**Sqm**
2	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	1	11	0.25	0.92	*2.53*	*Cum*
		TOTAL					**2.53**	**Cum**
3	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	1	11.00		2.09	*22.99*	*Sqm*
		TOTAL					**22.99**	***Sqm***
4	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	1	11.00		2.09	*22.99*	*Sqm*
		TOTAL					**22.99**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CROSS DRAINAGE WORK (Ch.-12.100 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Wing wall	1	6.00	0.25	0.6	*0.90*	*Cum*
		TOTAL					**0.90**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	2	6.00		1.45	*17.40*	*Sqm*
		TOTAL					**17.40**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	2	6.00		1.45	*17.40*	*Sqm*
		TOTAL					**17.40**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CULVERT (Ch.-12.220 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	10	0.25	0.6	*3.00*	*Cum*
		TOTAL					**3.00**	**Cum**

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	10.00		1.45	*29.00*	*Sqm*
		TOTAL					**29.00**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	10.00		1.45	*29.00*	*Sqm*
		TOTAL					**29.00**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CROSS DRAINAGE WORK (Ch.-12.470 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-12.650 Km)								
1	**5.3.5**	**Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.**						
		D/S Floor	1	7.00	4.50	0.914	*28.79*	*Cum*
		TOTAL					***28.79***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	7.00		0.914	*12.80*	Sqm
			2		4.50	0.914	*8.23*	Sqm
		TOTAL					**21.02**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR FALL (CH.-12.900 KM)								
1		**NEW FALL IS TO BE PROPOSED AT THIS LOCATION, EXISTING COMPLETLEY DESTROYED.**						
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-13.025 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-13.200 Km)								
1	**5.3.4**	**Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.**						
		CREST	*1*	*4.00*	*0.60*	*0.50*	*1.20*	*Cum*
		FLOOR	*1*	*8.00*	*4.00*	*0.60*	*19.20*	*Cum*
		TOTAL					***20.40***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		CREST	2	4.00		0.5	*4.00*	Sqm
			2		0.60	0.5	*0.60*	Sqm

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
		FLOOR	2	8.00		0.60	*9.60*	Sqm
			2		4.00	0.60	*4.80*	Sqm
		TOTAL					**19.00**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-13.540 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**150.00**	**Sqm**
		TOTAL					***150.00***	**Sqm**
QUANTITIES OF REPAIRING WORK FOR HR OF DHAMINI SUB DY (CH.-13.800 KM)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Side wall	2	3.00	0.50	2.00	*6.00*	*Cum*
		HR Gate Top	1	4.60	1.25	2.00	*11.50*	*Cum*
		TOTAL					**17.50**	***Cum***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
DETAILS OF QUANTITIES OF REPAIRED STRUCTURES OF PARANPUR MR								
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-0.200 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		RCC HUME PIPE	1.00	7.20	0.60	0.60	**2.59**	**Cum**
		NEW CULVERT + FALL IS PROPOSED AT THIS LOCATION.						
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-0.400 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		RCC HUME PIPE	1.00	7.20	0.60	0.60	**2.59**	**Cum**
		NEW CULVERT + FALL IS PROPOSED AT THIS LOCATION.						
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-0.550 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		RCC HUME PIPE	1.00	7.20	0.60	0.60	**2.59**	**Cum**
		NEW CULVERT + FALL IS PROPOSED AT THIS LOCATION.						
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-0.950 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		RCC HUME PIPE	1.00	7.20	0.60	0.60	**2.59**	**Cum**
		NEW CULVERT + FALL IS PROPOSED AT THIS LOCATION.						
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-1.050 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		RCC HUME PIPE	1.00	7.20	0.60	0.60	**2.59**	**Cum**
		NEW CULVERT + FALL IS PROPOSED AT THIS LOCATION.						
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-1.150 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		RCC HUME PIPE	1.00	7.20	0.60	0.60	**2.59**	**Cum**
		NEW CULVERT + FALL IS PROPOSED AT THIS LOCATION.						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
QUANTITIES OF REPAIRING WORK FOR CROSS DRAINAGE WORK (Ch.-1.660 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		U/S Wing wall	*2*	*8.00*	*0.45*	*1.20*	*8.64*	*Cum*
		D/S Wing wall	*2*	*6.00*	*0.45*	*1.20*	*6.48*	*Cum*
		TOTAL					***15.12***	***Cum***
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-1.990 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**120.00**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR FALL + CULVERT (Ch.-2.215 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		WELL	*1*	*6.00*	*1.20*	*1.20*	*8.64*	*Cum*
		PARAPET	*2*	*5.00*	*0.45*	*0.60*	*2.70*	*Cum*
		D/S Abutment	*1*	*3.00*	*0.45*	*0.90*	*1.22*	*Cum*
		TOTAL					***12.56***	***Cum***
NEW CULVERT + FALL IS PROPOSED AT THIS LOCATION.								
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-2.435 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-2.520 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-2.800 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**100.00**	**Sqm**

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
DETAILS OF QUANTITIES OF REPAIRED STRUCTURES OF SALAIYA MINOR								
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-0.030 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		U/S Wing wall	*2*	*3.00*	*0.45*	*1.20*	*3.24*	*Cum*
		D/S Wing wall	*2*	*2.00*	*0.45*	*1.20*	*2.16*	*Cum*
		U/S Abutment	*1*	*2.50*	*0.45*	*1.20*	*1.35*	*Cum*
		D/S Abutment	*1*	*3.00*	*0.45*	*1.20*	*1.62*	*Cum*
		TOTAL					***8.37***	***Cum***
		New Fall has been Proposed						
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-0.145 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR CROSS DRAINAGE WORK (Ch.-0.505 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR FALL(Ch.-0.610 Km)								
1	**5.3.4**	**Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.**						
		CREST	*1*	*2.00*	*0.60*	*0.50*	*0.60*	*Cum*
		FLOOR	*1*	*5.00*	*4.00*	*0.60*	*12.00*	*Cum*
		TOTAL					***12.60***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		CREST	2	2.00		0.5	*2.00*	Sqm
			2		0.60	0.5	*0.60*	Sqm
		FLOOR	2	5.00		0.60	*6.00*	Sqm
			2		4.00	0.60	*4.80*	Sqm
		TOTAL					**13.40**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR CULVERT+FALL (Ch.-0.810 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-1.060 Km)								
1	**5.3.4**	**Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.**						
		CREST	*1*	*1.80*	*0.60*	*0.50*	*0.54*	*Cum*
		FLOOR	*1*	*6.00*	*4.00*	*0.60*	*14.40*	*Cum*
		TOTAL					***14.94***	***Cum***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		CREST	2	1.80		0.5	*1.80*	Sqm
			2		0.60	0.5	*0.60*	Sqm
		FLOOR	2	6.00		0.60	*7.20*	Sqm
			2		4.00	0.60	*4.80*	Sqm
		TOTAL					**14.40**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR CROSS DRAINAGE WORK (Ch.-1.150 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR CULVERT+FALL (Ch.-1.260 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**100.00**	**Sqm**
2	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	3	0.25	0.92	*1.38*	*Cum*
		Wing wall	2	4	0.25	0.6	*1.20*	*Cum*
		TOTAL					**2.58**	**Cum**
3	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	3.00		2.09	*12.54*	*Sqm*
		Wing wall	2	4.00		1.45	*11.60*	*Sqm*
		TOTAL					**24.14**	***Sqm***
4	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	3.00		2.09	*12.54*	*Sqm*
		Wing wall	2	4.00		1.45	*11.60*	*Sqm*
		TOTAL					**24.14**	***Sqm***
5	**5.3.5**	**Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.**						
		D/S Floor	1	3.00	1.50	0.3	*1.35*	*Cum*
		TOTAL					***1.35***	***Cum***
6	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	3.00		0.3	*1.80*	Sqm
			2		1.50	0.3	*0.90*	Sqm
		TOTAL					**2.70**	**Sqm**

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
QUANTITIES OF REPAIRING WORK FOR CROSS DRAINAGE WORK (Ch.-1.780 Km)								
1		Structure requires no repair work.						
QUANTITIES OF REPAIRING WORK FOR CULVERT+FALL (Ch.-1.885 Km)								
1		Structure requires no repair work.						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
DETAILS OF QUANTITIES OF REPAIRED STRUCTURES OF DHAMANI SUB-DISTRIBUTARY								
QUANTITIES OF REPAIRING WORK FOR CROSS DRAINAGE (Ch.-0.375 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-0.430 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**110.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	1	3.00		1.25	*3.75*	*Sqm*
		TOTAL					**3.75**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	1	3.00		1.25	*3.75*	*Sqm*
		TOTAL					**3.75**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CULVERT (Ch.-1.595 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR CULVERT (Ch.-2.800 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**110.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	1	5.50		1.25	*6.88*	*Sqm*
		TOTAL					**6.88**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	1	5.50		1.25	*6.88*	*Sqm*
		TOTAL					**6.88**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-3.040 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**150.00**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-3.300 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		U/S Wing wall	*2*	*5.50*	*0.45*	*1.20*	*5.94*	*Cum*
		D/S Wing wall	*2*	*2.00*	*0.45*	*1.20*	*2.16*	*Cum*
		U/S Abutment	*1*	*2.50*	*0.45*	*1.20*	*1.35*	*Cum*
		D/S Abutment	*2*	*9.00*	*0.45*	*1.20*	*9.72*	*Cum*

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
		TOTAL					***19.17***	***Cum***
		New Fall has been Proposed						
QUANTITIES OF REPAIRING WORK FOR CULVERT/FALL (Ch.-3.625 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**100.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	5.50		1.25	*13.75*	*Sqm*
		TOTAL					**13.75**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	5.50		1.25	*13.75*	*Sqm*
		TOTAL					**13.75**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-3.800 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		U/S Wing wall	*2*	*4.00*	*0.45*	*1.20*	*4.32*	*Cum*
		D/S Wing wall	*2*	*2.00*	*0.45*	*1.20*	*2.16*	*Cum*
		CREST	*1*	*2.50*	*0.45*	*1.20*	*1.35*	*Cum*
		D/S Abutment	*2*	*6.00*	*0.45*	*1.20*	*6.48*	*Cum*
		TOTAL					***14.31***	***Cum***
		New Fall has been Proposed						
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-3.950 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		U/S Wing wall	*2*	*5.50*	*0.45*	*1.20*	*5.94*	*Cum*
		CREST	*1*	*2.50*	*0.45*	*1.20*	*1.35*	*Cum*
		D/S Abutment	*2*	*3.00*	*0.45*	*1.20*	*3.24*	*Cum*
		TOTAL					***10.53***	***Cum***
		New Fall has been Proposed						
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-4.150 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-4.312 Km)								
1		**Structure requires no repair work.**						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-4.490 Km)								
1	**5.3.4**	**Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.**						
		D/S ABUTMENT	*1*	*12.00*	*0.45*	*1.20*	*6.48*	*Cum*
		FLOOR	*1*	*4.00*	*3.00*	*0.60*	*7.20*	*Cum*
		TOTAL					***13.68***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S ABUTMENT	2	12.00		1.2	*28.80*	Sqm
			2		0.45	1.2	*1.08*	Sqm
		FLOOR	2	4.00		0.60	*4.80*	Sqm
			2		3.00	0.60	*3.60*	Sqm
		TOTAL					**38.28**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-4.595 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		U/S Wing wall	*2*	*5.00*	*0.45*	*1.20*	*5.40*	*Cum*
		CREST	*1*	*2.50*	*0.45*	*1.20*	*1.35*	*Cum*
		D/S Abutment	*2*	*4.00*	*0.45*	*1.20*	*4.32*	*Cum*
		TOTAL					***11.07***	***Cum***
		New Fall has been Proposed						

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND ANALYSIS OF RATE OF OUTLET GATE			
1	Cost of material **(A)** (Structural Steel WRD M-181)	Rs.	55116.67
2	Wastage **5%** =	Rs.	2755.83
3	Cost of miscellaneous material like electrodes,oxygen, acetylene nut bolt, rope as per site conditions, etc **65 % of (A)**	Rs.	35825.84
	Total 1+2+3= ***(B)*** =	Rs.	93698.34
4	Labour charge 30%(B) =	Rs.	28109.50
5	Overhead charge + Contractor profit **@15% A**	Rs.	8267.50
6	Workshop and energy charge ,**12 % of (B)**	Rs.	11243.80
7	Transportation and erection charge ,**15 % of B**	Rs.	14054.75
	Total = B+4+5+6+7 = ***C***	Rs.	155373.89
8	Other incidental charge , **3 % = of C**	Rs.	4661.22
	Total C+8 = D	Rs.	**160035.11**

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND ABSTRACT OF COST FOR CONSTRUCTION OF OUTLET										
Sl. No.	Reference	Name of Item	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount in Rs.	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)	Boulders (cum)
1	**WRD 5.3.9**	Providing & laying **P.C.C. or R.C.C. M-150** with nominal mix of (1:2:4) in superstructure of various components of canal or embankment structures with approved quality of graded coarse aggregate of required grade and approved quality sand of requisite F.M. washed and screened including necessary tools and plants, vibrating, curing,royalty etc. excluding cost of form work as well reinforcement its cutting, bending. binding, and placing complete job as per specification & direction of E/I.	7.61	Cum	**6381.70**	48564.42	2.47	3.42	6.85	
2	**WRD 5.4.10**	Providing rough dressed random rubble Stone Masonary in cement Mortar (1:4) in foundation with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints, curing, scaffholding and its removal whereever required including royalty etc. all complete job as per specification and direction of E/I.	8.60	Cum	**3391.40**	29172.74	1.24	3.44		8.60
3	**M-1701**	Providing 150mm NP2 RCC Hume Pipe with collar as per I.S.S. 458-1971 including fixing and fitting NP2 hume pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .	7.50	RM	**220.00**	1650.00				

Sl. No.	Reference	Name of Item	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount in Rs.	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)	Boulders (cum)
4	**WRD 5.6.1**	Labour Charges for Laying of 150mm NP2 RCC Hume Pipe with collar as per I.S.S. 458-1971 including fixing and fitting NP2 hume pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .	7.50	RM	**238.00**	1785.03				
5	**WRD 5.3.22**	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.								
a.		TMT Grade Fe-500 - 16 mm	0.03	M.T.	**73574.90**	2254.92				
6	**M-181**	Structural Steel (Average rate of Angle, Joint and Channel) etc.	0.08	MT	**160035.11**	12687.05				
7	**WRD 5.1.37**	Providing coarse clean sand in filling in foudation of trenches including ramming, watering, royalty all complete job as per specification and direction .	0.89	Cum	**339.90**	302.80				
8		**Carriage of materials**								
		Coarse Sand (60 Km lead)	7.76	Cum	**1075.00**	**8337.83**				
		Coarse Aggregates (100 Km lead)	6.85	Cum	**1398.00**	**9574.84**				
		Cement (30 km lead)	3.70	MT	**742.00**	**2748.60**				
		Boulders (60 km lead)	8.60	Cum	**1159.00**	**9969.69**				
		Steel (30 Km lead)	0.11	M.T.	**742.00**	**81.56**				
		Hume Pipe (30 Km)	7.50	RM	**82.00**	**615.00**				
TOTAL (In Rs.)						**127744.47**				
		Seigniorage @10%			Rate	Amount in Rs.	10%			

Sl. No.	Reference	Name of Item	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount in Rs.	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)	Boulders (cum)
		Coarse Sand	7.76	Cum	**584.64**	4534.54	453.45			
		Coarse Aggregate	6.85	Cum	**944.26**	6467.19	646.72			
		Total					1100.17			
		For 48 nos. outlet, Total Seigniorage charges					**52808.31**			

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND							
BILL OF QUANTITIES FOR CONSTRUCTION OF OUTLET							
Sl. No.	**Name of Item**	**No.**	**Length (m)**	**Width (m)**	**Height (m)**	**Qty.**	**Unit**
1	Providing & laying **P.C.C. or R.C.C. M-150** with nominal mix of (1:2:4) in superstructure of various components of canal or embankment structures with approved quality of graded coarse aggregate of required grade and approved quality sand of requisite F.M. washed and screened including necessary tools and plants, vibrating, curing,royalty etc. excluding cost of form work as well reinforcement its cutting, bending. binding, and placing complete job as per specification &						
	Toe Wall Base in Canal Portion	*1*	*1.5*	*0.75*	*0.15*	*0.17*	*Cum*
	Coping on Stem of Toe Wall	*1*	*1.50*	*0.45*	*0.075*	*0.05*	*Cum*
	Gate Structure (Section A-B)	*1*	*1.80*	*0.75*	*0.15*	*0.20*	*Cum*
	Coping (Section A-B)	*1*	*1.5*	*0.45*	*0.075*	*0.05*	*Cum*
	Water Course (Section C-D)	*1*	*15.00*	*1.50*	*0.15*	*3.38*	*Cum*
	Water Course Floor (Section C-D)	*1*	*15.00*	*0.40*	*0.075*	*0.45*	*Cum*
	Coping above Walls(Section C-D)	*2*	*15*	*0.40*	*0.075*	*0.90*	*Cum*
	Below transition walls	*1*	*1.5*	*1.2*	*0.15*	*0.27*	*Cum*
		1	*1.5*	*0.75*	*0.15*	*0.17*	*Cum*
	Gate Structure (Section A-B)	*2*	*1.50*	*0.45*	*1.21*	*1.63*	*Cum*
	Toe Wall stem	*1*	*1.50*	*0.45*	*0.51*	*0.35*	*Cum*
	TOTAL					***7.61***	*Cum*
2	Providing rough dressed random rubble Stone Masonary in cement Mortar (1:4) in foundation with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints, curing, scaffholding and its removal whereever required including royalty etc. all complete job as per specification and direction of E/I.						
	Transition Walls in U/S	*2*	*1.50*	*0.45*	*1.04*	*1.40*	*Cum*
	Water Course (Section C-D)	*2*	*15.00*	*0.40*	*0.60*	*7.20*	*Cum*
	2					**8.60**	Cum
3	Providing 150mm NP2 RCC Hume Pipe with collar as per I.S.S. 458-1971 including fixing and fitting NP2 hume pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .						
	150 mm Dia R.C.C. Pipe	1			7.5	**7.5**	**RM**
4	Structural Steel (Average rate of Angle, Joint and Channel) etc.						
	Spindle 25 mm dia	*1*	*0.000491*	*7850.00*	*1.29*	*4.97*	*Kg*
		1	*0.000491*	*7850.00*	*0.24*	*0.92*	*Kg*
	300 X300 MM MS GATE	*1*		*60.00*		*60.00*	*Kg*
	I.M.C. Grove (100 x 50) 9.56 kg/m	*2*		*9.56*	*0.70*	*13.38*	*Kg*
	TOTAL (In Kg)					**79.28**	**Kg**
	TOTAL					**0.08**	**MT**
5	Providing coarse clean sand in filling in foudation of trenches including ramming, watering, royalty all complete job as per specification and direction .						
	Toe Wall Base in Canal Portion	*1*	*1.50*	*0.75*	*0.10*	*0.11*	*Cum*
	Water Course Floor (Section C-D)	*1*	*15.00*	*0.40*	*0.10*	*0.60*	*Cum*
	Below transition walls	*1*	*1.50*	*1.19*	*0.10*	*0.18*	*Cum*
	TOTAL					**0.89**	**Cum**
6	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	RCC M-15 (Providing Reinforcement @ 0.24%)	*1.63*	*0.0024*	*0.004*	*7850.00*	*30.648*	*Kg*
	TOTAL					**30.65**	**Kg**

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND							
ANALYSIS OF RATES							
Sl. No.	**Refrences SOR No.**	**Description**	**Quantity**	**Unit**	**Rate**	**Amount**	**Ref**
1	**5.1.3**	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.					
		Unit :- **Per Sqm**					
		Taking Output :- 92.94 Sqm					
		Unskilled mazdoor for cutting shrubs, weed	1.50	nos	424.00	₹ 636.00	WRD SOR 2023 & PL JUNE 2024
		Unskilled mazdoor for removing grass roots and leveling	0.75	nos	424.00	₹ 318.00	
						₹ 954.00	
		Add Overhead charge &c.P @ 15 %				₹ 143.10	
					Total	₹ 1,097.10	
		Rate per Sqm			**Say, Rs**	**₹ 11.80**	**Per M^2**
2	**5.1.8**	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 28.32 cum					
		Unskilled mazdoor for cutting ,carrying	9.09	nos	424.00	₹ 3,854.16	Sl-1
					Total	₹ 3,854.16	
		Add Overhead charge &c.P @ 15 %				₹ 578.12	
						₹ 4,432.28	
		Rate per Cum			**Say, Rs**	**₹ 156.50**	**Per M^3**
	NOTE:-	Add royalty of earth Rs. 33.00 where needed without overhead charges & C.P.					

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
3	**5.1.31**	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I					
		Unit :- **Per cum**					
		Taking Output :- 28.32 cum					
		Unskilled mazdoor for cutting	4.50	nos	424.00	₹ 1,908.00	SI-1
		Unskilled mazdoor for carrying	4.00	nos	424.00	₹ 1,696.00	
		Head Mason	0.13	nos	569.00	₹ 71.13	
					Total	₹ 3,675.13	
		Add Overhead charge & C.P @ 15 %				₹ 551.27	
						₹ 4,226.39	
		Rate per Cum			**Say, Rs**	**₹ 149.30**	**Per M^3**
4	**5.1.21**	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge					
		Unit :- **Per cum**					
		Taking Output :- 28.32 cum					
		Unskilled mazdoor for cutting	4.00	nos	424.00	₹ 1,696.00	SI-1
		Unskilled mazdoor for carrying	4.00	nos	424.00	₹ 1,696.00	SI-1
		Unskilled mazdoor for controlling Slope and fine dressing	2.00	nos	424.00	₹ 848.00	SI-2
		Skilled Mazdoor	0.25	nos	536.00	₹ 134.00	SII-70
		Mate	1.00	nos	455.00	₹ 455.00	SII-2
					Total	₹ 4,829.00	
		Add Overhead charge &c.P @ 15 %				₹ 724.35	
						₹ 5,553.35	
		Rate per Cum			**Say, Rs**	**₹ 196.10**	**Per M^3**
5	**5.1.22**	Extra for wet earth all complete as per specifications and direction of E/I.					

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
		Unit: per Cum					
		Taking Output :- 28.32 cum					
		Unskilled mazdoor for cutting	1.00	nos	424.00	₹ 424.00	Sl-1
		Add Overhead charge &C.P @ 15 %				₹ 63.60	
						₹ 487.60	
		Rate per Cum			**Say, Rs**	**₹ 17.22**	**Per M^3**
6	**5.1.25**	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.					
		As per Labour rate (19.06.2024)					
		Unit: per Cum					
		Taking Output :- 28.32 cum					
		Labour					
		Unskilled mazdoor for cutting, carrying	9.09	nos	424.00	₹ 3,854.16	Sl-1
		Add extra wages of 1/2 no. unskilled labour per 28.32 m3	0.50	nos	424.00	₹ 212.00	Sl-1
						₹ 4,066.16	
		Add Overhead charge &C.P @ 15 %				₹ 609.92	
						₹ 4,676.08	
					Say, Rs	**₹ 165.12**	**Per M^3**
7	**5.1.39**	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.					
		As per Labour rate (19.06.2024)					
		Unit: per Cum					
		Taking Output :- 28.32 cum					

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
		Cost of water	LS			15.00	
		Bhisti for carriage of water and sprinkling	3.00	nos	417.00	₹ 1,251.00	S II-13
		Hire charges of sheep foot roller assuming 1450 cum to be rolled in 8 hr vide item no. 3.16	0.16	hr	1612.00	₹ 257.92	PM8001
						₹ 1,523.92	
		Add Overhead charge &C.P @ 15 %				₹ 228.59	
						₹ 1,752.51	
					Say, Rs	**₹ 61.88**	**Per M^3**
8	**5.1.46**	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)					
	5.1.46.1	Beyond 150m but upto 1/2 km					
	2	Cost of cutting & loading by Excavator one M3 capacity = Use rate of Excavator/Capacity of Excavator (60 m^3) PM 3005/60				38.13	
	3	Average Speed on Kucha truck Km/hr =(V)				10	
	4	Average haulage path (distance) in one cycle (D) in km				0.65	
	5	Haulage Time in Min (time taken in one cycle of run) =60d/V				3.9	
	6	Loading Time one minute per M^3 for 5.5 M^3				5.5	
	7	Unloading and Turning time in minute				3.3	
	8	Total Time Per trip in minutes Col =T				12.7	
	9	Number of trip per hour taken as 50 minutes N=50/T				3.937	
	10	Output per hour with 80% efficiency Q =0.8 x N x 5.5				17.323	

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
	11	Use Rate per hour of Tippers 5.5 M^3 Capacity =(Tr)				1441	
	12	Carriage cost per metre M^3 = Tr/Q				83.184	
	13	Add for spreading cost = (Use rate of Dozer 175HP per hour /capacity of dozer 175HP, Per hour. 300 cum) =4342/300				14.47	
	14	Add 5% of Haul road maintenance, 5% for processing and 2% for extra labour for finishing =12% of column (2+12+13)				₹ 16.29	
	15	Total cost per Cubic metre Col(2+12+13+14)				₹ 152.08	
	16	Add overhead charges and CP 15%				₹ 22.81	
	17	**Rate per cubic metre**				**₹ 174.89**	
	5.1.46.2	Beyond 1/2 km but upto 1 km					
	2	Cost of cutting & loading by Excavator one M3 capacity = Use rate of Excavator/Capacity of Excavator (60 m^3) PM 3005/60				38.13	
	3	Average Speed on Kucha truck Km/hr =(V)				10	
	4	Average haulage path (distance) in one cycle (D) in km				1.5	
	5	Haulage Time in Min (time taken in one cycle of run) =60d/V				9	
	6	Loading Time one minute per M^3 for 5.5 M^3				5.5	
	7	Unloading and Turning time in minute				3.3	
	8	Total Time Per trip in minutes Col =T				17.8	
	9	Number of trip per hour taken as 50 minutes N=50/T				2.809	
	10	Output per hour with 80% efficiency Q =0.8 x N x 5.5				12.36	
	11	Use Rate per hour of Tippers 5.5 M^3 Capacity =(Tr)				1441	
	12	Carriage cost per metre M^3 = Tr/Q				116.59	
	13	Add for spreading cost = (Use rate of Dozer 175HP per hour /capacity of dozer 175HP, Per hour. 300 cum) =4342/300				14.47	
	14	Add 5% of Haul road maintenance, 5% for processing and 2% for extra labour for finishing =12% of column (2+12+13)				₹ 20.30	
	15	Total cost per Cubic metre Col(2+12+13+14)				₹ 189.50	
	16	Add overhead charges and CP 15%				₹ 28.42	
	17	**Rate per cubic metre**				**₹ 217.92**	
	5.1.46.3	Beyond 1.00 km but upto 1.50 km					

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
	2	Cost of cutting & loading by Excavator one M3 capacity = Use rate of Excavator/Capacity of Excavator (60 m^3) PM 3005/60				38.13	
	3	Average Speed on Kucha truck Km/hr =(V)				10	
	4	Average haulage path (distance) in one cycle (D) in km				2.5	
	5	Haulage Time in Min (time taken in one cycle of run) =60d/V				15	
	6	Loading Time one minute per M^3 for 5.5 M^3				5.5	
	7	Unloading and Turning time in minute				3.3	
	8	Total Time Per trip in minutes Col =T				23.8	
	9	Number of trip per hour taken as 50 minutes N=50/T				2.101	
	10	Output per hour with 80% efficiency Q =0.8 x N x 5.5				9.244	
	11	Use Rate per hour of Tippers 5.5 M^3 Capacity =(Tr)				1441	
	12	Carriage cost per metre M^3 = Tr/Q				155.88	
	13	Add for spreading cost = (Use rate of Dozer 175HP per hour /capacity of dozer 175HP, Per hour. 300 cum) =4342/300				14.47	
	14	Add 5% of Haul road maintenance, 5% for processing and 2% for extra labour for finishing =12% of column (2+12+13)				₹ 25.02	
	15	Total cost per Cubic metre Col(2+12+13+14)				₹ 233.50	
	16	Add overhead charges and CP 15%				₹ 35.03	
	17	**Rate per cubic metre**				**₹ 268.53**	
	5.1.46.4	Beyond 1.50 km but upto 2.00 km					
	2	Cost of cutting & loading by Excavator one M3 capacity = Use rate of Excavator/Capacity of Excavator (60 m^3) PM 3005/60				38.13	
	3	Average Speed on Kucha truck Km/hr =(V)				10	
	4	Average haulage path (distance) in one cycle (D) in km				3.5	
	5	Haulage Time in Min (time taken in one cycle of run) =60d/V				21	
	6	Loading Time one minute per M^3 for 5.5 M^3				5.5	
	7	Unloading and Turning time in minute				3.3	
	8	Total Time Per trip in minutes Col =T				29.8	
	9	Number of trip per hour taken as 50 minutes N=50/T				1.678	
	10	Output per hour with 80% efficiency Q =0.8 x N x 5.5				7.383	
	11	Use Rate per hour of Tippers 5.5 M^3 Capacity =(Tr)				1441	
	12	Carriage cost per metre M^3 = Tr/Q				195.18	

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
	13	Add for spreading cost = (Use rate of Dozer 175HP per hour /capacity of dozer 175HP, Per hour. 300 cum) =4342/300				14.47	
	14	Add 5% of Haul road maintenance, 5% for processing and 2% for extra labour for finishing =12% of column (2+12+13)				₹ 29.73	
	15	Total cost per Cubic metre Col(2+12+13+14)				₹ 277.52	
	16	Add overhead charges and CP 15%				₹ 41.63	
	17	**Rate per cubic metre**				**₹ 319.14**	
	5.1.46.5	Beyond 2.00 km but upto 2.50 km					
	2	Cost of cutting & loading by Excavator one M3 capacity = Use rate of Excavator/Capacity of Excavator (60 m^3) PM 3005/60				38.13	
	3	Average Speed on Kucha truck Km/hr =(V)				10	
	4	Average haulage path (distance) in one cycle (D) in km				4.5	
	5	Haulage Time in Min (time taken in one cycle of run) =60d/V				27	
	6	Loading Time one minute per M^3 for 5.5 M^3				5.5	
	7	Unloading and Turning time in minute				3.3	
	8	Total Time Per trip in minutes Col =T				35.8	
	9	Number of trip per hour taken as 50 minutes N=50/T				1.397	
	10	Output per hour with 80% efficiency Q =0.8 x N x 5.5				6.147	
	11	Use Rate per hour of Tippers 5.5 M^3 Capacity =(Tr)				1441	
	12	Carriage cost per metre M^3 = Tr/Q				234.50	
	13	Add for spreading cost = (Use rate of Dozer 175HP per hour /capacity of dozer 175HP, Per hour. 300 cum) =4342/300				14.47	
	14	Add 5% of Haul road maintenance, 5% for processing and 2% for extra labour for finishing =12% of column (2+12+13)				₹ 34.45	
	15	Total cost per Cubic metre Col(2+12+13+14)				₹ 321.56	
	16	Add overhead charges and CP 15%				₹ 48.24	
	17	**Rate per cubic metre**				**₹ 369.80**	
	5.1.46.6	Beyond 2.50 km but upto 3.00 km					
	2	Cost of cutting & loading by Excavator one M3 capacity = Use rate of Excavator/Capacity of Excavator (60 m^3) PM 3005/60				38.13	
	3	Average Speed on Kucha truck Km/hr =(V)				10	
	4	Average haulage path (distance) in one cycle (D) in km				5.5	

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
	5	Haulage Time in Min (time taken in one cycle of run) =60d/V				33	
	6	Loading Time one minute per M^3 for 5.5 M^3				5.5	
	7	Unloading and Turning time in minute				3.3	
	8	Total Time Per trip in minutes Col =T				41.8	
	9	Number of trip per hour taken as 50 minutes N=50/T				1.196	
	10	Output per hour with 80% efficiency Q =0.8 x N x 5.5				5.263	
	11	Use Rate per hour of Tippers 5.5 M^3 Capacity =(Tr)				1441	
	12	Carriage cost per metre M^3 = Tr/Q				273.80	
	13	Add for spreading cost = (Use rate of Dozer 175HP per hour /capacity of dozer 175HP, Per hour. 300 cum) =4342/300				14.47	
	14	Add 5% of Haul road maintenance, 5% for processing and 2% for extra labour for finishing =12% of column (2+12+13)				₹ 39.17	
	15	Total cost per Cubic metre Col(2+12+13+14)				₹ 365.57	
	16	Add overhead charges and CP 15%				₹ 54.84	
	17	**Rate per cubic metre**				**₹ 420.41**	
9	**5.1.24**	Earthwork in filling in flood embankment, canals banks (Canal Discharge Above 28 Cumecs) as well as special repair of embankments and canal banks in ordinary soil in proper profile obtain from borrow area or any other source free from logs, roots or any other ingredients etc. with intial lead of 30m and initial lift of 1.5m including breaking the clods to maximum 60 mm cube, placing the earth in layers not exceeding 225 mm thicka ll complete as per specification and direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 28.32 cum					
		Unskilled mazdoor for cutting	9.00	nos	424.00	₹ 3,816.00	SI-1
		Skilled Mazdoor	1.00	nos	536.00	₹ 536.00	SI-3
		Mate	0.25	nos	455.00	₹ 113.75	SII-2
					Total	₹ 4,465.75	
		Add Overhead charge & C.P @ 15 %				₹ 669.86	
						₹ 5,135.61	
		Rate per Cum			**Say, Rs**	**₹ 181.30**	**Per M^3**

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
10	**5.1.27**	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 28.32 cum					
		Unskilled mazdoor for cutting and carrying	11.00	nos	424.00	₹ 4,664.00	SI-1
		Head Mason	0.25	nos	569.00	₹ 142.25	SII -3
					Total	₹ 4,806.25	
		Add Overhead charge & C.P @ 15 %				₹ 720.94	
						₹ 5,527.19	
		Rate per Cum			**Say, Rs**	**₹ 195.20**	**Per M^3**
11	**5.3.8**	Providing & laying **P.C.C. M-100** with nominal mix of (1:3:6) in superstructure of various components of canal or embankment structures with approved quality of graded coarse aggregate of required grade and approved quality sand of requisite F.M. washed and screened including necessary tools and plants, vibrating, curing,royalty etc. excluding cost of form work as well reinforcement its cutting, bending. binding, and placing complete job as per specification & direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 2.832 cum					
	A.	**MATERIALS**					
		Coarse aggregates Gr IV **(Rate of approved quality of aggregate as per Design)**	2.66	M^3	1115.24	₹ 2,966.54	M047
		Sand	1.330	M^3	584.64	₹ 777.57	M-004
		Cement	0.443	M^3	8264.70	₹ 3,661.26	M-1P
		Total				₹ 7,405.37	
	B.	**LABOUR**					
		Head mason	0.5	nos	569.00	₹ 284.50	S II -3
		Mason Gr II	1	nos	508.00	₹ 508.00	S II-4
		Unskilled mazdoor	12	nos	424.00	₹ 5,088.00	S II-1
		Bhisti	1	nos	417.00	₹ 417.00	S II -13
		Total				₹ 6,297.50	

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
	C.	**HIRE CHARGES OF MACHINE**					
		(i)Concrete mixer (10 H.P) for 2.832 cum consists	**1.43**	hr	351	₹ 501.93	
		on the basic of mixer production capacity 1.98 m3					
		per hour. Used rate per hourx2.832/1.98					
		(ii) Vibrator 1no. To vibrate 2.832 cum on the	**1.43**	hr	405	₹ 579.15	
		basic of vibrator capacity 1.98 cum per hour.					
		Used rate per hourx2.832/1.98					
		Total				₹ 14,783.95	
		Add Overhead charge & C.P	15	%		₹ 2,217.59	
						₹ 17,001.55	**Per M^3**
					Say, Rs	**₹ 6,003.37**	**Per M^3**
12	**5.3.4**	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 2.832 cum					
	A	**Material**					
		Course Aggregate (20mm & 10mm) **(Taking Rate of approved quality as per design)**	2.55	m^3	913.48	₹ 2,327.55	M044
		Sand	1.27	m^3	584.64	₹ 744.83	M-004
		Cement	0.64	m^3	8264.70	₹ 5,264.62	M-1P
		Total				₹ 8,337.00	
	B	**Labour**					
		Head mason	0.50	nos	569.00	₹ 284.50	S II -3
		Mason Gr-II	1.00	nos	508.00	₹ 508.00	S II-4
		Unskilled mazdoor for controlling Slope and fine dressing	12.00	nos	424.00	₹ 5,088.00	S II-1
		Bhisti	1.00	nos	417.00	₹ 417.00	S II -13
		Total				₹ 6,297.50	

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
	C	**Hire charge of Machine**					
		Concrete Mixer (taking 2cum per hr.)	1.43	hr	351.00	₹ 501.93	PM21001
		on the basic of mixer production capacity 1.98 m^3 per hour. Used rate per hour 2.832/1.98					
		(ii) Vibrator 1 no. To vibrate 2.832 cum on the Basic of VibratorCapacity 1.98 m3 per hour.	1.43	hr	405.00	₹ 579.15	PM44001
					Total	₹ 15,715.58	
		Add Overhead charge &c.P @ 15 %				₹ 2,357.34	
						₹ 18,072.92	
		Rate per Cum			**Say, Rs**	**₹ 6,381.70**	**Per M^3**
13	**5.3.5**	Providing & laying **P.C.C. or R.C.C. M-200** with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 2.832 cum					
	A	**Material**					
		Course Aggregate (20mm & 10mm) **(Taking Rate of approved quality as per design)**	2.44	m^3	913.48	₹ 2,225.24	M044
		Sand	1.22	m^3	584.64	₹ 712.09	M-004
		Cement	0.81	m^3	8264.70	₹ 6,710.94	M-1P
		Total				₹ 9,648.27	
	B	**Labour**					
		Head mason	0.50	nos	569.00	₹ 284.50	S II -3
		Mason Gr-II	1.00	nos	508.00	₹ 508.00	S II-4
		Unskilled mazdoor for controlling Slope and fine dressing	12.00	nos	424.00	₹ 5,088.00	S II-1
		Bhisti	1.00	nos	417.00	₹ 417.00	S II -13
		Total				₹ 6,297.50	
	C	**Hire charge of Machine**					
		Concrete Mixer (taking 2cum per hr.)	1.43	hr	351.00	₹ 501.93	PM21001

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
		on the basic of mixer production capacity 1.98 m^3 per hour. Used rate per hour 2.832/1.98					
		(ii) Vibrator 1 no. To vibrate 2.832 cum on the Basic of VibratorCapacity 1.98 m3 per hour.	1.43	hr	405.00	₹ 579.15	PM44001
					Total	₹ 17,026.85	
		Add Overhead charge &c.P @ 15 %				₹ 2,554.03	
						₹ 19,580.88	
		Rate per Cum			**Say, Rs**	**₹ 6,914.20**	**Per M^3**
14	**5.3.5**	Providing & laying **P.C.C. or R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 2.832 cum					
	A	**Material**					
		Course Aggregate (20mm & 10mm) **(Taking Rate of approved quality as per design)**	2.436	m^3	913.48	₹ 2,225.24	M044
		Sand	1.218	m^3	584.64	₹ 712.09	M-004
		Cement	0.812	m^3	8264.70	₹ 6,710.94	M-1P
		Total				₹ 9,648.27	
	B	**Labour**					
		Head mason	0.50	nos	569.00	₹ 284.50	S II -3
		Mason Gr-II	1.00	nos	508.00	₹ 508.00	S II-4
		Unskilled mazdoor	12.00	nos	424.00	₹ 5,088.00	S II-1
		Bhisti	1.00	nos	417.00	₹ 417.00	S II -13
		Total				₹ 6,297.50	
	C	**Hire charge of Machine**					
		Concrete Mixer (taking 2cum per hr.)	1.43	hr	351.00	₹ 501.93	PM21001
		on the basic of mixer production capacity 1.98 m^3 per hour. Used rate per hour 2.832/1.98					

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
		(ii) Vibrator 1 no. To vibrate 2.832 cum on the Basic of VibratorCapacity 1.98 m3 per hour.	1.43	hr	405.00	₹ 579.15	PM44001
					Total	₹ 17,026.85	
		Add Overhead charge &c.P @ 15 %				₹ 2,554.03	
						₹ 19,580.88	
		Rate per Cum			**Say, Rs**	**₹ 6,914.20**	**Per M^3**
15	**5.3.11**	Providing & laying P.C.C. or R.C.C. **M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 2.832 cum					
	A	**Material**					
		coarse Aggregate (20mm & 10mm) (Cost of coarse aggregates as per design)	2.38	m^3	913.48	₹ 2,173.17	M044
		Sand	1.19	m^4	584.64	₹ 695.14	M-004
		Cement	1.19	m^5	8264.70	₹ 9,826.73	M-1P
		Total				₹ 12,695.04	
	B	**Labour**					
		Head mason	0.50	nos	569.00	₹ 284.50	S II -3
		Mason Gr-II	1.00	nos	508.00	₹ 508.00	S II-4
		Unskilled mazdoor for controlling Slope and fine dressing	12.00	nos	424.00	₹ 5,088.00	S II-1
		Bhisti	1.00	nos	417.00	₹ 417.00	S II -13
		Total				₹ 6,297.50	
	C	**Hire charge of Machine**					
		Concrete Mixer (taking 2cum per hr.)	1.43	hr	351.00	₹ 501.93	PM21001
		on the basic of mixer production capacity 1.98 m^3 per hour. Used rate per hour 2.832/1.98					
		(ii) Vibrator 1 no. To vibrate 2.832 cum on the Basic of VibratorCapacity 1.98 m3 per hour.	1.43	hr	405.00	₹ 579.15	PM44001
					total	₹ 20,073.62	

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
		Add Overhead charge &c.P @ 15 %				₹ 3,011.04	
						₹ 23,084.66	
		Rate per Cum			**Say, Rs**	**₹ 8,151.40**	**Per M^3**
16	**5.3.22**	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.					
		Unit :- **Per M.T**					
		Taking Output :- 1 M.T					
	(a)	TMT grade Fe-500 ***8 mm***					
	(A)	Providing MS reinforcement plain	1.050	MT	52450	₹ 55,072.50	
		(Including 5% wastage)					
	B	i. Annealed wire	14.00	Kg	48.3	₹ 676.20	M072
		ii. Black Smith Gr.II	9.00	nos	508.00	₹ 4,572.00	SII-10
		iii. Head Black Smith	1.00	nos	569.00	₹ 569.00	SII-9
		Iv.Skilled mazdoor	8.00	nos	536.00	₹ 4,288.00	SI-71
		v. Unskilled Mazdoor	2.00	nos	424.00	₹ 848.00	SI-1
					total	₹ 66,025.70	
		Add Overhead charge &c.P @ 15 %				₹ 9,903.86	
						₹ 75,929.56	
		Rate per M.T			**Say, Rs**	**₹ 75,929.60**	**Per M.T**
	(B)	TMT grade Fe-500 ***10 mm***					
	(A)	Providing MS reinforcement plain	1.050	MT	51094	₹ 53,648.70	
		(Including 5% wastage)					
	B	i. Annealed wire	14.00	Kg	48.3	₹ 676.20	M072
		ii. Black Smith Gr.II	9.00	nos	508.00	₹ 4,572.00	SII-10
		iii. Head Black Smith	1.00	nos	569.00	₹ 569.00	SII-9
		Iv.Skilled mazdoor	8.00	nos	536.00	₹ 4,288.00	SI-71
		v. Unskilled Mazdoor	2.00	nos	424.00	₹ 848.00	SI-1
					total	₹ 64,601.90	
		Add Overhead charge &c.P @ 15 %				₹ 9,690.29	
						₹ 74,292.19	
		Rate per M.T			**Say, Rs**	**₹ 74,292.20**	**Per M.T**

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
	(C)	TMT grade Fe-500 ***12 mm***					
	(A)	Providing MS reinforcement plain	1.050	MT	50500	₹ 53,025.00	
		(Including 5% wastage)					
	B	i. Annealed wire	14.00	Kg	48.3	₹ 676.20	M072
		ii. Black Smith Gr.II	9.00	nos	508.00	₹ 4,572.00	SII-10
		iii. Head Black Smith	1.00	nos	569.00	₹ 569.00	SII-9
		Iv.Skilled mazdoor	8.00	nos	536.00	₹ 4,288.00	SI-71
		v. Unskilled Mazdoor	2.00	nos	424.00	₹ 848.00	SI-1
					total	₹ 63,978.20	
		Add Overhead charge &c.P @ 15 %				₹ 9,596.73	
						₹ 73,574.93	
		Rate per M.T			**Say, Rs**	**₹ 73,574.90**	**Per M.T**
	(C)	TMT grade Fe-500 ***16 mm***					
	(A)	Providing MS reinforcement plain	1.050	MT	50500	₹ 53,025.00	
		(Including 5% wastage)					
	B	i. Annealed wire	14.00	Kg	48.3	₹ 676.20	M072
		ii. Black Smith Gr.II	9.00	nos	508.00	₹ 4,572.00	SII-10
		iii. Head Black Smith	1.00	nos	569.00	₹ 569.00	SII-9
		Iv.Skilled mazdoor	8.00	nos	536.00	₹ 4,288.00	SI-71
		v. Unskilled Mazdoor	2.00	nos	424.00	₹ 848.00	SI-1
					total	₹ 63,978.20	
		Add Overhead charge &c.P @ 15 %				₹ 9,596.73	
						₹ 73,574.93	
		Rate per M.T			**Say, Rs**	**₹ 73,574.90**	**Per M.T**
	(C)	TMT grade Fe-500 ***20 mm***					
	(A)	Providing MS reinforcement plain	1.050	MT	50500	₹ 53,025.00	
		(Including 5% wastage)					
	B	i. Annealed wire	14.00	Kg	48.3	₹ 676.20	M072
		ii. Black Smith Gr.II	9.00	nos	508.00	₹ 4,572.00	SII-10
		iii. Head Black Smith	1.00	nos	569.00	₹ 569.00	SII-9
		Iv.Skilled mazdoor	8.00	nos	536.00	₹ 4,288.00	SI-71

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
		v. Unskilled Mazdoor	2.00	nos	424.00	₹ 848.00	SI-1
					total	₹ 63,978.20	
		Add Overhead charge &c.P @ 15 %				₹ 9,596.73	
						₹ 73,574.93	
		Rate per M.T			**Say, Rs**	**₹ 73,574.90**	**Per M.T**
	(C)	TMT grade Fe-500 ***25 mm***					
	(A)	Providing MS reinforcement plain	1.050	MT	50500	₹ 53,025.00	
		(Including 5% wastage)					
	B	i. Annealed wire	14.00	Kg	48.3	₹ 676.20	M072
		ii. Black Smith Gr.II	9.00	nos	508.00	₹ 4,572.00	SII-10
		iii. Head Black Smith	1.00	nos	569.00	₹ 569.00	SII-9
		Iv.Skilled mazdoor	8.00	nos	536.00	₹ 4,288.00	SI-71
		v. Unskilled Mazdoor	2.00	nos	424.00	₹ 848.00	SI-1
					total	₹ 63,978.20	
		Add Overhead charge &c.P @ 15 %				₹ 9,596.73	
						₹ 73,574.93	
		Rate per M.T			**Say, Rs**	**₹ 73,574.90**	**Per M.T**
17	**5.3.18**	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.					
		Unit :- **Per Sqm**					
		Taking Output :- 9.3 Sqm					
	A	**Material**					
		Local wood planks. 38 mm thick =9.3x38x1000	0.35	m^3			
		Add 5% wastage	0.02	m^3			
		Cost of 0.37 cum local wood planks.	0.37	m^3	26000.00	₹ 9,620.00	code no 1198 (RCD)
		Add cost for shattering and propping @ 10% of above				₹ 962.00	
					Total	₹ 10,582.00	
		Assuming 4 uses to calculate	4.00	use			
		Cost of shattering for 2.832 cum total cost /4				₹ 2,645.50	
		Add 1% for cost of nails and spikes on total cost of wood				₹ 105.82	
					Total	₹ 2,751.32	A

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
	B	**Labour**					
		Carpenter Gr-II	1.50	nos	508.00	₹ 762.00	S II-17
		Unskilled mazdoor	2.50	nos	424.00	₹ 1,060.00	S I-1
					Total	₹ 1,822.00	B
	C	**Carriage of materials**					
		Cost of carriage of material from godown and back to godown after use, including loading, unloading and stacking @ 1% of total cost of food materials				₹ 105.82	C
		Total cost for 9.3 sqm=A+B+C				₹ 4,679.14	
		Add Overhead charge &c.P @ 15 %				₹ 701.87	
						₹ 5,381.01	
		Rate per Sqm			**Say, Rs**	**₹ 578.60**	**Per M2**
18	**5.3.20**	Providing centering including strutting, proping etc. and its removal after use indeck slab as per specification and direction of E/I.					
		Unit :- **Per Sqm**					
		Taking Output :- 22.326 Sqm					
		(Assuming size in slab 7.32 x 3.05 =22.326 sqm)					
	A	**MATERIALS**					
		a. 40 mm thick local wood planks (22.326x 40)/1000 = 0.893					
		Add 5% wastages = 0.045					
		0.938	0.94	m^3	**26000.00**	**₹ 24,440.00**	**Code no. 1197 (BCD)**
		Assuming 4 uses to calculate	4.00	use			
		Cost of planks per use = 0.89 x rate of local wood/4				**₹ 6,110.00**	
		b. Assuming avg. height of slab from GL = 3.66 m					
		150 mm sal bullah required = 78 nos.					
		Length of sal bullah = 78X3.66 =285.48	285.48	M	**75.00**	**₹ 21,411.00**	**M SL No. 223**
		(Assuming sal bullah to be used 10 times for centering					
		= 285.48 x Rate per mtr/10				**₹ 2,141.10**	
		c. Salwood scanting required (75 mm * 63 mmsize) = 0.311 cum	0.31	m^3	**60000.00**	**₹ 18,660.00**	**Code no. 1199 (BCD)**
		(Assuming 10 uses)					
		Cost per use = 0.311 x Rate per mtr/10				**₹ 1,866.00**	
		Total				**₹ 10,117.10**	

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
		Add 1% for cost of nails and spikes				**₹ 101.17**	
						₹ 10,218.27	**(A)**
	B	**LABOUR**					
		Carpenter Gr-II	4.00	nos	508.00	₹ 2,032.00	S I-17
		Unskilled Majdoor	7.00	nos	424.00	₹ 2,968.00	S I-1
					Total	₹ 5,000.00	**(B)**
	C	Carriage of Materials					
		Cost of carriage of material from godown and back to godown after use, including loading, unloading and stacking @ 1% of total cost of food materials				₹ 101.17	
		Total cost for 22.326 sqm=A+B+C				₹ 15,319.44	
		Add Overhead charge & C.P @ 15 %				₹ 2,297.92	
		Total				₹ 17,617.36	
		Rate per Sqm			**Say, Rs**	**₹ 789.10**	**Per M2**
17	**5.5.10**	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.					
		Unit :- **Per Sqm**					
		Taking Output :- 9.3 Sqm					
		Material					
		Cement	0.01	m^4	8264.70	₹ 115.71	M-1P
					Total	₹ 115.71	
	B	**Labour**					
		Head mason	0.06	nos	569.00	₹ 35.56	S II-3
		Mason Gr-II	0.50	nos	508.00	₹ 254.00	S II-4
		Unskilled mazdoor	0.25	nos	424.00	₹ 106.00	S II-1

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
					Total	₹ 395.56	
		Total				₹ 511.27	
		Add Overhead charge &c.P @ 15 %				₹ 76.69	
						₹ 587.96	
		Rate per Cum			**Say, Rs**	**₹ 63.20**	**Per M^3**
18	**5.2.2**	Providing filter of stone chips 20 mm and down well graded as per design for lined canal, drains including hand packing etc all complete as per specification and direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 2.832 cum					
		Material					
		Sone chips (M-040 +M -045)/2	2.83	nos	673.97	₹ 1,908.68	M-004
		Labour					
		Unskilled mazdoor for Screening and grading Filter	2.00	nos	424.00	₹ 848.00	SI-1
		Unskilled mazdoor for laying and hand packing	1.50	nos	424.00	₹ 636.00	SI-1
					Total	₹ 3,392.68	
		Add Overhead charge &c.P @ 15 %				₹ 508.90	
						₹ 3,901.59	
		Rate per Cum			**Say, Rs**	**₹ 1,377.70**	**Per M^3**
19	**5.7.13**	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 2.832 cum					
		Unskilled Mazdoor	3	nos.	424.00	1272.00	
						1272.00	
		Add Overhead charge & C.P. @15%				190.80	
						1462.80	
					Say, Rs	**₹ 516.50**	**Per M^3**

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
20	**5.7.18.1**	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 2.832 cum					
		Unskilled Mazdoor	6	nos.	424.00	2544.00	
		Mason Gr II	0.5	nos.	508.00	254.00	
		Mate	0.25	nos.	455.00	113.75	
		Stone Dresser	0.25	nos.	538.00	134.50	
						3046.25	
		Add Overhead charge & C.P. @15%				456.94	
						3503.19	
					Say, Rs	**₹ 1,237.00**	**Per M^3**
21	**5.1.37**	Providing coarse clean sand in filling in foudation of trenches including ramming, watering, royalty all complete job as per specification and direction .					
		Unit :- **Per cum**					
		Taking Output :- 2.832 cum					
		Unskilled Mazdoor for cutting	1	nos.	424.00	424.00	
		Local Sand	2.832	nos.	145.87	413.10	
						837.10	
		Add Overhead charge & C.P. @15%				125.57	
						962.67	
					Say, Rs	**₹ 339.90**	**Per M^3**

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
20	**5.5.5**	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.				**Page -261**	
		Unit :- **Per Sqm**					
		Taking Output :- 9.3 cum					
		Materials					
		Cement	0.07	m^3	8264.70	₹ 562.00	M-1 P
		Sand	0.27	m^3	584.64	₹ 159.02	M044
		Total				₹ 721.02	
		Labour					
		Mason Gr II	1.50	nos	508.00	₹ 762.00	SII-4
		Unskilled Mazdoor	2.50	nos	424.00	₹ 1,060.00	SII-1
		Bhisti	0.50	nos	417.00	₹ 208.50	SI-13
					total	₹ 2,030.50	
		Add Overhead charge &c.P @ 15 %				₹ 412.73	
						₹ 3,164.25	
		Rate per Cum			**Say, Rs**	**₹ 340.20**	**Per M^3**
21	**5.6.1**	Labour Charges for Laying of 150mm NP2 RCC Hume Pipe with collar as per I.S.S. 458-1971 including fixing and fitting NP2 hume pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .					
	5.6.1.1	**150 mm dia NP2 H.P.**					
		Unit: per m					
		Taking Output =	**8**	**m**			
		(Assuming 4 pipes of 2m length and three collars)					
		Materials					
		Cement	0.011	cum	8264.70	90.91	**M-1 P**
		Sand	0.011	cum	584.64	6.43	**M-004**
		Jute	1.5	Kg	20.89	31.34	**M Sl. No. 257**
		Total				128.68	
		Labour					
		Head Mason	0.50	nos	569.00	284.50	

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
		Unskilled Mazdoor	2.25	nos	424.00	954.00	
		Fitter Gr I	0.50	nos	577.00	288.50	
		Total				1527.00	
						1655.68	
		Add Overhead charge & C.P @ 15 %				₹ 248.35	
						₹ 1,904.03	
					Say, Rs	**₹ 238.00**	**Per M**
	5.6.2	Labour Charges for Laying, fitting and fixing NP3 RCC Hume Pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .					
	5.6.2.2	**600 mm dia NP3 H.P.**					
		Unit: per m					
		Taking Output =	**7.5**	**m**			
		(Assuming 3 pipes of 2.5 m length and two collars)					
		Materials					
		Cement	0.034	cum	8264.70	281.00	**M-1 P**
		Sand	0.034	cum	584.64	19.88	**M-004**
		Jute	4	Kg	20.89	83.56	**M Sl. No. 257**
		Total				384.44	
		Labour					
		Head Mason	1.5	nos	569.00	853.50	
		Unskilled Mazdoor	7	nos	424.00	2968.00	
		Fitter Gr I	0.75	nos	577.00	432.75	
		Total				4254.25	
						4638.69	
		Add Overhead charge & C.P @ 15 %				₹ 695.80	
						₹ 5,334.49	
					Say, Rs	**₹ 711.27**	**Per M**
	5.6.1.7	**1000 mm dia NP2 H.P.**					
		Unit: per m					
		Taking Output =	**7.5**	**m**			
		(Assuming 3 pipes of 2.5 m length and two collars)					
		Materials					

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
		Cement	0.045	cum	8264.70	371.91	**M-1 P**
		Sand	0.045	cum	584.64	26.31	**M-004**
		Jute	7.5	Kg	20.89	156.68	**M Sl. No. 257**
		Total				554.90	
		Labour					
		Head Mason	2	nos	569.00	1138.00	
		Unskilled Mazdoor	21	nos	424.00	8904.00	
		Fitter Gr I	1	nos	577.00	577.00	
		Total				10619.00	
						11173.90	
		Add Overhead charge & C.P @ 15 %				₹ 1,676.08	
						₹ 12,849.98	
					Say, Rs	**₹ 1,713.33**	**Per M**
	5.6.2.5	**Labour Charges for Laying of 1200 mm NP3 RCC Hume Pipe with collar as per I.S.S. 458-1971 including fixing and fitting NP2 hume pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .**					
		Unit: per m					
		Taking Output =	**7.5**	**m**			
		(Assuming 3 pipes of 2.5 m length and two collars)					
		Materials					
		Cement	0.057	cum	8264.70	471.09	**M-1 P**
		Sand	0.057	cum	584.64	33.32	**M-004**
		Jute	12	Kg	20.89	250.68	**M Sl. No. 257**
		Total				755.09	
		Labour					
		Head Mason	2.5	nos	569.00	1422.50	
		Unskilled Mazdoor	25	nos	424.00	10600.00	
		Fitter Gr I	1	nos	577.00	577.00	
		Total				12599.50	
						13354.59	

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
		Add Overhead charge & C.P @ 15 %				₹ 2,003.19	
						₹ 15,357.78	
					Say, Rs	**₹ 2,047.70**	**Per M**
22	**5.4.10**	Providing rough dressed random rubble Stone Masonary in cement Mortar (1:4) in foundation with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints, curing, scaffholding and its removal whereever required including royalty etc. all complete job as per specification and direction of E/I.					
		Unit :- **Per Sqm**					
		Taking Output :- 2.832 cum					
		Materials					
		Stone Boulder	2.832	cum	694.61	1967.14	
		Sand	1.12	cum	584.64	654.80	
		Cement	0.28	cum	8264.70	2314.12	
		Labour				4936.05	
		Head Mason	0.125	nos	569.00	71.13	
		Mason Gr II	2	nos	508.00	1016.00	
		Unskilled Mazdoor	5	nos	424.00	2120.00	
		Bhisti	0.5	nos	417.00	208.50	
						3415.63	
						8351.67	
		Add Overhead charge & C.P @ 15 %				₹ 1,252.75	
						₹ 9,604.43	
					Say, Rs	**₹ 3,391.40**	**Per M^3**
23	**5.7.16**	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.					
		Unit :- **Per Sqm**					
		Taking Output :- 9.3 cum					
		Materials					
		Bricks	800	per 1000 nos	4891.00	3912.80	

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
		Local Sand	0.425	cum	145.87	61.99	
		Total				3974.79	
		Labour					
		Mason Gr II	1.125	nos	508.00	571.50	
		Unskilled Mazdoor	2.25	nos	424.00	954.00	
						1525.50	
						5500.29	
		Add Overhead charge & C.P @ 15 %				₹ 825.04	
						₹ 6,325.34	
					Say, Rs	**₹ 680.10**	**Per M^3**
24	**5.8.9**	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.					
		Unit :- **Per Sqm**					
		Taking Output :- 2.832 cum					
		Hammer man	2.25	nos	445.00	₹ 1,001.25	SII-17
		Skilled Mazdoor	2.25	nos	536.00	₹ 1,206.00	SII-18
		Unskilled mazdoor	7.00	nos	424.00	₹ 2,968.00	SI-1
		Blacksmith GR II	1.00	nos	508.00	₹ 508.00	SII-10
		Mate	1.00	nos	455.00	₹ 455.00	SII-2
					total	₹ 6,138.25	
		Add Overhead charge & C.P @ 15 %				₹ 920.74	
						₹ 7,058.99	
		Rate per Cum			**Say, Rs**	**₹ 2,492.58**	**Per M^3**
25	**5.4.6**	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.					
		Unit :- **Per Sqm**					
		Taking Output :- 2.832 cum					
		Materials					

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
		Bricks	1150	per 1000 nos	4891.00	5624.65	
		Sand	0.92	cum	584.64	537.87	
		Cement	0.23	cum	8264.70	1900.88	
		Total				8063.40	
		Labour					
		Head Mason	0.125	nos	569.00	71.13	
		Mason Gr II	2.5	nos	508.00	1270.00	
		Unskilled Mazdoor	6	nos	424.00	2544.00	
		Bhisti	1	nos	417.00	417.00	
						4302.13	
						12365.52	
		Add Overhead charge & C.P @ 15 %				₹ 1,854.83	
						₹ 14,220.35	
					Say, Rs	**₹ 5,021.30**	**Per M^3**

ITEM RATES					
Sl. No.	Reference		Particular	Unit	Rate (in Rs.)
1	WRD SOR 2025 & PL MARCH 2025	WRD 5.1.3	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	Sqm	11.80
2	WRD SOR 2025 & PL MARCH 2025	WRD 5.1.8	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I.	Cum	156.50
3	WRD SOR 2025 & PL MARCH 2025	WRD 5.1.31	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	Cum	149.30
4	WRD SOR 2025 & PL MARCH 2025	5.1.21	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.	Cum	196.10
5	WRD SOR 2025 & PL MARCH 2025	5.1.22	Extra for wet earth all complete as per specifications and direction of E/I.	Cum	17.22
6	WRD SOR 2025 & PL MARCH 2025	5.1.25	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.	Cum	165.12
7	WRD SOR 2025 & PL MARCH 2025	WRD 5.1.39	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.	Cum	61.88

8	**WRD SOR 2025 & PL MARCH 2025**	**5.1.46**	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)		
		5.1.46.1	Beyond 150m but upto 1/2 km	**174.89**	**Cum**
		5.1.46.2	Beyond 1/2 km but upto 1 km	**217.92**	**Cum**
		5.1.46.3	Beyond 1 km but upto 1.50 km	**268.53**	**Cum**
		5.1.46.4	Beyond 1.50 km but upto 2.00 km	**319.14**	**Cum**
		5.1.46.5	Beyond 2.00 km but upto 2.50 km	**369.80**	**Cum**
		5.1.46.6	Beyond 2.50 km but upto 3.00 km	**420.41**	**Cum**
9	**WRD SOR 2025 & PL MARCH 2025**	**WRD 5.1.27**	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	**195.20**	**Cum**
10	**WRD SOR 2025 & PL 2025**	**WRD 5.5.10**	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	**Sqm**	**63.20**
11	**WRD SOR 2023 & PL JUNE 2025**	**5.5.5**	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of D/I.	**Cum**	**340.20**
12	**WRD SOR 2025 & PL 2025**	**5.3.8**	Providing & laying **P.C.C. M-100** with nominal mix of (1:3:6) in superstructure of various components of canal or embankment structures with approved quality of graded coarse aggregate of required grade and approved quality sand of requisite F.M. washed and screened including necessary tools and plants, vibrating, curing,royalty etc. excluding cost of form work as well reinforcement its cutting, bending. binding, and placing complete job as per specification & direction of E/I.	**Cum**	**6003.37**
13	**WRD SOR 2025 & PL 2025**	**5.3.4**	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	**Cum**	**6381.70**

14	**WRD SOR 2025 & PL 2025**	**5.3.5**	Providing & laying **P.C.C. or R.C.C. M-200** with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	**Cum**	**6914.20**
15	**WRD SOR 2025 & PL 2025**	**5.3.10**	Providing & laying **P.C.C. or R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	**Cum**	**6914.20**
16	**WRD SOR 2025 & PL 2025**	**5.3.11**	Providing & laying **P.C.C. or R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	**Cum**	**8151.40**
17	**RCD 2025**	**RCD 14.09**	Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	**NO.**	5588.70
18	**WRD SOR 2025 & PL 2025**	**WRD 5.3.22**	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.		
			TMT Grade FE-500 - 8 mm	**MT**	**75929.60**
			TMT Grade FE-500 - 10 mm	**MT**	**74292.20**
			TMT Grade FE-500 - 12 mm	**MT**	**73574.90**
			TMT Grade FE-500 - 16 mm	**MT**	**73574.90**
			TMT Grade FE-500 - 20 mm	**MT**	**73574.90**
			TMT Grade FE-500 - 25mm	**MT**	**73574.90**
19	**WRD SOR 2025 & PL 2025**	**WRD 5.3.19**	Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.	**Cum**	**578.60**
20	**WRD SOR 2025 & PL 2025**	**WRD 5.3.20**	Providing centering including strutting, propping etc. and its removal after use in deck slab as per specifications and direction of E/I.	**Cum**	**789.10**
21	**WRD SOR 2025 & PL 2025**	**WRD 5.2.2**	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	**Cum**	**1377.70**
22	**WRD SOR 2025 & PL 2025**	**WRD 5.7.13**	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	**Cum**	**516.50**
23	**WRD SOR 2025 & PL 2025**	**WRD M-002**	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	**Cum**	694.61

24	**WRD SOR 2025 & PL 2025**	**WRD 5.7.18.1**	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	**Cum**	**1237.00**
25	**WRD SOR 2025 & PL 2025**	**WRD 5.1.37**	Providing coarse clean sand in filling in foudation of trenches including ramming, watering, royalty all complete job as per specification and direction .	**Cum**	**339.90**
26	**WRD SOR 2025 & PL 2025**	**WRD 5.5.5**	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	**Cum**	**340.20**
27	**WRD SOR 2025 & PL 2025**	**M-1701**	Providing 150mm NP2 RCC Hume Pipe with collar as per I.S.S. 458-1971 including fixing and fitting NP2 hume pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .	**RM**	220.00
28	**WRD SOR 2025 & PL 2025**	**WRD 5.6.1.1**	Labour Charges for Laying of 150mm NP2 RCC Hume Pipe with collar as per I.S.S. 458-1971 including fixing and fitting NP2 hume pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .	**RM**	**238.00**
29	**RCD 2025**	**RCD M-148**	Providing RCC Pipe NP 4 heavy duty non pressure pipe 1000 mm dia with spigot	**R.M.**	6002.82
30	**WRD SOR 2025 & PL 2025**	**WRD 5.6.2.4**	Labour for laying 1000mm NP3 RCC Hume Pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .	**R.M.**	**1713.33**
31	**RCD 2025**	**RCD M-149**	Providing RCC Pipe NP 4 heavy duty non pressure pipe 1200 mm dia with spigot	**R.M.**	7015.86
32	**WRD SOR 2025 & PL 2025**	**WRD 5.6.2.5**	Labour for laying 1200mm NP3 RCC Hume Pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .	**R.M.**	**2047.70**
33	**WRD SOR 2025 & PL 2025**	**5.4.10**	Providing rough dressed random rubble Stone Masonary in cement Mortar (1:4) in foundation with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints, curing, scaffholding and its removal whereever required including royalty etc. all complete job as per specification and direction of E/I.	**Cum**	**3391.40**
34	**WRD SOR 2025 & PL 2025**	**M-181**	Structural Steel (Average rate of Angle, Joint and Channel) etc.	**MT**	**160035.11**
35	**WRD SOR 2025 & PL 2025**	**5.7.16**	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	**Sqm**	**680.10**
36	**RCD 2025**	**RCD 15.22**	Providing and fixing in position 20 mm thick compressible fibre board in expansion joint complete as per drawing & Technical specification.	**RM**	499.80
37	**RCD 2025**	**RCD M-151**	Providing RCC Pipe NP 4 heavy duty non pressure pipe 600 mm dia with spigot	**RM**	2532.61

38	**WRD SOR 2025 & PL 2025**	**5.6.2.2**	Labour Charges for Laying, fitting and fixing NP3 RCC Hume Pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .	**RM**	**711.27**
39	**WRD SOR 2025**	**M-126**	Modular Strip/box seal expansion joint	**RM**	36993.21
40	**PWD NH SOR CHHATISGARH 2025**	**3.18 PWD NH SOR CHHATISGARH 2025**	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications. (3.18 PWD NH SOR CHHATISGARH 2025)	**RM**	66.00
41	**RCD 2025**	**RCD M-148**	Providing RCC Pipe NP 4 heavy duty non pressure pipe 900 mm dia with spigot	**R.M.**	4849.67
42	**RCD 2025**	**13.08**	Weepholes	**No.**	152.60
43	**RCD 2025**	**3.06 - 301**	Excavation for road work in soil with hydraulic excavator including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and tranporting to the embankment location within all lifts and lead upto 1000 m	**Cum**	78.40
44	**RCD 2025**	**4.01 B - 401**	Construction of granular sub-base by providing closegraded material, spreading in uniform layers with motorgrader on prepared surface, mixing by mix in placemethod with front end loader at OMC, and compactingwith vibratory roller to achieve the desired density,complete as per clause 401.	**Cum**	1044.90
45	**RCD 2025**	**14.01 C**	RCC Grade M-30 using Batching plant, Transit Mixer and Concrete Pump	**Cum**	6217.20
46	**RCD 2025**	**8.14**	Kilometer Stone M-15	**Nos.**	3853.40

	MATERIAL RATE:				
1	**WRD SOR 2025**	**M-004**	Coarse Sand	**Cum**	584.64
2	**WRD SOR 2025**	**M-012**	Coarse Aggregate	**Cum**	944.26
3	**WRD SOR 2025**	**M-001**	Boulder	**Cum**	694.61
4	**WRD SOR 2025**	**M-11 9(ii)**	Brick	**Cum**	4891
5	**WRD SOR 2025**	**M-006**	Fine Sand	**Cum**	145.87
6	**WRD SOR 2025**	**M1**	Cement (Gaya)	**per bag of 50 Kg**	281.00
7	**WRD SOR 2025**	**M-025**	Aggregate 26.5 mm to 4.75 mm	**Cum**	913.48
8	**WRD SOR 2025**	**M-015**	Aggregate 9.5 mm to 4.75 mm	**Cum**	602.28
9	**WRD SOR 2025**	**M-017**	Aggregate 4.75 mm and below	**Cum**	266.62
10	**WRD SOR 2025**	**M-181**	Structural Steel	**MT**	55116.67

Madanpur Division – Kotwara Dy.
(Total Cost – Rs. 38.88 Crores)

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND ABSTRACT OF COST (KOTWARA DISTRIBUTARY)								
S. No.	Items	Qty.	Unit	Rate	Seigniorage Charges	Amount (Rs.) Including Seigniorage Charges	Reference for Rate	Page no.
1	Earthwork							
	KOTWARA DY.	1	Job	106360831.55	0.00	₹ 10,63,60,831.55	AOC Earthwork Kotwara Dy.	54
	GAMHARIA MINOR	1	Job	5579483.74	0.00	₹ 55,79,483.74	AOC Earthwork Gamharia Minor	56
	NAGWA MINOR	1	Job	4541474.99	0.00	₹ 45,41,474.99	AOC Earthwork Nagwa Minor	58
	PAWAI MINOR	1	Job	5011768.08	0.00	₹ 50,11,768.08	AOC Earthwork Pawai Minor	60
	BHUTAILI MINOR	1	Job	5165886.88	0.00	₹ 51,65,886.88	AOC Earthwork Bhutaili Minor	62
	SALOPURA MINOR	1	Job	9342442.50	0.00	₹ 93,42,442.50	AOC Earthwork Salopura Minor	64
	SINGHI SUB -DY	1	Job	137270802.59	0.00	₹ 13,72,70,802.59	AOC Earthwork Singhi Sub Dy.	66
	SAHOKARMA MINOR	1	Job	3728239.48	0.00	₹ 37,28,239.48	AOC Earthwork Sahokarma Minor	68
	DHAMNI MINOR	1	Job	12275702.80	0.00	₹ 1,22,75,702.80	AOC Earthwork Dhamani Minor	70
	BHADWA MINOR	1	Job	6929978.12	0.00	₹ 69,29,978.12	AOC Earthwork Bhadwa Minor	72
2	Head Regulator							
	GAMHARIA MINOR	1	No.	1679341.07	11709.08	₹ 16,91,050.15	HR (AOC) Gamharia Minor	84
	NAGWA MINOR	1	No.	1994295.16	12772.37	₹ 20,07,067.53	HR (AOC) Nagwa Minor	87
	PAWAI MINOR	1	No.	1927516.58	13793.50	₹ 19,41,310.08	HR (AOC) Pawai Minor	90
	BHUTAILI MINOR	1	No.	1912760.57	13834.52	₹ 19,26,595.09	HR (AOC) Bhutaili Minor	93
	SALOPURA MINOR	1	No.	2364759.69	17986.09	₹ 23,82,745.79	HR (AOC) Salopura Minor	96
	SINGHI SUB -DY	1	No.	3440826.07	24044.27	₹ 34,64,870.34	HR (AOC) Singhi Sub dy.	99
	SAHOKARMA MINOR	1	No.	1646046.25	11380.18	₹ 16,57,426.42	HR (AOC) Sahokarma Minor	102
	DHAMNI MINOR	1	No.	2119662.34	15291.72	₹ 21,34,954.06	HR (AOC) Dhamani Minor	105
	NAWAKHAP MINOR	1	No.	236817.22	1725.59	₹ 2,38,542.80	HR (AOC) Nawakhap Minor	108
	BHADWA MINOR	1	No.	1671810.89	11382.17	₹ 16,83,193.06	HR (AOC) Bhadwa Minor	111
3	Falls							
	KOTWARA DY.							
	0.457 m Fall at Ch. 5.500 Km	1	No.	2072733.50	19137.48	₹ 20,91,870.99	Fall (AOC) Kotwara Dy.	163
	1.524 m Fall at Ch. 6.750 Km	1	No.	4006129.10	38236.65	₹ 40,44,365.76		166
	1.830 m Fall at Ch. 6.940 Km	1	No.	4908275.25	46886.46	₹ 49,55,161.72		169
	1.524 m Fall at Ch. 10.300 Km	1	No.	4019414.89	38251.06	₹ 40,57,665.95		172
	0.762 m Fall at Ch. 29.875 Km	1	No.	712803.19	6080.61	₹ 7,18,883.80		175
	0.762 m Fall at Ch. 30.000 Km	1	No.	635838.63	5396.81	₹ 6,41,235.44		178
	GAMHARI MINOR							
	No new proposed fall	0	No.	0.00		₹ 0.00		
	NAGWA MINOR							
	No new proposed fall	0	No.	0.00		₹ 0.00		
	PAWAI MINOR							
	1.067m Fall at Ch. 0.200 Km	1	No.	660158.94	5549.15	₹ 6,65,708.08	Fall (AOC) Pawai Minor	181
	0.914 m Fall at Ch. 0.375 Km	1	No.	577679.07	4866.03	₹ 5,82,545.10		184
	1.830 m Fall at Ch. 1.720 Km	1	No.	872624.65	7474.90	₹ 8,80,099.56		187
	BHUTAILI MINOR							
	1.524 m Fall at Ch. 0.580 Km	1	No.	851155.61	7303.94	₹ 8,58,459.55	Fall (AOC) Bhutaili minor	190
	0.610 m Fall at Ch. 1.350 Km	1	No.	452328.26	3803.89	₹ 4,56,132.15		193

S. No.	Items	Qty.	Unit	Rate	Seigniorage Charges	Amount (Rs.) Including Seigniorage Charges	Reference for Rate	Page no.
	SALOPURA MINOR							
	1.220 m Fall at Ch. 0.487 Km	1	No.	729903.11	6222.77	₹ 7,36,125.88	Fall (AOC) Salopura Minor	196
	2.134 m Fall at Ch. 1.185 Km	1	No.	1265252.85	10966.79	₹ 12,76,219.64		199
	1.220 m Fall at Ch. 2.800 Km	1	No.	508568.96	4221.94	₹ 5,12,790.89		202
	SINGHI SUB -DY							
	1.220 m Fall at Ch. 0.650 Km	1	No.	2257844.98	20953.32	₹ 22,78,798.30	Fall (AOC) Singhi Sub-Dy.	205
	1.220 m Fall at Ch. 1.350 Km	1	No.	2238826.66	20953.32	₹ 22,59,779.99		208
	0.305 m Fall at Ch. 2.740 Km	1	No.	1501113.80	13751.30	₹ 15,14,865.10		211
	0.762 m Fall at Ch. 3.850 Km	1	No.	1650322.03	15144.49	₹ 16,65,466.51		214
	1.524 m Fall at Ch. 4.455 Km	1	No.	2733125.09	25552.51	₹ 27,58,677.60		217
	SAHOKARMA MINOR							
	1.220 m Fall at Ch. 0.450 Km	1	No.	715088.87	6085.02	₹ 7,21,173.90	Fall (AOC) Sahokarma Minor	220
	1.524 m Fall at Ch. 0.620 Km	1	No.	1147123.48	9763.84	₹ 11,56,887.32		223
	DHAMNI MINOR							
	1.220 m Fall at Ch. 3.300 Km	1	No.	679916.21	5779.36	₹ 6,85,695.57	Fall (AOC) Dhamani Minor	226
	0.762 m Fall at Ch. 4.800 Km	1	No.	292521.30	2351.54	₹ 2,94,872.83		229
	BHADWA MINOR							
	1.220 m Fall at Ch. 0.450 Km	1	No.	605450.31	5119.94	₹ 6,10,570.25	Fall (AOC) Bhadwa Minor	231
4	*SLR Bridge*							
	KOTWARA DY.							
	At Km 10.925	1	No.	1875174.86	14884.38	₹ 18,90,059.24	Slab-AOC Kotwara Dy.	305
	At Km 11.730	1	No.	2404977.44	19930.07	₹ 24,24,907.50		307
5	*Repair of Structures*							
	KOTWARA DY.	40	No.	5603864.788	20572.23	₹ 56,24,437.02	Abstract (Repair St.) Kotwara Dy.	315
	GAMHARIA MINOR	2	No.	217548.2933	377.34	₹ 2,17,925.63	Abstract (Repair St.) Gamharia Minor	316
	NAGWA MINOR	1	No.	32103.59765	45.16	₹ 32,148.76	Abstract (Repair St.) Nagwa Minor	317
	PAWAI MINOR	5	No.	594353.4765	3140.67	₹ 5,97,494.15	Abstract (Repair St.) Pawai Minor	317
	BHUTAILI MINOR	8	No.	937786.1519	3042.51	₹ 9,40,828.66	Abstract (Repair St.) Bhutaili Minor	317
	SALOPURA MINOR	13	No.	835704.1646	2030.61	₹ 8,37,734.78	Abstract (Repair St.) Salopura Minor	318
	SINGHI SUB -DY	28	No.	3562495.596	17678.80	₹ 35,80,174.40	Abstract (Repair St.) Singhi Sub Dy.	319
	SAHOKARMA MINOR	2	No.	304259.4972	185.23	₹ 3,04,444.72	Abstract (Repair St.) Sahokarma Minor	320
	DHAMNI MINOR	4	No.	156784.0718	687.23	₹ 1,57,471.30	Abstract (Repair St.) Dhamani Minor	320
	BHADWA MINOR	6	No.	310047.2108	363.76	₹ 3,10,410.97	Abstract (Repair St.) Bhadwa Minor	320
6	Outlets							
	KOTWARA DY.	64	No.	127744.47	1100.17	₹ 82,46,057.00	Outlet-AOC	435
	GAMHARI MINOR	5	No.	127744.47	1100.17	₹ 6,44,223.20		435
	NAGWA MINOR	7	No.	127744.47	1100.17	₹ 9,01,912.48		435
	PAWAI MINOR	6	No.	127744.47	1100.17	₹ 7,73,067.84		435
	BHUTAILI MINOR	4	No.	127744.47	1100.17	₹ 5,15,378.56		435
	SALOPURA MINOR	5	No.	127744.47	1100.17	₹ 6,44,223.20		435
	SINGHI SUB -DY	40	No.	127744.47	1100.17	₹ 51,53,785.63		435
	SAHOKARMA MINOR	5	No.	127744.47	1100.17	₹ 6,44,223.20		435
	DHAMNI MINOR	10	No.	127744.47	1100.17	₹ 12,88,446.41		435
	BHADWA MINOR	8	No.	127744.47	1100.17	₹ 10,30,757.13		435
7	Kilometer Stone	75	No.	3853.40	0.00	₹ 2,89,005.00	Rates '!F61	467
	TOTAL (In Rs.)					**388807534.73**		
	TOTAL (In Lacs)					**3888.08**		

	As Per Latest Approved Rates Dec.		
1	Steel & Cement (30 Km)	M.T.	**742.00**
2	RCC Hume Pipe (30 Km)	Per Meter	
	150 mm dia	Per Meter	**82.00**
	600 mm dia	Per Meter	**919.00**
	1000 mm dia	Per Meter	**1470.00**
	1200 mm dia	Per Meter	**1838.00**
3	Bricks (15 Km)	Per 1000 no	**3.18**
4	Boulder (60 Km)	Cumecs	**1159.0**
5	Coarse Sand (60 Km)	Cumecs	**1075.00**
6	Stone Chips/Aggregate (100 Km)	Cumecs	**1398.0**

CARRIAGE OF MATERIAL BY TIPPER OF 18 CUM CAPACITY INCLUDING OVER HEAD CHARGES & C.P																		
Sr No	Name Of Materials	Unit	Gross Tipper Capacity Per Trip	(For Void) Multiplying Factor	Net Tipper capacity (Payable Quantity) Per Trip	Cost of Loading,Unloading & Stacking Per Trip of Tipper (Tipperr capacity 18 cum x Xa_1	Cost of Haulage Per cum			Cost of Haulage Per Tipper of 18 cum capacity (Tipper capacity 18 Cum x H)			Lead in KM			Carriage of Cost =[(18Hsa.Ls+18Hua.Lu+18Hka.Lk)+18 X_a	Per Unit Rate =(col 17 / Net Payable capacity)
							For Surface Road	For Unsurfaced Graveted Road	For Kacha Track & Track in River Bed / Nallah Bed & Choe Bed	For Surface Road	For Unsurfaced Graveted Road	For Kacha Track & Track in River Bed / Nallah Bed & Choe Bed	For Surface Road	For Unsurfaced Graveted Road	For Kacha Track & Track in River Bed / Nallah Bed & Choe Bed		
						$18X_a$	H_{Sa}	H_{ua}	H_{ka}	$18H_{Sa}$	$18H_{Ua}$	$18H_{Ka}$	L_S	L_U	L_K		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Boulder (60 Kms)	M^3	18	0.80	14.4	6507.00	9.10	11.10	22.20	163.80	199.80	399.60	50	10	0	16695	1159.00
2	Stone Aggregate (100 Kms)	M^3	18	0.924	16.63	6507.00	9.10	11.10	22.20	163.80	199.80	399.60	90	10	0	23247	1398.00
3	Sand (60 Kms)	M^3	18	0.924	16.63	6507.00	9.10	11.10	22.20	163.80	199.80	399.60	45	10	5	17874	1075.00

CARRIAGE OF MATERIAL BY TIPPER OF 25 TONNES CAPACITY INCLUDING OVER HEAD CHARGES & C.P																	
Sr No	Name Of Materials	Unit	Gross Tipper Capacity Per Trip	(For Void) Multiplying Factor	Net Tipper capacity (Payable Quantity) Per Trip	Cost of Loading,Unloading & Stacking Per Trip of Tipper (Tipperr capacity 25 t x X_b)	Cost of Haulage Per cum			Cost of Haulage Per Tipper of 8 tonne capacity (Tipper capacity 8x H)			Lead in KM			Carriage of Cost =[(25Hsa.Ls+25Hua.Lu+25Hka.Lk)+25 X_a	Per Unit Rate =(col 17 / Net Payable capacity)
							For Surface Road	For Unsurfaced Graveted Road	For Kacha Track & Track in River Bed / Nallah Bed & Choe Bed	For Surface Road	For Unsurfaced Graveted Road	For Kacha Track & Track in River Bed / Nallah Bed & Choe Bed	For Surface Road	For Unsurfaced Graveted Road	For Kacha Track & Track in River Bed / Nallah Bed & Choe Bed		
						$25X_b$	H_{Sb}	Hub	H_{Kb}	$25H_{Sb}$	$25H_{Ub}$	$25H_{Kb}$	L_S	L_U	L_K		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	**Cement & Steel (30 Kms)**	M.T	25	1	25	13250.00	6.60	8.00	16.00	165.00	200.00	400.00	20	10	0	18550	742.00
2	**Brick ($9^{3/4}$x$4^{3/4}$x$2^{3/4}$) (15 Kms)**	Per % 0	5000	1	5000	13250.00	6.60	8.00	16.00	165.00	200.00	400.00	10	5	0	15900	3180.00
3	**R.C.C hume, A.C. pipe (30 Km)**																
a	**150 mm dia**	mtr	225	1	225	13250.00	6.60	8.00	16.00	165.00	200.00	400.00	25	5	0	18375	82.00
b	**500 mm & 600 mm dia**	mtr	20	1	20	13250.00	6.60	8.00	16.00	165.00	200.00	400.00	25	5	0	18375	919.00
c	**900mm & 1000 mm dia**	mtr	12.5	1	12.5	13250.00	6.60	8.00	16.00	165.00	200.00	400.00	25	5	0	18375	1470.00
d	**1100 & 1200 m dia**	mtr	10	1	10	13250.00	6.60	8.00	16.00	165.00	200.00	400.00	25	5	0	18375	1838.00

NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND

CONCRETE MIX RATIO TABLE

Sl. No.	Mixes	Unit by Volume (Cum)	Crushed Aggregate			
			Cement (bags of 50 kg)	Sand (Cum)	Coarse Aggregate (Cum)	Boulder (Cum)
1	M -10 (1:3:6)	1.00	4.49	0.47	0.94	
2	M -15 (1:2:4)	1.00	6.48	0.45	0.90	
3	M -20 (1:1.5:3)	1.00	8.25	0.43	0.86	
4	M -25 (1:1:2)	1.00	11.34	0.39	0.79	
5	M-30 (1:0.75:1.5)	1.00	13.96	0.36	0.73	
6	RR Masonary (1:4)	1.00	2.880	0.40		1.00
7	Brick Work (1:4)	1.00	2.304	0.320		
8	Cement Plaster (1:4)	1.00	1.037	0.015		
9	Cement Punning	1.00	0.0015			

DETAIL QUANTITIES OF EARTHWORK

KOTWARA SUB DY. (0.000 TO 30.700 KM)

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
0		0.000	0	0	0.000	0	0.000
100	100	8.684	4.342	434.200	3.258	1.629	162.900
200	100	1.645	5.165	516.450	5.082	4.170	417.000
300	100	0.000	0.823	82.250	10.406	7.744	774.400
400	100	0.000	0.000	0.000	14.551	12.479	1247.850
500	100	0.000	0.000	0.000	16.805	15.678	1567.800
600	100	0.167	0.084	8.350	13.850	15.328	1532.750
700	100	0.744	0.456	45.550	12.934	13.392	1339.200
800	100	1.644	1.194	119.400	11.015	11.975	1197.450
900	100	0.118	0.881	88.100	17.550	14.283	1428.250
1000	100	0.140	0.129	12.900	12.818	15.184	1518.400
1100	100	0.164	0.152	15.200	9.057	10.938	1093.750
1200	100	0.190	0.177	17.700	12.575	10.816	1081.600
1300	100	0.219	0.205	20.450	13.050	12.813	1281.250
1400	100	0.249	0.234	23.400	13.648	13.349	1334.900
1500	100	0.282	0.266	26.550	14.253	13.951	1395.050
1600	100	0.317	0.300	29.950	14.819	14.536	1453.600
1700	100	1.509	0.913	91.300	7.489	11.154	1115.400
1800	100	8.053	4.781	478.100	3.065	5.277	527.700
1900	100	12.516	10.285	1028.450	5.890	4.478	447.750
2000	100	8.900	10.708	1070.800	5.870	5.880	588.000
2100	100	5.628	7.264	726.400	4.154	5.012	501.200
2200	100	2.917	4.273	427.250	3.924	4.039	403.900
2300	100	1.081	1.999	199.900	4.816	4.370	437.000
2400	100	1.113	1.097	109.700	5.440	5.128	512.800
2500	100	0.359	0.736	73.600	7.395	6.418	641.750
2600	100	0.644	0.502	50.150	5.458	6.427	642.650
2700	100	0.045	0.345	34.450	6.977	6.218	621.750
2800	100	0.146	0.096	9.550	5.529	6.253	625.300
2900	100	0.330	0.238	23.800	3.364	4.447	444.650
3000	100	0.516	0.423	42.300	3.008	3.186	318.600
3100	100	0.767	0.642	64.150	3.922	3.465	346.500
3200	100	1.159	0.963	96.300	3.736	3.829	382.900
3300	100	1.594	1.377	137.650	4.011	3.874	387.350
3400	100	2.142	1.868	186.800	4.019	4.015	401.500
3500	100	1.762	1.952	195.200	6.053	5.036	503.600
3600	100	1.921	1.842	184.150	6.940	6.497	649.650
3700	100	2.181	2.051	205.100	11.835	9.388	938.750
3800	100	1.387	1.784	178.400	11.380	11.608	1160.750
3900	100	2.906	2.147	214.650	8.294	9.837	983.700
4000	100	5.094	4.000	400.000	4.345	6.320	631.950
4100	100	8.054	6.574	657.400	2.970	3.658	365.750
4200	100	11.777	9.916	991.550	4.372	3.671	367.100
4300	100	16.218	13.998	1399.750	5.642	5.007	500.700

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
4400	100	31.953	24.086	2408.550	5.121	5.382	538.150
4500	100	14.496	23.225	2322.450	4.010	4.566	456.550
4600	100	7.402	10.949	1094.900	11.610	7.810	781.000
4700	100	2.170	4.786	478.600	10.432	11.021	1102.100
4800	100	2.187	2.179	217.850	10.179	10.306	1030.550
4900	100	3.519	2.853	285.300	9.850	10.015	1001.450
5000	100	5.606	4.563	456.250	8.881	9.366	936.550
5100	100	15.129	10.368	1036.750	3.747	6.314	631.400
5200	100	17.917	16.523	1652.300	3.036	3.392	339.150
5300	100	18.739	18.328	1832.800	1.585	2.311	231.050
5400	100	9.919	14.329	1432.900	3.362	2.474	247.350
5500	100	10.310	10.115	1011.450	3.614	3.488	348.800
5600	100	4.754	7.532	753.200	7.926	5.770	577.000
5700	100	4.805	4.780	477.950	5.175	6.551	655.050
5800	100	7.084	5.945	594.450	7.650	6.413	641.250
5900	100	8.133	7.609	760.850	8.334	7.992	799.200
6000	100	12.076	10.105	1010.450	5.462	6.898	689.800
6100	100	7.006	9.541	954.100	4.253	4.858	485.750
6200	100	1.953	4.480	447.950	6.914	5.584	558.350
6300	100	0.000	0.977	97.650	11.720	9.317	931.700
6400	100	0.164	0.082	8.200	6.642	9.181	918.100
6500	100	0.000	0.082	8.200	21.593	14.118	1411.750
6600	100	0.000	0.000	0.000	33.726	27.660	2765.950
6700	100	0.945	0.473	47.250	10.871	22.299	2229.850
6800	100	11.260	6.103	610.250	1.342	6.107	610.650
6900	100	1.363	6.312	631.150	7.745	4.544	454.350
7000	100	11.505	6.434	643.400	5.660	6.703	670.250
7100	100	8.584	10.045	1004.450	8.662	7.161	716.100
7200	100	3.996	6.290	629.000	6.372	7.517	751.700
7300	100	7.167	5.582	558.150	7.048	6.710	671.000
7400	100	4.362	5.765	576.450	6.258	6.653	665.300
7500	100	2.215	3.289	328.850	6.118	6.188	618.800
7600	100	2.580	2.398	239.750	5.481	5.800	579.950
7700	100	3.426	3.003	300.300	6.497	5.989	598.900
7800	100	3.073	3.250	324.950	6.004	6.251	625.050
7900	100	6.146	4.610	460.950	5.621	5.813	581.250
8000	100	12.454	9.300	930.000	7.066	6.344	634.350
8100	100	19.631	16.043	1604.250	8.844	7.955	795.500
8200	100	26.790	23.211	2321.050	8.852	8.848	884.800
8300	100	1.205	13.998	1399.750	7.069	7.961	796.050
8400	100	9.823	5.514	551.400	2.731	4.900	490.000
8500	100	7.168	8.496	849.550	2.742	2.737	273.650
8600	100	4.582	5.875	587.500	3.526	3.134	313.400
8700	100	2.176	3.379	337.900	6.084	4.805	480.500
8800	100	0.756	1.466	146.600	8.284	7.184	718.400
8900	100	0.000	0.378	37.800	10.704	9.494	949.400

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
9000	100	0.125	0.063	6.250	9.675	10.190	1018.950
9100	100	0.000	0.063	6.250	15.245	12.460	1246.000
9200	100	0.000	0.000	0.000	21.587	18.416	1841.600
9300	100	0.000	0.000	0.000	29.378	25.483	2548.250
9400	100	0.000	0.000	0.000	31.228	30.303	3030.300
9500	100	0.000	0.000	0.000	23.759	27.494	2749.350
9600	100	0.000	0.000	0.000	16.538	20.149	2014.850
9700	100	0.665	0.333	33.250	10.551	13.545	1354.450
9800	100	16.651	8.658	865.800	2.939	6.745	674.500
9900	100	10.571	13.611	1361.100	4.297	3.618	361.800
10000	100	5.551	8.061	806.100	6.510	5.404	540.350
10100	100	1.431	3.491	349.100	8.040	7.275	727.500
10200	100	0.000	0.716	71.550	11.616	9.828	982.800
10300	100	12.700	6.350	635.000	7.645	9.631	963.050
10400	100	7.231	9.966	996.550	9.349	8.497	849.700
10500	100	2.523	4.877	487.700	10.926	10.138	1013.750
10600	100	0.796	1.660	165.950	14.665	12.796	1279.550
10700	100	0.755	0.776	77.550	19.379	17.022	1702.200
10800	100	0.102	0.429	42.850	23.123	21.251	2125.100
10900	100	0.000	0.051	5.100	34.231	28.677	2867.700
11000	100	0.000	0.000	0.000	34.231	34.231	3423.100
11100	100	0.000	0.000	0.000	28.552	31.392	3139.150
11200	100	0.000	0.000	0.000	39.538	34.045	3404.500
11300	100	0.000	0.000	0.000	51.788	45.663	4566.300
11400	100	0.000	0.000	0.000	65.142	58.465	5846.500
11500	100	0.000	0.000	0.000	63.488	64.315	6431.500
11600	100	0.000	0.000	0.000	46.814	55.151	5515.100
11700	100	0.000	0.000	0.000	37.656	42.235	4223.500
11800	100	0.000	0.000	0.000	24.576	31.116	3111.600
11900	100	0.141	0.071	7.050	14.917	19.747	1974.650
12000	100	0.691	0.416	41.600	7.670	11.294	1129.350
12100	100	1.778	1.235	123.450	4.431	6.051	605.050
12200	100	2.322	2.050	205.000	4.954	4.693	469.250
12300	100	5.067	3.695	369.450	2.876	3.915	391.500
12400	100	7.760	6.414	641.350	1.266	2.071	207.100
12500	100	9.517	8.639	863.850	2.530	1.898	189.800
12600	100	12.739	11.128	1112.800	1.940	2.235	223.500
12700	100	11.614	12.177	1217.650	2.978	2.459	245.900
12800	100	7.250	9.432	943.200	3.379	3.179	317.850
12900	100	3.772	5.511	551.100	4.950	4.165	416.450
13000	100	8.336	6.054	605.400	3.032	3.991	399.100
13100	100	1.437	4.887	488.650	6.741	4.887	488.650
13200	100	2.422	1.930	192.950	5.247	5.994	599.400
13300	100	0.000	1.211	121.100	12.814	9.031	903.050
13400	100	0.060	0.030	3.000	21.612	17.213	1721.300
13500	100	2.766	1.413	141.300	31.655	26.634	2663.350

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
13600	100	0.223	1.495	149.450	26.140	28.898	2889.750
13700	100	0.000	0.112	11.150	28.927	27.534	2753.350
13800	100	0.455	0.228	22.750	22.363	25.645	2564.500
13900	100	0.244	0.350	34.950	19.968	21.166	2116.550
14000	100	2.323	1.284	128.350	19.292	19.630	1963.000
14100	100	1.553	1.938	193.800	13.998	16.645	1664.500
14200	100	0.249	0.901	90.100	20.546	17.272	1727.200
14300	100	0.361	0.305	30.500	22.093	21.320	2131.950
14400	100	0.000	0.181	18.050	27.246	24.670	2466.950
14500	100	0.000	0.000	0.000	22.304	24.775	2477.500
14600	100	0.000	0.000	0.000	15.543	18.924	1892.350
14700	100	0.000	0.000	0.000	11.993	13.768	1376.800
14800	100	0.834	0.417	41.700	7.619	9.806	980.600
14900	100	2.211	1.523	152.250	2.814	5.217	521.650
15000	100	4.602	3.407	340.650	7.668	5.241	524.100
15100	100	11.134	7.868	786.800	8.668	8.168	816.800
15200	100	14.528	12.831	1283.100	8.382	8.525	852.500
15300	100	10.193	12.361	1236.050	6.916	7.649	764.900
15400	100	7.698	8.946	894.550	4.070	5.493	549.300
15500	100	5.675	6.687	668.650	3.967	4.019	401.850
15600	100	4.258	4.967	496.650	4.406	4.187	418.650
15700	100	3.151	3.705	370.450	5.936	5.171	517.100
15800	100	2.225	2.688	268.800	6.246	6.091	609.100
15900	100	1.770	1.998	199.750	4.883	5.565	556.450
16000	100	6.629	4.200	419.950	7.422	6.153	615.250
16100	100	10.141	8.385	838.500	8.054	7.738	773.800
16200	100	7.244	8.693	869.250	3.022	5.538	553.800
16300	100	3.301	5.273	527.250	4.900	3.961	396.100
16400	100	1.352	2.327	232.650	8.122	6.511	651.100
16500	100	27.335	14.344	1434.350	11.812	9.967	996.700
16600	100	5.367	16.351	1635.100	7.020	9.416	941.600
16700	100	1.301	3.334	333.400	4.874	5.947	594.700
16800	100	1.542	1.422	142.150	2.687	3.781	378.050
16900	100	0.488	1.015	101.500	6.496	4.592	459.150
17000	100	0.686	0.587	58.700	7.280	6.888	688.800
17100	100	1.086	0.886	88.600	7.389	7.335	733.450
17200	100	1.176	1.131	113.100	7.911	7.650	765.000
17300	100	1.368	1.272	127.200	5.214	6.563	656.250
17400	100	5.757	3.563	356.250	4.245	4.730	472.950
17500	100	3.625	4.691	469.100	7.440	5.843	584.250
17600	100	1.092	2.359	235.850	5.702	6.571	657.100
17700	100	1.033	1.063	106.250	3.403	4.553	455.250
17800	100	1.076	1.055	105.450	4.097	3.750	375.000
17900	100	1.156	1.116	111.600	4.777	4.437	443.700
18000	100	1.283	1.220	121.950	5.441	5.109	510.900
18100	100	1.861	1.572	157.200	2.711	4.076	407.600

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
18200	100	2.022	1.942	194.150	3.228	2.970	296.950
18300	100	2.192	2.107	210.700	3.808	3.518	351.800
18400	100	4.260	3.226	322.600	1.480	2.644	264.400
18500	100	0.624	2.442	244.200	5.813	3.647	364.650
18600	100	0.557	0.591	59.050	7.542	6.678	667.750
18700	100	0.380	0.469	46.850	7.590	7.566	756.600
18800	100	0.243	0.312	31.150	8.049	7.820	781.950
18900	100	0.126	0.185	18.450	7.083	7.566	756.600
19000	100	0.055	0.091	9.050	7.531	7.307	730.700
19100	100	10.228	5.142	514.150	2.506	5.019	501.850
19200	100	2.236	6.232	623.200	3.633	3.070	306.950
19300	100	1.536	1.886	188.600	5.311	4.472	447.200
19400	100	1.407	1.472	147.150	6.819	6.065	606.500
19500	100	1.716	1.562	156.150	2.790	4.805	480.450
19600	100	4.655	3.186	318.550	2.551	2.671	267.050
19700	100	8.025	6.340	634.000	1.740	2.146	214.550
19800	100	7.426	7.726	772.550	1.646	1.693	169.300
19900	100	6.143	6.785	678.450	1.877	1.762	176.150
20000	100	4.924	5.534	553.350	1.752	1.815	181.450
20100	100	3.796	4.360	436.000	1.657	1.705	170.450
20200	100	2.385	3.091	309.050	1.746	1.702	170.150
20300	100	1.608	1.997	199.650	1.399	1.573	157.250
20400	100	0.784	1.196	119.600	2.408	1.904	190.350
20500	100	0.349	0.567	56.650	3.669	3.039	303.850
20600	100	0.974	0.662	66.150	2.277	2.973	297.300
20700	100	9.514	5.244	524.400	1.244	1.761	176.050
20800	100	6.793	8.154	815.350	1.431	1.338	133.750
20900	100	3.994	5.394	539.350	1.963	1.697	169.700
21000	100	2.097	3.046	304.550	3.654	2.809	280.850
21100	100	0.549	1.323	132.300	4.145	3.900	389.950
21200	100	0.210	0.380	37.950	4.557	4.351	435.100
21300	100	0.432	0.321	32.100	4.173	4.365	436.500
21400	100	0.183	0.308	30.750	6.550	5.362	536.150
21500	100	2.305	1.244	124.400	1.990	4.270	427.000
21600	100	0.744	1.525	152.450	2.393	2.192	219.150
21700	100	1.285	1.015	101.450	1.937	2.165	216.500
21800	100	1.029	1.157	115.700	1.933	1.935	193.500
21900	100	0.809	0.919	91.900	2.440	2.187	218.650
22000	100	0.367	0.588	58.800	3.481	2.961	296.050
22100	100	0.024	0.196	19.550	5.354	4.418	441.750
22200	100	0.000	0.012	1.200	6.516	5.935	593.500
22300	100	0.031	0.016	1.550	6.135	6.326	632.550
22400	100	7.910	3.971	397.050	2.780	4.458	445.750
22500	100	0.852	4.381	438.100	5.715	4.248	424.750
22600	100	0.000	0.426	42.600	6.410	6.063	606.250
22700	100	0.126	0.063	6.300	6.155	6.283	628.250

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
22800	100	4.425	2.276	227.550	1.846	4.001	400.050
22900	100	3.243	3.834	383.400	2.900	2.373	237.300
23000	100	2.800	3.022	302.150	5.554	4.227	422.700
23100	100	0.069	1.435	143.450	7.686	6.620	662.000
23200	100	0.000	0.035	3.450	40.636	24.161	2416.100
23300	100	0.054	0.027	2.700	4.948	22.792	2279.200
23400	100	0.000	0.027	2.700	5.484	5.216	521.600
23500	100	0.000	0.000	0.000	5.956	5.720	572.000
23600	100	0.000	0.000	0.000	5.954	5.955	595.500
23700	100	0.000	0.000	0.000	6.515	6.235	623.450
23800	100	0.000	0.000	0.000	6.451	6.483	648.300
23900	100	0.000	0.000	0.000	7.756	7.104	710.350
24000	100	0.000	0.000	0.000	8.359	8.058	805.750
24100	100	0.000	0.000	0.000	8.532	8.446	844.550
24200	100	7.352	3.676	367.600	3.285	5.909	590.850
24300	100	2.011	4.682	468.150	3.173	3.229	322.900
24400	100	1.618	1.815	181.450	3.164	3.169	316.850
24500	100	0.828	1.223	122.300	4.554	3.859	385.900
24600	100	0.719	0.774	77.350	7.589	6.072	607.150
24700	100	0.758	0.739	73.850	9.128	8.359	835.850
24800	100	0.583	0.671	67.050	7.926	8.527	852.700
24900	100	0.000	0.292	29.150	8.219	8.073	807.250
25000	100	0.085	0.043	4.250	9.101	8.660	866.000
25100	100	0.231	0.158	15.800	6.719	7.910	791.000
25200	100	0.283	0.257	25.700	4.991	5.855	585.500
25300	100	0.681	0.482	48.200	4.816	4.904	490.350
25400	100	0.287	0.484	48.400	5.636	5.226	522.600
25500	100	0.000	0.144	14.350	6.931	6.284	628.350
25600	100	0.000	0.000	0.000	8.347	7.639	763.900
25700	100	0.000	0.000	0.000	9.857	9.102	910.200
25800	100	0.000	0.000	0.000	11.841	10.849	1084.900
25900	100	0.000	0.000	0.000	10.542	11.192	1119.150
26000	100	0.766	0.383	38.300	6.897	8.720	871.950
26100	100	0.372	0.569	56.900	7.941	7.419	741.900
26200	100	0.005	0.189	18.850	9.366	8.654	865.350
26300	100	0.000	0.003	0.250	11.044	10.205	1020.500
26400	100	0.000	0.000	0.000	8.918	9.981	998.100
26500	100	0.000	0.000	0.000	7.428	8.173	817.300
26600	100	0.000	0.000	0.000	9.310	8.369	836.900
26700	100	0.000	0.000	0.000	11.111	10.211	1021.050
26800	100	1.372	0.686	68.600	4.463	7.787	778.700
26900	100	1.442	1.407	140.700	4.571	4.517	451.700
27000	100	1.864	1.653	165.300	4.366	4.469	446.850
27100	100	0.905	1.385	138.450	5.736	5.051	505.100
27200	100	0.700	0.803	80.250	7.117	6.427	642.650
27300	100	4.162	2.431	243.100	4.585	5.851	585.100

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
27400	100	0.685	2.424	242.350	5.276	4.931	493.050
27500	100	0.000	0.343	34.250	9.392	7.334	733.400
27600	100	11.101	5.551	555.050	5.563	7.478	747.750
27700	100	0.895	5.998	599.800	5.103	5.333	533.300
27800	100	0.664	0.780	77.950	5.271	5.187	518.700
27900	100	0.507	0.586	58.550	5.313	5.292	529.200
28000	100	0.468	0.488	48.750	5.562	5.438	543.750
28100	100	0.437	0.453	45.250	4.761	5.162	516.150
28200	100	0.412	0.425	42.450	4.288	4.525	452.450
28300	100	0.386	0.399	39.900	4.302	4.295	429.500
28400	100	0.362	0.374	37.400	4.224	4.263	426.300
28500	100	0.337	0.350	34.950	4.598	4.411	441.100
28600	100	0.309	0.323	32.300	4.024	4.311	431.100
28700	100	0.274	0.292	29.150	4.036	4.030	403.000
28800	100	4.588	2.431	243.100	2.302	3.169	316.900
28900	100	2.499	3.544	354.350	3.398	2.850	285.000
29000	100	0.803	1.651	165.100	2.535	2.967	296.650
29100	100	0.356	0.580	57.950	2.633	2.584	258.400
29200	100	0.117	0.237	23.650	4.280	3.457	345.650
29300	100	0.000	0.059	5.850	3.278	3.779	377.900
29400	100	2.637	1.319	131.850	2.727	3.003	300.250
29500	100	0.967	1.802	180.200	3.176	2.952	295.150
29600	100	0.248	0.608	60.750	3.599	3.388	338.750
29700	100	3.839	2.044	204.350	1.456	2.528	252.750
29800	100	0.106	1.973	197.250	4.911	3.184	318.350
29900	100	0.981	0.544	54.350	3.289	4.100	410.000
30000	100	2.232	1.607	160.650	3.096	3.193	319.250
30100	100	0.451	1.342	134.150	4.435	3.766	376.550
30200	100	0.008	0.230	22.950	5.062	4.749	474.850
30300	100	2.085	1.047	104.650	3.583	4.323	432.250
30400	100	0.579	1.332	133.200	5.241	4.412	441.200
30500	100	0.947	0.763	76.300	13.958	9.600	959.950
30600	100	0.938	0.943	94.250	5.185	9.572	957.150
30700	100	0.490	0.714	71.400	7.953	6.569	656.900
Total				**93515.300**			**265538.050**
TOTAL QUANTITY OF EARTHWORK IN EXCAVATION							**93515.300**
TOTAL QUANTITY OF EARTHWORK IN BACKFILLING							**265538.050**
NET QUANTITY OF EARTHWORK							**172022.75**

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
DETAIL QUANTITIES OF EARTHWORK GAMHARIA MR (0.000 TO 2.850 KM)							
0		0.000	0	0	0.000	0	0.000
100	100	1.552	0.776	77.600	2.088	1.044	104.400
200	100	0.872	1.212	121.200	5.545	3.817	381.650
300	100	0.777	0.825	82.450	5.716	5.631	563.050
400	100	0.887	0.832	83.200	4.928	5.322	532.200
500	100	1.214	1.051	105.050	4.353	4.641	464.050
600	100	1.690	1.452	145.200	4.091	4.222	422.200
700	100	2.260	1.975	197.500	3.754	3.923	392.250
800	100	2.935	2.598	259.750	4.635	4.195	419.450
900	100	3.738	3.337	333.650	4.470	4.553	455.250
1000	100	0.378	2.058	205.800	9.917	7.194	719.350
1100	100	1.908	1.143	114.300	5.902	7.910	790.950
1200	100	5.083	3.496	349.550	4.525	5.214	521.350
1300	100	0.518	2.801	280.050	7.739	6.132	613.200
1400	100	2.196	1.357	135.700	5.395	6.567	656.700
1500	100	9.225	5.711	571.050	2.708	4.052	405.150
1600	100	4.732	6.979	697.850	5.921	4.315	431.450
1700	100	5.610	5.171	517.100	6.795	6.358	635.800
1800	100	3.570	4.590	459.000	6.450	6.623	662.250
1900	100	1.442	2.506	250.600	6.223	6.337	633.650
2000	100	0.277	0.860	85.950	6.939	6.581	658.100
2100	100	15.011	7.644	764.400	6.838	6.889	688.850
2200	100	3.956	9.484	948.350	5.068	5.953	595.300
2300	100	3.075	3.516	351.550	4.522	4.795	479.500
2400	100	2.778	2.927	292.650	4.331	4.427	442.650
2500	100	2.533	2.656	265.550	6.295	5.313	531.300
2600	100	3.197	2.865	286.500	6.513	6.404	640.400
2700	100	4.526	3.862	386.150	4.228	5.371	537.050
2800	100	0.813	2.670	266.950	6.254	5.241	524.100
2850	50	0.000	0.407	20.325	0.000	3.127	156.350
Total				**8654.975**			**15057.950**
TOTAL QUANTITY OF EARTHWORK IN EXCAVATION							**8654.975**
TOTAL QUANTITY OF EARTHWORK IN BACKFILLING							**15057.950**
NET QUANTITY OF EARTHWORK IN FILLING							**6402.98**

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
DETAIL QUANTITIES OF EARTHWORK NAGWA MR (0.000 TO 1.900 KM)							
0		0.000	0	0	0.000	0	0.000
100	100	0.274	0.137	13.700	3.971	1.986	198.550
200	100	0.162	0.218	21.800	3.562	3.767	376.650
300	100	0.096	0.129	12.900	3.377	3.470	346.950
400	100	0.034	0.065	6.500	3.052	3.215	321.450
500	100	0.047	0.041	4.050	2.658	2.855	285.500
600	100	0.487	0.267	26.700	1.777	2.218	221.750
700	100	1.731	1.109	110.900	0.936	1.357	135.650
800	100	0.685	1.208	120.800	2.064	1.500	150.000
900	100	0.378	0.532	53.150	1.909	1.987	198.650
1000	100	0.264	0.321	32.100	3.262	2.586	258.550
1100	100	0.178	0.221	22.100	4.122	3.692	369.200
1200	100	0.071	0.125	12.450	5.628	4.875	487.500
1300	100	0.029	0.050	5.000	5.979	5.804	580.350
1400	100	0.024	0.027	2.650	6.782	6.381	638.050
1500	100	0.263	0.144	14.350	9.038	7.910	791.000
1600	100	0.298	0.281	28.050	9.596	9.317	931.700
1700	100	0.333	0.316	31.550	9.513	9.555	955.450
1800	100	0.368	0.351	35.050	9.824	9.669	966.850
1900	100	0.402	0.385	38.500	10.221	10.023	1002.250
Total				**592.300**			**9216.050**
TOTAL QUANTITY OF EARTHWORK IN EXCAVATION							**592.300**
TOTAL QUANTITY OF EARTHWORK IN BACKFILLING							**9216.050**
NET QUANTITY OF EARTHWORK IN FILLING							**8623.75**

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
DETAIL QUANTITIES OF EARTHWORK PAWAI MR (0.000 TO 1.850 KM)							
0		0.000	0	0	0.000	0	0.000
100	100	11.643	5.822	582.150	0.990	0.495	49.500
200	100	4.155	7.899	789.900	1.789	1.390	138.950
300	100	0.537	2.346	234.600	5.052	3.421	342.050
400	100	1.938	1.238	123.750	6.093	5.573	557.250
500	100	0.189	1.064	106.350	8.513	7.303	730.300
600	100	0.000	0.095	9.450	10.546	9.530	952.950
700	100	0.076	0.038	3.800	6.921	8.734	873.350
800	100	0.178	0.127	12.700	4.673	5.797	579.700
900	100	0.525	0.352	35.150	4.575	4.624	462.400
1000	100	0.252	0.389	38.850	5.130	4.853	485.250
1100	100	0.000	0.126	12.600	5.681	5.406	540.550
1200	100	0.253	0.127	12.650	3.209	4.445	444.500
1300	100	0.633	0.443	44.300	2.059	2.634	263.400
1400	100	0.000	0.317	31.650	5.089	3.574	357.400
1500	100	1.010	0.505	50.500	3.962	4.526	452.550
1600	100	0.145	0.578	57.750	4.661	4.312	431.150
1700	100	0.000	0.073	7.250	26.732	15.697	1569.650
1800	100	0.000	0.000	0.000	7.079	16.906	1690.550
1850	50	0.000	0.000	0.000	9.103	8.091	404.550
Total				**2153.400**			**11326.000**
TOTAL QUANTITY OF EARTHWORK IN EXCAVATION							**2153.400**
TOTAL QUANTITY OF EARTHWORK IN BACKFILLING							**11326.000**
NET QUANTITY OF EARTHWORK IN FILLING							**9172.60**

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
DETAIL QUANTITIES OF EARTHWORK BHUTAILI MR (0.000 TO 2.000 KM)							
0		0.000	0	0	0.000	0	0.000
100	100	1.749	0.875	87.450	2.945	1.473	147.250
200	100	1.676	1.713	171.250	3.146	3.046	304.550
300	100	0.044	0.860	86.000	10.253	6.700	669.950
400	100	0.123	0.084	8.350	3.161	6.707	670.700
500	100	0.000	0.062	6.150	10.295	6.728	672.800
600	100	2.442	1.221	122.100	4.359	7.327	732.700
700	100	0.074	1.258	125.800	7.046	5.703	570.250
800	100	0.223	0.149	14.850	3.437	5.242	524.150
900	100	0.000	0.112	11.150	8.548	5.993	599.250
1000	100	0.003	0.002	0.150	4.472	6.510	651.000
1100	100	0.000	0.002	0.150	8.482	6.477	647.700
1200	100	0.000	0.000	0.000	2.744	5.613	561.300
1300	100	0.000	0.000	0.000	8.536	5.640	564.000
1400	100	0.025	0.013	1.250	6.247	7.392	739.150
1500	100	1.301	0.663	66.300	6.447	6.347	634.700
1600	100	0.315	0.808	80.800	7.172	6.810	680.950
1700	100	0.591	0.453	45.300	2.171	4.672	467.150
1800	100	0.000	0.296	29.550	8.049	5.110	511.000
1900	100	0.406	0.203	20.300	3.903	5.976	597.600
2000	100	0.005	0.206	20.550	7.561	5.732	573.200
Total				**876.900**			**10946.150**
TOTAL QUANTITY OF EARTHWORK IN EXCAVATION							**876.900**
TOTAL QUANTITY OF EARTHWORK IN BACKFILLING							**10946.150**
NET QUANTITY OF EARTHWORK IN FILLING							**10069.25**

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
DETAIL QUANTITIES OF EARTHWORK SALOPURA MR (0.000 TO 3.050 KM)							
0		0.000	0	0	0.000	0	0.000
100	100	1.792	0.896	89.600	3.816	1.908	190.800
200	100	0.000	0.896	89.600	12.050	7.933	793.300
300	100	6.605	3.303	330.250	2.871	7.461	746.050
400	100	0.351	3.478	347.800	8.205	5.538	553.800
500	100	2.066	1.209	120.850	2.157	5.181	518.100
600	100	0.253	1.160	115.950	8.929	5.543	554.300
700	100	2.728	1.491	149.050	15.637	12.283	1228.300
800	100	0.099	1.414	141.350	7.013	11.325	1132.500
900	100	1.451	0.775	77.500	1.076	4.045	404.450
1000	100	0.564	1.008	100.750	5.505	3.291	329.050
1100	100	0.000	0.282	28.200	15.931	10.718	1071.800
1200	100	0.963	0.482	48.150	1.199	8.565	856.500
1300	100	0.338	0.651	65.050	7.033	4.116	411.600
1400	100	0.000	0.169	16.900	13.601	10.317	1031.700
1500	100	0.633	0.317	31.650	2.521	8.061	806.100
1600	100	0.000	0.317	31.650	8.817	5.669	566.900
1700	100	0.000	0.000	0.000	12.473	10.645	1064.500
1800	100	0.013	0.007	0.650	5.610	9.042	904.150
1900	100	0.021	0.017	1.700	7.974	6.792	679.200
2000	100	0.004	0.013	1.250	7.692	7.833	783.300
2100	100	0.064	0.034	3.400	7.401	7.547	754.650
2200	100	2.229	1.147	114.650	0.775	4.088	408.800
2300	100	1.184	1.707	170.650	0.544	0.660	65.950
2400	100	0.467	0.826	82.550	3.662	2.103	210.300
2500	100	0.001	0.234	23.400	7.807	5.735	573.450
2600	100	0.000	0.001	0.050	12.314	10.061	1006.050
2700	100	0.019	0.010	0.950	9.188	10.751	1075.100
2800	100	3.280	1.650	164.950	1.488	5.338	533.800
2900	100	1.305	2.293	229.250	0.584	1.036	103.600
3000	100	0.005	0.655	65.500	8.264	4.424	442.400
3050	50	0.000	0.003	0.125	19.539	13.902	695.075
Total				**2643.375**			**20495.575**
TOTAL QUANTITY OF EARTHWORK IN EXCAVATION							**2643.375**
TOTAL QUANTITY OF EARTHWORK IN BACKFILLING							**20495.575**
NET QUANTITY OF EARTHWORK IN FILLING							**17852.20**

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
DETAIL QUANTITIES OF EARTHWORK							
SINGHI SUB DISTY (0.000 TO 17.900 KM)							
0		0.000	0	0	0.000	0	0.000
100	100	1.046	0.523	52.300	3.142	1.571	157.100
200	100	9.228	5.137	513.700	3.983	3.563	356.250
300	100	4.350	6.789	678.900	4.313	4.148	414.800
400	100	2.012	3.181	318.100	3.321	3.817	381.700
500	100	18.298	10.155	1015.500	5.157	4.239	423.900
600	100	2.392	10.345	1034.500	3.830	4.494	449.350
700	100	5.471	3.932	393.150	2.755	3.293	329.250
800	100	2.412	3.942	394.150	3.863	3.309	330.900
900	100	0.834	1.623	162.300	3.288	3.576	357.550
1000	100	0.004	0.419	41.900	10.499	6.894	689.350
1100	100	5.005	2.505	250.450	2.279	6.389	638.900
1200	100	1.823	3.414	341.400	8.693	5.486	548.600
1300	100	17.088	9.456	945.550	6.520	7.607	760.650
1400	100	4.587	10.838	1083.750	4.805	5.663	566.250
1500	100	1.634	3.111	311.050	8.524	6.665	666.450
1600	100	0.131	0.883	88.250	13.908	11.216	1121.600
1700	100	0.000	0.066	6.550	20.890	17.399	1739.900
1800	100	0.000	0.000	0.000	28.207	24.549	2454.850
1900	100	11.396	5.698	569.800	5.758	16.983	1698.250
2000	100	9.478	10.437	1043.700	4.808	5.283	528.300
2100	100	9.198	9.338	933.800	3.637	4.223	422.250
2200	100	14.196	11.697	1169.700	6.083	4.860	486.000
2300	100	4.720	9.458	945.800	3.039	4.561	456.100
2400	100	3.777	4.249	424.850	4.375	3.707	370.700
2500	100	2.881	3.329	332.900	5.950	5.163	516.250
2600	100	2.584	2.733	273.250	8.836	7.393	739.300
2700	100	7.722	5.153	515.300	5.206	7.021	702.100
2800	100	5.381	6.552	655.150	3.019	4.113	411.250
2900	100	3.865	4.623	462.300	2.262	2.641	264.050
3000	100	2.470	3.168	316.750	2.070	2.166	216.600
3100	100	2.216	2.343	234.300	3.703	2.887	288.650
3200	100	1.843	2.030	202.950	2.271	2.987	298.700
3300	100	2.903	2.373	237.300	2.300	2.286	228.550
3400	100	1.475	2.189	218.900	2.274	2.287	228.700
3500	100	1.195	1.335	133.500	2.257	2.266	226.550
3600	100	5.453	3.324	332.400	2.922	2.590	258.950
3700	100	3.446	4.450	444.950	4.090	3.506	350.600
3800	100	1.446	2.446	244.600	5.128	4.609	460.900
3900	100	6.906	4.176	417.600	6.891	6.010	600.950
4000	100	3.934	5.420	542.000	9.062	7.977	797.650
4100	100	0.902	2.418	241.800	8.626	8.844	884.400
4200	100	5.084	2.993	299.300	6.541	7.584	758.350
4300	100	2.979	4.032	403.150	4.358	5.450	544.950

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
4400	100	0.244	1.612	161.150	6.854	5.606	560.600
4500	100	2.919	1.582	158.150	23.383	15.119	1511.850
4600	100	0.000	1.460	145.950	23.912	23.648	2364.750
4700	100	0.000	0.000	0.000	24.135	24.024	2402.350
4800	100	0.000	0.000	0.000	19.322	21.729	2172.850
4900	100	0.000	0.000	0.000	18.230	18.776	1877.600
5000	100	0.000	0.000	0.000	19.638	18.934	1893.400
5100	100	0.000	0.000	0.000	17.356	18.497	1849.700
5200	100	0.000	0.000	0.000	23.358	20.357	2035.700
5300	100	0.000	0.000	0.000	21.150	22.254	2225.400
5400	100	0.250	0.125	12.500	8.265	14.708	1470.750
5500	100	0.661	0.456	45.550	11.775	10.020	1002.000
5600	100	0.365	0.513	51.300	15.158	13.467	1346.650
5700	100	0.648	0.507	50.650	18.300	16.729	1672.900
5800	100	0.667	0.658	65.750	19.455	18.878	1887.750
5900	100	0.842	0.755	75.450	28.828	24.142	2414.150
6000	100	1.025	0.934	93.350	20.684	24.756	2475.600
6100	100	1.271	1.148	114.800	18.311	19.498	1949.750
6200	100	1.410	1.341	134.050	20.226	19.269	1926.850
6300	100	0.018	0.714	71.400	25.921	23.074	2307.350
6400	100	1.814	0.916	91.600	19.373	22.647	2264.700
6500	100	3.041	2.428	242.750	18.713	19.043	1904.300
6600	100	3.344	3.193	319.250	17.494	18.104	1810.350
6700	100	3.893	3.619	361.850	17.147	17.321	1732.050
6800	100	2.118	3.006	300.550	19.799	18.473	1847.300
6900	100	0.758	1.438	143.800	22.255	21.027	2102.700
7000	100	0.000	0.379	37.900	26.877	24.566	2456.600
7100	100	0.000	0.000	0.000	29.653	28.265	2826.500
7200	100	0.000	0.000	0.000	28.145	28.899	2889.900
7300	100	0.064	0.032	3.200	27.615	27.880	2788.000
7400	100	0.424	0.244	24.400	24.664	26.140	2613.950
7500	100	0.438	0.431	43.100	16.752	20.708	2070.800
7600	100	0.163	0.301	30.050	21.480	19.116	1911.600
7700	100	0.000	0.082	8.150	25.342	23.411	2341.100
7800	100	0.000	0.000	0.000	25.923	25.633	2563.250
7900	100	0.000	0.000	0.000	34.160	30.042	3004.150
8000	100	0.000	0.000	0.000	32.516	33.338	3333.800
8100	100	0.000	0.000	0.000	37.333	34.925	3492.450
8200	100	0.000	0.000	0.000	33.647	35.490	3549.000
8300	100	0.000	0.000	0.000	32.763	33.205	3320.500
8400	100	0.000	0.000	0.000	29.781	31.272	3127.200
8500	100	0.000	0.000	0.000	27.503	28.642	2864.200
8600	100	0.000	0.000	0.000	29.033	28.268	2826.800
8700	100	0.000	0.000	0.000	31.328	30.181	3018.050
8800	100	0.000	0.000	0.000	29.275	30.302	3030.150
8900	100	0.000	0.000	0.000	35.038	32.157	3215.650

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
9000	100	0.000	0.000	0.000	35.045	35.042	3504.150
9100	100	0.000	0.000	0.000	33.675	34.360	3436.000
9200	100	0.000	0.000	0.000	33.011	33.343	3334.300
9300	100	0.000	0.000	0.000	33.121	33.066	3306.600
9400	100	0.000	0.000	0.000	34.031	33.576	3357.600
9500	100	0.000	0.000	0.000	32.614	33.323	3332.250
9600	100	0.000	0.000	0.000	31.235	31.925	3192.450
9700	100	0.000	0.000	0.000	34.816	33.026	3302.550
9800	100	2.009	1.005	100.450	4.232	19.524	1952.400
9900	100	0.000	1.005	100.450	46.165	25.199	2519.850
10000	100	0.000	0.000	0.000	47.234	46.700	4669.950
10100	100	0.000	0.000	0.000	50.019	48.627	4862.650
10200	100	0.000	0.000	0.000	51.059	50.539	5053.900
10300	100	0.000	0.000	0.000	47.289	49.174	4917.400
10400	100	0.000	0.000	0.000	48.757	48.023	4802.300
10500	100	0.000	0.000	0.000	49.452	49.105	4910.450
10600	100	0.000	0.000	0.000	42.253	45.853	4585.250
10700	100	0.000	0.000	0.000	40.587	41.420	4142.000
10800	100	0.000	0.000	0.000	38.969	39.778	3977.800
10900	100	0.000	0.000	0.000	37.477	38.223	3822.300
11000	100	0.000	0.000	0.000	36.863	37.170	3717.000
11100	100	0.009	0.005	0.450	35.541	36.202	3620.200
11200	100	0.032	0.021	2.050	35.156	35.349	3534.850
11300	100	0.000	0.016	1.600	32.637	33.897	3389.650
11400	100	0.000	0.000	0.000	32.673	32.655	3265.500
11500	100	0.000	0.000	0.000	32.679	32.676	3267.600
11600	100	0.000	0.000	0.000	33.087	32.883	3288.300
11700	100	0.000	0.000	0.000	29.788	31.438	3143.750
11800	100	0.000	0.000	0.000	19.989	24.889	2488.850
11900	100	0.000	0.000	0.000	27.896	23.943	2394.250
12000	100	0.000	0.000	0.000	35.243	31.570	3156.950
12100	100	0.000	0.000	0.000	33.732	34.488	3448.750
12200	100	0.000	0.000	0.000	30.722	32.227	3222.700
12300	100	0.000	0.000	0.000	33.955	32.339	3233.850
12400	100	0.000	0.000	0.000	27.627	30.791	3079.100
12500	100	0.000	0.000	0.000	23.845	25.736	2573.600
12600	100	0.172	0.086	8.600	22.917	23.381	2338.100
12700	100	0.581	0.377	37.650	21.913	22.415	2241.500
12800	100	1.048	0.815	81.450	20.844	21.379	2137.850
12900	100	0.000	0.524	52.400	26.887	23.866	2386.550
13000	100	0.000	0.000	0.000	24.720	25.804	2580.350
13100	100	0.000	0.000	0.000	24.106	24.413	2441.300
13200	100	0.034	0.017	1.700	19.325	21.716	2171.550
13300	100	0.122	0.078	7.800	17.376	18.351	1835.050
13400	100	0.046	0.084	8.400	2.614	9.995	999.500
13500	100	0.168	0.107	10.700	4.349	3.482	348.150

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
13600	100	0.573	0.371	37.050	4.281	4.315	431.500
13700	100	1.723	1.148	114.800	5.423	4.852	485.200
13800	100	2.813	2.268	226.800	4.784	5.104	510.350
13900	100	3.796	3.305	330.450	4.025	4.405	440.450
14000	100	4.933	4.365	436.450	5.128	4.577	457.650
14100	100	6.205	5.569	556.900	4.223	4.676	467.550
14200	100	7.621	6.913	691.300	5.277	4.750	475.000
14300	100	6.163	6.892	689.200	2.487	3.882	388.200
14400	100	3.694	4.929	492.850	2.327	2.407	240.700
14500	100	4.136	3.915	391.500	2.935	2.631	263.100
14600	100	1.193	2.665	266.450	4.682	3.809	380.850
14700	100	0.059	0.626	62.600	5.392	5.037	503.700
14800	100	0.151	0.105	10.500	6.726	6.059	605.900
14900	100	1.517	0.834	83.400	2.729	4.728	472.750
15000	100	0.847	1.182	118.200	2.895	2.812	281.200
15100	100	0.350	0.599	59.850	3.160	3.028	302.750
15200	100	0.041	0.196	19.550	4.661	3.911	391.050
15300	100	0.000	0.021	2.050	5.107	4.884	488.400
15400	100	0.000	0.000	0.000	6.248	5.678	567.750
15500	100	0.000	0.000	0.000	6.864	6.556	655.600
15600	100	0.000	0.000	0.000	4.841	5.853	585.250
15700	100	0.088	0.044	4.400	2.871	3.856	385.600
15800	100	1.861	0.975	97.450	5.574	4.223	422.250
15900	100	3.176	2.519	251.850	1.389	3.482	348.150
16000	100	3.317	3.247	324.650	2.466	1.928	192.750
16100	100	0.000	1.659	165.850	1.700	2.083	208.300
16200	100	0.333	0.167	16.650	2.266	1.983	198.300
16300	100	6.383	3.358	335.800	2.879	2.573	257.250
16400	100	2.091	4.237	423.700	2.650	2.765	276.450
16500	100	0.556	1.324	132.350	2.686	2.668	266.800
16600	100	0.117	0.337	33.650	4.216	3.451	345.100
16700	100	0.000	0.059	5.850	5.967	5.092	509.150
16800	100	0.000	0.000	0.000	7.176	6.572	657.150
16900	100	3.178	1.589	158.900	3.206	5.191	519.100
17000	100	0.632	1.905	190.500	3.313	3.260	325.950
17100	100	0.392	0.512	51.200	3.565	3.439	343.900
17200	100	0.111	0.252	25.150	4.580	4.073	407.250
17300	100	0.016	0.064	6.350	5.612	5.096	509.600
17400	100	0.000	0.008	0.800	5.509	5.561	556.050
17500	100	0.000	0.000	0.000	5.188	5.349	534.850
17600	100	3.908	1.954	195.400	1.987	3.588	358.750

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
17700	100	0.746	2.327	232.700	3.441	2.714	271.400
17800	100	3.424	2.085	208.500	1.345	2.393	239.300
17900	100	1.015	2.220	221.950	4.190	2.768	276.750
Total				**30101.450**			**296471.400**
TOTAL QUANTITY OF EARTHWORK IN EXCAVATION							**30101.450**
TOTAL QUANTITY OF EARTHWORK IN BACKFILLING							**296471.400**
NET QUANTITY OF EARTHWORK IN FILLING							**266369.95**

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
DETAIL QUANTITIES OF EARTHWORK SAHOKARMA MR (0.000 TO 1.600 KM)							
0		0.000	0	0	0.000	0	0.000
100	100	2.393	1.197	119.650	1.841	0.921	92.050
200	100	7.537	4.965	496.500	2.201	2.021	202.100
300	100	4.293	5.915	591.500	1.911	2.056	205.600
400	100	0.425	2.359	235.900	3.708	2.810	280.950
500	100	0.809	0.617	61.700	3.911	3.810	380.950
600	100	0.000	0.405	40.450	9.132	6.522	652.150
700	100	1.901	0.951	95.050	2.786	5.959	595.900
800	100	0.231	1.066	106.600	4.706	3.746	374.600
900	100	0.000	0.116	11.550	14.901	9.804	980.350
1000	100	1.776	0.888	88.800	3.268	9.085	908.450
1100	100	1.583	1.680	167.950	1.894	2.581	258.100
1200	100	0.114	0.849	84.850	5.247	3.571	357.050
1300	100	0.000	0.057	5.700	13.237	9.242	924.200
1400	100	0.723	0.362	36.150	3.608	8.423	842.250
1500	100	0.275	0.499	49.900	2.648	3.128	312.800
1600	100	0.000	0.138	13.750	6.526	4.587	458.700
Total				**2206.000**			**7826.200**
TOTAL QUANTITY OF EARTHWORK IN EXCAVATION							**2206.000**
TOTAL QUANTITY OF EARTHWORK IN BACKFILLING							**7826.200**
NET QUANTITY OF EARTHWORK IN FILLING							**5620.20**

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
DETAIL QUANTITIES OF EARTHWORK DHAMINI SUB DY (0.000 TO 5.300 KM)							
0		0.000	0	0	0.000	0	0.000
100	100	0.000	0.000	0.000	5.616	2.808	280.800
200	100	1.105	0.553	55.250	5.495	5.556	555.550
300	100	2.971	2.038	203.800	4.844	5.170	516.950
400	100	5.343	4.157	415.700	4.022	4.433	443.300
500	100	6.799	6.071	607.100	2.587	3.305	330.450
600	100	6.558	6.679	667.850	1.733	2.160	216.000
700	100	6.471	6.515	651.450	1.629	1.681	168.100
800	100	6.075	6.273	627.300	1.961	1.795	179.500
900	100	5.128	5.602	560.150	1.295	1.628	162.800
1000	100	4.203	4.666	466.550	1.224	1.260	125.950
1100	100	3.386	3.795	379.450	1.488	1.356	135.600
1200	100	2.659	3.023	302.250	1.637	1.563	156.250
1300	100	2.004	2.332	233.150	2.573	2.105	210.500
1400	100	1.204	1.604	160.400	3.392	2.983	298.250
1500	100	0.653	0.929	92.850	3.925	3.659	365.850
1600	100	0.238	0.446	44.550	5.394	4.660	465.950
1700	100	0.000	0.119	11.900	8.742	7.068	706.800
1800	100	0.000	0.000	0.000	12.281	10.512	1051.150
1900	100	1.089	0.545	54.450	2.666	7.474	747.350
2000	100	0.015	0.552	55.200	7.476	5.071	507.100
2100	100	0.000	0.008	0.750	15.305	11.391	1139.050
2200	100	0.860	0.430	43.000	3.530	9.418	941.750
2300	100	0.587	0.724	72.350	4.560	4.045	404.500
2400	100	0.400	0.494	49.350	5.155	4.858	485.750
2500	100	0.199	0.300	29.950	6.048	5.602	560.150
2600	100	0.000	0.100	9.950	7.822	6.935	693.500
2700	100	2.106	1.053	105.300	4.998	6.410	641.000
2800	100	0.095	1.101	110.050	6.203	5.601	560.050
2900	100	0.000	0.048	4.750	9.596	7.900	789.950
3000	100	0.000	0.000	0.000	14.540	12.068	1206.800
3100	100	0.942	0.471	47.100	3.767	9.154	915.350
3200	100	0.000	0.471	47.100	7.201	5.484	548.400
3300	100	1.519	0.760	75.950	6.374	6.788	678.750
3400	100	0.614	1.067	106.650	4.424	5.399	539.900
3500	100	0.037	0.326	32.550	4.280	4.352	435.200
3600	100	0.000	0.019	1.850	9.239	6.760	675.950
3700	100	0.032	0.016	1.600	8.567	8.903	890.300
3800	100	0.081	0.057	5.650	8.056	8.312	831.150
3900	100	0.136	0.109	10.850	7.534	7.795	779.500
4000	100	0.196	0.166	16.600	6.975	7.255	725.450
4100	100	0.170	0.183	18.300	6.047	6.511	651.100
4200	100	0.155	0.163	16.250	4.619	5.333	533.300
4300	100	0.201	0.178	17.800	4.840	4.730	472.950

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum
4400	100	0.138	0.170	16.950	4.770	4.805	480.500
4500	100	0.295	0.217	21.650	4.365	4.568	456.750
4600	100	0.257	0.276	27.600	4.345	4.355	435.500
4700	100	0.411	0.334	33.400	4.302	4.324	432.350
4800	100	1.358	0.885	88.450	3.826	4.064	406.400
4900	100	1.073	1.216	121.550	4.447	4.137	413.650
5000	100	0.803	0.938	93.800	4.495	4.471	447.100
5100	100	0.532	0.668	66.750	5.339	4.917	491.700
5200	100	0.262	0.397	39.700	4.292	4.816	481.550
5300	100	0.000	0.131	13.100	6.164	5.228	522.800
Total				**6936.000**			**28292.300**
TOTAL QUANTITY OF EARTHWORK IN EXCAVATION							**6936.000**
TOTAL QUANTITY OF EARTHWORK IN BACKFILLING							**28292.300**
NET QUANTITY OF EARTHWORK IN FILLING							**21356.30**

		Earthwork in Cutting			Earthwork in filling		
Chainge	Length	Area of Cutting	Average area of Cutting	Earth work in Cutting	Area of Filling	Average area of Filling	Earth work in Filling
m	m	sq-m	sq-m	Cum	sq-m	sq-m	Cum

DETAIL QUANTITIES OF EARTHWORK
BHADWA MR (0.000 TO 2.900 KM)

0		0.000	0	0	0.000	0	0.000
100	100	1.393	0.697	69.650	3.247	1.624	162.350
200	100	1.463	1.428	142.800	3.379	3.313	331.300
300	100	1.623	1.543	154.300	3.229	3.304	330.400
400	100	0.580	1.102	110.150	6.854	5.042	504.150
500	100	0.546	0.563	56.300	5.922	6.388	638.800
600	100	0.514	0.530	53.000	5.927	5.925	592.450
700	100	0.483	0.499	49.850	6.373	6.150	615.000
800	100	0.453	0.468	46.800	5.882	6.128	612.750
900	100	0.429	0.441	44.100	6.148	6.015	601.500
1000	100	0.279	0.354	35.400	7.001	6.575	657.450
1100	100	0.059	0.169	16.900	5.874	6.438	643.750
1200	100	0.000	0.030	2.950	7.251	6.563	656.250
1300	100	0.000	0.000	0.000	6.988	7.120	711.950
1400	100	0.000	0.000	0.000	10.414	8.701	870.100
1500	100	1.823	0.912	91.150	3.792	7.103	710.300
1600	100	0.411	1.117	111.700	2.101	2.947	294.650
1700	100	2.041	1.226	122.600	0.953	1.527	152.700
1800	100	0.499	1.270	127.000	2.531	1.742	174.200
1900	100	0.000	0.250	24.950	14.923	8.727	872.700
2000	100	0.577	0.289	28.850	3.920	9.422	942.150
2100	100	0.000	0.289	28.850	3.732	3.826	382.600
2200	100	1.011	0.506	50.550	3.907	3.820	381.950
2300	100	1.377	1.194	119.400	4.535	4.221	422.100
2400	100	0.507	0.942	94.200	4.932	4.734	473.350
2500	100	0.356	0.432	43.150	3.857	4.395	439.450
2600	100	0.393	0.375	37.450	2.207	3.032	303.200
2700	100	0.820	0.607	60.650	4.004	3.106	310.550
2800	100	0.043	0.432	43.150	6.488	5.246	524.600
2900	100	0.000	0.022	2.150	6.148	6.318	631.800
Total				**1768.000**			**14944.500**
TOTAL QUANTITY OF EARTHWORK IN EXCAVATION							**1768.000**
TOTAL QUANTITY OF EARTHWORK IN BACKFILLING							**14944.500**
NET QUANTITY OF EARTHWORK IN FILLING							**13176.50**

NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND				
KOTWARA SUB DY. (0.000 TO 30.800 KM)				
JUNGLE CLEARANCE QUANTITY				
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Quantity**	
0.00 - 5.120	5120	11.37	58214.40	Sqm
5.120 - 13.020	7900	10.460	82634.00	Sqm
13.020 - 16.200	3180	6.670	21210.60	Sqm
16.200 - 17.350	1150	6.310	7256.50	Sqm
17.350 - 20.200	2850	5.750	16387.50	Sqm
20.200 - 21.350	1150	5.380	6187.00	Sqm
21.350 - 23.830	2480	5.150	12772.00	Sqm
23.830 - 26.400	2570	4.670	12001.90	Sqm
26.400 - 27.075	675	4.230	2855.25	Sqm
27.075 - 28.800	1725	3.270	5640.75	Sqm
28.800 - 29.000	200	2.790	558.00	Sqm
29.000 - 30.000	1000	2.410	2410.00	Sqm
30.000 - 30.350	350	1.910	668.50	Sqm
30.350 - 30.650	300	1.580	474.00	Sqm
30.650 - 30.800	150	1.300	195.00	Sqm
	TOTAL		**216663.90**	**Sqm**

LIP CUTTING QUANTITY					
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Thickness (m)**	**Quantity**	
0.00 - 5.120	5120	11.370	0.15	8732.16	Cum
5.120 - 13.020	7900	10.460	0.15	12395.10	Cum
13.020 - 16.200	3180	6.670	0.15	3181.59	Cum
16.200 - 17.350	1150	6.310	0.15	1088.48	Cum
17.350 - 20.200	2850	5.750	0.15	2458.13	Cum
20.200 - 21.350	1150	5.380	0.15	928.05	Cum
21.350 - 23.830	2480	5.150	0.15	1915.80	Cum
23.830 - 26.400	2570	4.670	0.15	1800.29	Cum
26.400 - 27.075	675	4.230	0.15	428.29	Cum
27.075 - 28.800	1725	3.270	0.15	846.11	Cum
28.800 - 29.000	200	2.790	0.15	83.70	Cum
29.000 - 30.000	1000	2.410	0.15	361.50	Cum
30.000 - 30.350	350	1.910	0.15	100.28	Cum
30.350 - 30.650	300	1.580	0.15	71.10	Cum
30.650 - 30.800	150	1.300	0.15	29.25	Cum
	TOTAL			**32499.59**	**Cum**

GAMHARIA MINOR (0.000 TO 2.850 KM)				
JUNGLE CLEARANCE QUANTITY				
Reaches (km)	Length (m)	Perimeter (m)	Quantity	
0.00 - 1.000	1000	2.17	2170.00	Sqm
1.000 - 1.500	500	1.91	955.00	Sqm
1.500 - 2.200	700	1.54	1078.00	Sqm
2.200 - 2.850	650	1.25	812.50	Sqm
	TOTAL		**5015.50**	**Sqm**

LIP CUTTING QUANTITY					
Reaches (km)	Length (m)	Perimeter (m)	Thickness (m)	Quantity	
0.00 - 1.000	2300	2.17	0.15	748.65	Cum
1.000 - 1.500	1850	1.91	0.15	530.03	Cum
1.500 - 2.200	800	1.54	0.15	184.80	Cum
2.200 - 2.850	801	1.25	1.15	1151.44	Cum
	TOTAL			**2614.91**	**Cum**

NAGWA MINOR (0.000 TO 1.950 KM)				
JUNGLE CLEARANCE QUANTITY				
Reaches (km)	Length (m)	Perimeter (m)	Quantity	
0.00 - 0.150	150	2.660	399.00	Sqm
0.150 - 1.150	1000	2.320	2320.00	Sqm
1.150 - 1.450	300	1.890	567.00	Sqm
1.450 - 1.950	500	1.300	650.00	Sqm
	TOTAL		**3936.00**	**Sqm**

LIP CUTTING QUANTITY					
Reaches (km)	Length (m)	Perimeter (m)	Thickness (m)	Quantity	
0.00 - 0.150	150	2.66	0.15	59.85	Cum
0.150 - 1.150	1000	2.32	0.15	348.00	Cum
1.150 - 1.450	300	1.89	0.15	85.05	Cum
1.450 - 1.950	500	1.30	1.15	747.50	Cum
	TOTAL			**1240.40**	**Cum**

PAWAI MINOR (0.000 TO 1.900 KM)				
JUNGLE CLEARANCE QUANTITY				
Reaches (km)	Length (m)	Perimeter (m)	Quantity	
0.00 - 0.450	450	2.21	994.50	Sqm
0.450 - 1.100	650	1.89	1228.50	Sqm
1.100 - 1.400	300	1.4	420.00	Sqm
1.400 - 1.900	500	1.599	799.50	Sqm
	TOTAL		**3442.50**	**Sqm**

LIP CUTTING QUANTITY					
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Thickness (m)**	**Quantity**	
0.00 - 0.450	450	2.21	0.15	149.18	Cum
0.450 - 1.100	650	1.89	0.15	184.28	Cum
1.100 - 1.400	300	1.89	0.15	85.05	Cum
1.400 - 1.900	500	1.599	0.15	119.93	Cum
	TOTAL			**538.43**	**Cum**

BHUTAILI MR. (0.000 TO 2.050 KM)				
JUNGLE CLEARANCE QUANTITY				
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Quantity**	
0.00 -0.650	650	2.21	1436.50	Sqm
0.650 - 1.625	975	1.89	1842.75	Sqm
1.625 - 2.050	425	1.4	595.00	Sqm
	TOTAL		**3874.25**	**Sqm**

LIP CUTTING QUANTITY					
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Thickness (m)**	**Quantity**	
0.00 -0.650	650	2.21	0.15	215.48	Cum
0.650 - 1.625	975	1.89	0.15	276.41	Cum
1.625 - 2.050	425	1.4	0.15	89.25	Cum
	TOTAL			**581.14**	**Cum**

SALOPURA MR (0.000 TO 3.100 KM)				
JUNGLE CLEARANCE QUANTITY				
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Quantity**	
0.00 - 0.710	710	2.32	1647.20	Sqm
0.710 - 1.350	640	1.94	1241.60	Sqm
1.350 - 3.100	1750	1.42	2485.00	Sqm
	TOTAL		**5373.80**	**Sqm**

LIP CUTTING QUANTITY					
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Thickness (m)**	**Quantity**	
0.00 - 0.710	710	2.32	0.15	247.08	Cum
0.710 - 1.350	640	1.94	0.15	186.24	Cum
1.350 - 3.100	1750	1.42	0.15	372.75	Cum
	TOTAL			**806.07**	**Cum**

SINGHI SUB - DY. MIINOR (0.000 TO 17.950 KM)				
JUNGLE CLEARANCE QUANTITY				
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Quantity**	
0.00 - 2.800	2800	6.41	17948.00	Sqm
2.800 - 4.584	1784	5.96	10632.64	Sqm
4.584 - 7.000	2416	5.29	12780.64	Sqm
7.000 - 10.250	3250	4.94	16055.00	Sqm
10.250 - 12.550	2300	4.66	10718.00	Sqm
12.550 - 13.380	830	4.11	3411.30	Sqm
13.380 - 15.200	1820	2.09	3803.80	Sqm
15.200 - 17.950	2750	1.56	4290.00	Sqm
	TOTAL		**79639.38**	**Sqm**

LIP CUTTING QUANTITY					
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Thickness (m)**	**Quantity**	
0.00 - 2.800	2800	6.410	0.15	2692.20	Cum
2.800 - 4.584	1784	5.960	0.15	1594.90	Cum
4.584 - 7.000	2416	5.290	0.15	1917.10	Cum
7.000 - 10.250	3250	4.940	0.15	2408.25	Cum
10.250 - 12.550	2300	4.660	0.15	1607.70	Cum
12.550 - 13.380	830	4.110	0.15	511.70	Cum
13.380 - 15.200	1820	2.090	0.15	570.57	Cum
15.200 - 17.950	2750	1.560	0.15	643.50	Cum
	TOTAL			**11945.91**	**Cum**

SAHOKARMA MR. (0.000 TO 1.950 KM)				
JUNGLE CLEARANCE QUANTITY				
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Quantity**	
0.00 - 1.000	1000	2.17	2170.00	Sqm
1.000 - 1.400	400	1.81	724.00	Sqm
1.400 - 1.950	550	1.2	660.00	Sqm
	TOTAL		**3554.00**	**Sqm**

LIP CUTTING QUANTITY					
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Thickness (m)**	**Quantity**	
0.00 - 1.000	1000	2.17	0.15	325.50	Cum
1.000 - 1.400	400	1.81	1.15	832.60	Cum
1.400 - 1.950	550	1.2	2.15	1419.00	Cum
	TOTAL			**2577.10**	**Cum**

DHAMNI MIINOR (0.000 TO 5.400 KM)				
JUNGLE CLEARANCE QUANTITY				
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Quantity**	
0.00 - 1.350	1350	3.040	4104.00	Sqm
1.350 - 3.050	1700	2.580	4386.00	Sqm
3.050 - 3.300	250	2.170	542.50	Sqm
3.300 - 4.450	1150	1.84	2116.00	Sqm
4.450 - 5.400	950	1.4	1330.00	Sqm
	TOTAL		**12478.50**	**Sqm**

LIP CUTTING QUANTITY					
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Thickness (m)**	**Quantity**	
0.00 - 1.350	1350	3.040	0.15	615.60	Cum
1.350 - 3.050	1700	2.580	0.15	657.90	Cum
3.050 - 3.300	250	2.170	0.15	81.38	Cum
3.300 - 4.450	1150	1.840	0.15	317.40	Cum
4.450 - 5.400	950	1.400	0.15	199.50	Cum
	TOTAL			**1871.78**	**Cum**

BHADWA MINOR (0.000 TO 3.000 KM)				
JUNGLE CLEARANCE QUANTITY				
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Quantity**	
0.00 - 1.000	1000	2.63	2630.00	Sqm
1.000 - 1.600	600	2.01	1206.00	Sqm
1.600 - 2.000	400	1.79	716.00	Sqm
2.000 - 3.000	1000	1.25	1250.00	Sqm
	TOTAL		**5802.00**	**Sqm**

LIP CUTTING QUANTITY					
Reaches (km)	**Length (m)**	**Perimeter (m)**	**Thickness (m)**	**Quantity**	
0.00 - 1.000	1000	2.63	0.15	394.50	Cum
1.000 - 1.600	600	2.01	0.15	180.90	Cum
1.600 - 2.000	400	1.79	0.15	107.40	Cum
2.000 - 3.000	1000	1.25	0.15	187.50	Cum
	TOTAL			**870.30**	**Cum**

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND				
DETAILS OF QUANTITIES FOR EARTH WORK FOR KOTWARA DISTRIBUTARY				
S.No.	**Items**	**No.**	**Quantity**	**Unit**
1	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.			
	Separate sheet attached	1	*216663.90*	***Sqm***
2	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I. **(Total Excavation) Separate sheet attached.**			
a.	100% of Total Cutting for ordinary soil	1	93515.300	Cum
3	Extra for wet earth all complete as per specifications and direction of E/I.			
	(40% of Total Cutting)	1	37406.12	Cum
4	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.			
	Excavated earth to be used for filling	1	172022.750	Cum
5	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)			
a.	Lead Beyond 150 m but upto 500 m (30 % of net filling)	1	51606.83	Cum
b.	Lead Beyond 500 m but upto 1 km (25% of net filling)	1	43005.69	Cum

S.No.	Items	No.	Quantity	Unit
c.	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	1	77410.24	Cum
6	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.	1	32499.59	Cum
7	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.			
	Total quantity of filling	1	265538.05	Cum

S.No.	Items	No.	Quantity	Unit
	DETAILS OF QUANTITIES FOR EARTH WORK FOR GAMHARIA MR.			
1	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.			
	Separate sheet attached	1	***5015.50***	***Sqm***
2	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I. **(Total Excavation) Separate sheet attached.**			
a.	100% of Total Cutting for ordinary soil	1	8654.975	Cum
3	Extra for wet earth all complete as per specifications and direction of E/I.			
	(40% of Total Cutting)	1	3461.99	Cum
4	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.			
	Excavated earth to be used for filling	1	6402.975	Cum
5	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)			
a.	Lead Beyond 150 m but upto 500 m (30 % of net filling)	1	1920.89	Cum
b.	Lead Beyond 500 m but upto 1 km (25% of net filling)	1	1600.74	Cum

S.No.	Items	No.	Quantity	Unit
c.	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	1	2881.34	Cum
6	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.	1	2614.91	Cum
7	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.			
	Total quantity of filling	1	15057.95	Cum

S.No.	Items	No.	Quantity	Unit
	DETAILS OF QUANTITIES FOR EARTH WORK FOR NAGWA MR.			
1	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.			
	Separate sheet attached	1	***3936.00***	***Sqm***
2	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I. **(Total Excavation) Separate sheet attached.**			
a.	100% of Total Cutting for ordinary soil	1	592.300	Cum
3	Extra for wet earth all complete as per specifications and direction of E/I.			
	(40% of Total Cutting)	1	236.92	Cum
4	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.			
	Excavated earth to be used for filling	1	8623.750	Cum
5	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)			
a.	Lead Beyond 150 m but upto 500 m (30 % of net filling)	1	2587.13	Cum
b.	Lead Beyond 500 m but upto 1 km (25% of net filling)	1	2155.94	Cum
c.	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	1	3880.69	Cum

S.No.	Items	No.	Quantity	Unit
6	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.	1	1240.40	Cum
7	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.			
	Total quantity of filling	1	9216.05	Cum

S.No.	Items	No.	Quantity	Unit
	DETAILS OF QUANTITIES FOR EARTH WORK FOR PAWAI MINOR			
1	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.			
	Separate sheet attached	1	***3442.50***	***Sqm***
2	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I. **(Total Excavation) Separate sheet attached.**			
a.	100% of Total Cutting for ordinary soil	1	2153.400	Cum
3	Extra for wet earth all complete as per specifications and direction of E/I.			
	(40% of Total Cutting)	1	861.36	Cum
4	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.			
	Excavated earth to be used for filling	1	9172.600	Cum
5	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)			
a.	Lead Beyond 150 m but upto 500 m (30 % of net filling)	1	2751.78	Cum
b.	Lead Beyond 500 m but upto 1 km (25% of net filling)	1	2293.15	Cum
c.	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	1	4127.67	Cum

S.No.	Items	No.	Quantity	Unit
6	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.	1	538.43	Cum
7	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.			
	Total quantity of filling	1	11326.00	Cum

S.No.	Items	No.	Quantity	Unit
	DETAILS OF QUANTITIES FOR EARTH WORK FOR BHUTAILI MINOR			
1	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.			
	Separate sheet attached	1	***3874.25***	***Sqm***
2	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I. **(Total Excavation) Separate sheet attached.**			
a.	100% of Total Cutting for ordinary soil	1	876.900	Cum
3	Extra for wet earth all complete as per specifications and direction of E/I.			
	(40% of Total Cutting)	1	350.76	Cum
4	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.			
	Excavated earth to be used for filling	1	10069.250	Cum
5	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)			
a.	Lead Beyond 150 m but upto 500 m (30 % of net filling)	1	3020.78	Cum
b.	Lead Beyond 500 m but upto 1 km (25% of net filling)	1	2517.31	Cum
c.	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	1	4531.16	Cum

S.No.	Items	No.	Quantity	Unit
6	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.	1	581.14	Cum
7	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.			
	Total quantity of filling	1	10946.15	Cum

S.No.	Items	No.	Quantity	Unit
	DETAILS OF QUANTITIES FOR EARTH WORK FOR SALOPURA MINOR			
1	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.			
	Separate sheet attached	1	***5373.80***	***Sqm***
2	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I. **(Total Excavation) Separate sheet attached.**			
a.	100% of Total Cutting for ordinary soil	1	2643.375	Cum
3	Extra for wet earth all complete as per specifications and direction of E/I.			
	(40% of Total Cutting)	1	1057.35	Cum
4	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.			
	Excavated earth to be used for filling	1	17852.200	Cum
5	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)			
a.	Lead Beyond 150 m but upto 500 m (30 % of net filling)	1	5355.66	Cum
b.	Lead Beyond 500 m but upto 1 km (25% of net filling)	1	4463.05	Cum
c.	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	1	8033.49	Cum

S.No.	Items	No.	Quantity	Unit
6	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.	1	806.07	Cum
7	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.			
	Total quantity of filling	1	20495.58	Cum

S.No.	Items	No.	Quantity	Unit
	DETAILS OF QUANTITIES FOR EARTH WORK FOR SINGHI SUB DY.			
1	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.			
	Separate sheet attached	1	***79639.38***	***Sqm***
2	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I. **(Total Excavation) Separate sheet attached.**			
a.	100% of Total Cutting for ordinary soil	1	30101.450	Cum
3	Extra for wet earth all complete as per specifications and direction of E/I.			
	(40% of Total Cutting)	1	12040.58	Cum
4	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.			
	Excavated earth to be used for filling	1	266369.950	Cum
5	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)			
a.	Lead Beyond 150 m but upto 500 m (30 % of net filling)	1	79910.99	Cum
b.	Lead Beyond 500 m but upto 1 km (25% of net filling)	1	66592.49	Cum
c.	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	1	119866.48	Cum

S.No.	Items	No.	Quantity	Unit

S.No.	Items	No.	Quantity	Unit
6	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.	1	11945.91	Cum
7	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.			
	Total quantity of filling	1	296471.40	Cum

S.No.	Items	No.	Quantity	Unit
	DETAILS OF QUANTITIES FOR EARTH WORK FOR SAHOKARMA MINOR			
1	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.			
	Separate sheet attached	1	***3554.00***	***Sqm***
2	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I. **(Total Excavation) Separate sheet attached.**			
a.	100% of Total Cutting for ordinary soil	1	2206.000	Cum
3	Extra for wet earth all complete as per specifications and direction of E/I.			
	(40% of Total Cutting)	1	882.4	Cum
4	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.			
	Excavated earth to be used for filling	1	5620.200	Cum
5	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)			
a.	Lead Beyond 150 m but upto 500 m (30 % of net filling)	1	1686.06	Cum
b.	Lead Beyond 500 m but upto 1 km (25% of net filling)	1	1405.05	Cum
c.	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	1	2529.09	Cum

S.No.	Items	No.	Quantity	Unit
6	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.	1	2577.10	Cum
7	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.			
	Total quantity of filling	1	7826.20	Cum

S.No.	Items	No.	Quantity	Unit
	DETAILS OF QUANTITIES FOR EARTH WORK FOR DHAMNI MINOR			
1	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.			
	Separate sheet attached	1	***12478.50***	***Sqm***
2	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I. **(Total Excavation) Separate sheet attached.**			
a.	100% of Total Cutting for ordinary soil	1	6936.000	Cum
3	Extra for wet earth all complete as per specifications and direction of E/I.			
	(40% of Total Cutting)	1	2774.4	Cum
4	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.			
	Excavated earth to be used for filling	1	21356.300	Cum
5	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)			
a.	Lead Beyond 150 m but upto 500 m (30 % of net filling)	1	6406.89	Cum
b.	Lead Beyond 500 m but upto 1 km (25% of net filling)	1	5339.08	Cum
c.	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	1	9610.34	Cum

S.No.	Items	No.	Quantity	Unit
6	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.	1	1871.78	Cum
7	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.			
	Total quantity of filling	1	28292.30	Cum

S.No.	Items	No.	Quantity	Unit
	DETAILS OF QUANTITIES FOR EARTH WORK FOR BHADWA MINOR			
1	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.			
	Separate sheet attached	1	***5802.00***	***Sqm***
2	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I. **(Total Excavation) Separate sheet attached.**			
a.	100% of Total Cutting for ordinary soil	1	1768.000	Cum
3	Extra for wet earth all complete as per specifications and direction of E/I.			
	(40% of Total Cutting)	1	707.2	Cum
4	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.			
	Excavated earth to be used for filling	1	13176.500	Cum
5	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)			
a.	Lead Beyond 150 m but upto 500 m (30 % of net filling)	1	3952.95	Cum
b.	Lead Beyond 500 m but upto 1 km (25% of net filling)	1	3294.13	Cum
c.	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	1	5929.43	Cum

S.No.	Items	No.	Quantity	Unit
6	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.	1	870.30	Cum
7	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.			
	Total quantity of filling	1	14944.50	Cum

NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND						
ABSTRACT OF QUANTITY OF EARTHWORK FOR KOTWARA DISTRIBUTARY						
Sl. No.	**Reference Clause no.**	**Particular**	**Quantity**	**Unit**	**Rate (in Rs.)**	**Amount in Rs.**
1	**WRD 5.1.3**	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	216663.90	Sqm	**11.80**	2557585.159
2	**WRD 5.1.8**	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I.				
		100% of Total Cutting for ordinary soil	93515.30	Cum	**156.50**	14635144.45
3	**5.1.22**	*Extra for wet earth all complete as per specifications and direction of E/I.*	37406.12	Cum	**17.22**	644040.3994
4	**5.1.25**	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.	172022.75	Cum	**165.12**	28403701.59
5	**5.1.46**	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)				
A.	**5.1.46.1**	Lead Beyond 150 m but upto 500 m (30 % of net filling)	51606.83	Cum	**174.89**	9025517.62
B.	**5.1.46.2**	Lead Beyond 500 m but upto 1 km (25% of net filling)	43005.69	Cum	**217.92**	9371799.42
C.	**5.1.46.4**	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	77410.24	Cum	**319.14**	24704703.20

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
6	**5.1.21**	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.				
			32499.59	Cum	**196.10**	6373168.62
7	**WRD 5.1.39**	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.	172022.75	Cum	**61.88**	10645171.10
TOTAL COST OF EARTHWORK (in Rs.)						**106360831.55**
TOTAL COST OF EARTHWORK (in Rs. Lakhs)						**1063.608**

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
ABSTRACT OF QUANTITY OF EARTHWORK FOR GAMHARIA MINOR						
1	**WRD 5.1.3**	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	5015.50	Sqm	**11.80**	59204.91769
2	**WRD 5.1.8**	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I.				
		100% of Total Cutting for ordinary soil	8654.98	Cum	**156.50**	1354503.588
3	**5.1.22**	*Extra for wet earth all complete as per specifications and direction of E/I.*	3461.99	Cum	**17.22**	59606.86172
4	**5.1.25**	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.	6402.98	Cum	**165.12**	1057233.37
5	**5.1.46**	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)				
A.	**5.1.46.1**	Lead Beyond 150 m but upto 500 m (30 % of net filling)	1920.89	Cum	**174.89**	335944.89
B.	**5.1.46.2**	Lead Beyond 500 m but upto 1 km (25% of net filling)	1600.74	Cum	**217.92**	348834.08
C.	**5.1.46.4**	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	2881.34	Cum	**319.14**	919550.45
6	**5.1.21**	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.				
			2614.91	Cum	**196.10**	512784.34

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
7	**WRD 5.1.39**	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.	15057.95	Cum	**61.88**	931821.25
TOTAL COST OF EARTHWORK (in Rs.)						**5579483.74**
TOTAL COST OF EARTHWORK (in Rs. Lakhs)						**55.795**

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
ABSTRACT OF QUANTITY OF EARTHWORK FOR NAGWA MINOR						
1	**WRD 5.1.3**	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	3936.00	Sqm	**11.80**	46462.07876
2	**WRD 5.1.8**	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I.				
		100% of Total Cutting for ordinary soil	592.30	Cum	**156.50**	92694.95
3	**5.1.22**	*Extra for wet earth all complete as per specifications and direction of E/I.*	236.92	Cum	**17.22**	4079.173446
4	**5.1.25**	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.	8623.75	Cum	**165.12**	1423918.76
5	**5.1.46**	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)				
A.	**5.1.46.1**	Lead Beyond 150 m but upto 500 m (30 % of net filling)	2587.13	Cum	**174.89**	452462.29
B.	**5.1.46.2**	Lead Beyond 500 m but upto 1 km (25% of net filling)	2155.94	Cum	**217.92**	469821.90
C.	**5.1.46.4**	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	3880.69	Cum	**319.14**	1238482.61
6	**5.1.21**	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.				
			1240.40	Cum	**196.10**	243242.44

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
7	**WRD 5.1.39**	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.	9216.05	Cum	**61.88**	570310.78
TOTAL COST OF EARTHWORK (in Rs.)						**4541474.99**
TOTAL COST OF EARTHWORK (in Rs. Lakhs)						**45.415**

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
ABSTRACT OF QUANTITY OF EARTHWORK FOR PAWAI MINOR						
1	**WRD 5.1.3**	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	3442.50	Sqm	**11.80**	40636.61233
2	**WRD 5.1.8**	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I.				
		100% of Total Cutting for ordinary soil	2153.40	Cum	**156.50**	337007.1
3	**5.1.22**	*Extra for wet earth all complete as per specifications and direction of E/I.*	861.36	Cum	**17.22**	14830.47797
4	**5.1.25**	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.	9172.60	Cum	**165.12**	1514542.66
5	**5.1.46**	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)				
A.	**5.1.46.1**	Lead Beyond 150 m but upto 500 m (30 % of net filling)	2751.78	Cum	**174.89**	481258.80
B.	**5.1.46.2**	Lead Beyond 500 m but upto 1 km (25% of net filling)	2293.15	Cum	**217.92**	499723.25
C.	**5.1.46.4**	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	4127.67	Cum	**319.14**	1317304.60
6	**5.1.21**	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.				
			538.43	Cum	**196.10**	105585.14

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
7	**WRD 5.1.39**	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.	11326.00	Cum	**61.88**	700879.44
TOTAL COST OF EARTHWORK (in Rs.)						**5011768.08**
TOTAL COST OF EARTHWORK (in Rs. Lakhs)						**50.118**

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
ABSTRACT OF QUANTITY OF EARTHWORK FOR BHUTAILI MINOR						
1	**WRD 5.1.3**	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	3874.25	Sqm	**11.80**	45733.15768
2	**WRD 5.1.8**	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I.				
		100% of Total Cutting for ordinary soil	876.90	Cum	**156.50**	137234.85
3	**5.1.22**	*Extra for wet earth all complete as per specifications and direction of E/I.*	350.76	Cum	**17.22**	6039.215254
4	**5.1.25**	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.	10069.25	Cum	**165.12**	1662593.88
5	**5.1.46**	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)				
A.	**5.1.46.1**	Lead Beyond 150 m but upto 500 m (30 % of net filling)	3020.78	Cum	**174.89**	528303.34
B.	**5.1.46.2**	Lead Beyond 500 m but upto 1 km (25% of net filling)	2517.31	Cum	**217.92**	548572.74
C.	**5.1.46.4**	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	4531.16	Cum	**319.14**	1446075.20
6	**5.1.21**	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.				
			581.14	Cum	**196.10**	113961.06

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
7	**WRD 5.1.39**	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.	10946.15	Cum	**61.88**	677373.43
TOTAL COST OF EARTHWORK (in Rs.)						**5165886.88**
TOTAL COST OF EARTHWORK (in Rs. Lakhs)						**51.659**

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
ABSTRACT OF QUANTITY OF EARTHWORK FOR SALOPURA MINOR						
1	**WRD 5.1.3**	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	5373.80	Sqm	**11.80**	63434.4306
2	**WRD 5.1.8**	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I.				
		100% of Total Cutting for ordinary soil	2643.38	Cum	**156.50**	413688.1875
3	**5.1.22**	*Extra for wet earth all complete as per specifications and direction of E/I.*	1057.35	Cum	**17.22**	18204.93856
4	**5.1.25**	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.	17852.20	Cum	**165.12**	2947683.15
5	**5.1.46**	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)				
A.	**5.1.46.1**	Lead Beyond 150 m but upto 500 m (30 % of net filling)	5355.66	Cum	**174.89**	936651.38
B.	**5.1.46.2**	Lead Beyond 500 m but upto 1 km (25% of net filling)	4463.05	Cum	**217.92**	972587.86
C.	**5.1.46.4**	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	8033.49	Cum	**319.14**	2563808.00
6	**5.1.21**	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.				
			806.07	Cum	**196.10**	158070.33

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
7	**WRD 5.1.39**	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.	20495.58	Cum	**61.88**	1268314.24
TOTAL COST OF EARTHWORK (in Rs.)						**9342442.50**
TOTAL COST OF EARTHWORK (in Rs. Lakhs)						**93.424**

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
ABSTRACT OF QUANTITY OF EARTHWORK FOR SINGHI SUB DY.						
1	**WRD 5.1.3**	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	79639.38	Sqm	**11.80**	940094.2952
2	**WRD 5.1.8**	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I.				
		100% of Total Cutting for ordinary soil	30101.45	Cum	**156.50**	4710876.925
3	**5.1.22**	*Extra for wet earth all complete as per specifications and direction of E/I.*	12040.58	Cum	**17.22**	207308.8562
4	**5.1.25**	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.	266369.95	Cum	**165.12**	43981930.13
5	**5.1.46**	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)				
A.	**5.1.46.1**	Lead Beyond 150 m but upto 500 m (30 % of net filling)	79910.99	Cum	**174.89**	13975632.17
B.	**5.1.46.2**	Lead Beyond 500 m but upto 1 km (25% of net filling)	66592.49	Cum	**217.92**	14511834.88
C.	**5.1.46.4**	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	119866.48	Cum	**319.14**	38254187.63
6	**5.1.21**	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.				
			11945.91	Cum	**196.10**	2342592.36

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
7	**WRD 5.1.39**	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.	296471.40	Cum	**61.88**	18346345.35
TOTAL COST OF EARTHWORK (in Rs.)						**137270802.59**
TOTAL COST OF EARTHWORK (in Rs. Lakhs)						**1372.708**

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
ABSTRACT OF QUANTITY OF EARTHWORK FOR SAHOKARMA MINOR						
1	**WRD 5.1.3**	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	3554.00	Sqm	**11.80**	41952.80181
2	**WRD 5.1.8**	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I.				
		100% of Total Cutting for ordinary soil	2206.00	Cum	**156.50**	345239
3	**5.1.22**	*Extra for wet earth all complete as per specifications and direction of E/I.*	882.40	Cum	**17.22**	15192.73446
4	**5.1.25**	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.	5620.20	Cum	**165.12**	927984.72
5	**5.1.46**	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)				
A.	**5.1.46.1**	Lead Beyond 150 m but upto 500 m (30 % of net filling)	1686.06	Cum	**174.89**	294875.03
B.	**5.1.46.2**	Lead Beyond 500 m but upto 1 km (25% of net filling)	1405.05	Cum	**217.92**	306188.50
C.	**5.1.46.4**	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	2529.09	Cum	**319.14**	807133.78
6	**5.1.21**	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.				
			2577.10	Cum	**196.10**	505369.31

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
7	**WRD 5.1.39**	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.	7826.20	Cum	**61.88**	484303.61
TOTAL COST OF EARTHWORK (in Rs.)						**3728239.48**
TOTAL COST OF EARTHWORK (in Rs. Lakhs)						**37.282**

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
ABSTRACT OF QUANTITY OF EARTHWORK FOR DHAMNI MINOR						
1	**WRD 5.1.3**	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	12478.50	Sqm	**11.80**	147301.0797
2	**WRD 5.1.8**	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I.				
		100% of Total Cutting for ordinary soil	6936.00	Cum	**156.50**	1085484
3	**5.1.22**	*Extra for wet earth all complete as per specifications and direction of E/I.*	2774.40	Cum	**17.22**	47768.27119
4	**5.1.25**	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.	21356.30	Cum	**165.12**	3526265.99
5	**5.1.46**	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)				
A.	**5.1.46.1**	Lead Beyond 150 m but upto 500 m (30 % of net filling)	6406.89	Cum	**174.89**	1120500.99
B.	**5.1.46.2**	Lead Beyond 500 m but upto 1 km (25% of net filling)	5339.08	Cum	**217.92**	1163491.22
C.	**5.1.46.4**	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	9610.34	Cum	**319.14**	3067042.31
6	**5.1.21**	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.				
			1871.78	Cum	**196.10**	367055.08

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
7	**WRD 5.1.39**	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.	28292.30	Cum	**61.88**	1750793.86
TOTAL COST OF EARTHWORK (in Rs.)						**12275702.80**
TOTAL COST OF EARTHWORK (in Rs. Lakhs)						**122.757**

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
ABSTRACT OF QUANTITY OF EARTHWORK FOR BHADWA MINOR						
1	**WRD 5.1.3**	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	5802.00	Sqm	**11.80**	68489.07037
2	**WRD 5.1.8**	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I.				
		100% of Total Cutting for ordinary soil	1768.00	Cum	**156.50**	276692
3	**5.1.22**	*Extra for wet earth all complete as per specifications and direction of E/I.*	707.20	Cum	**17.22**	12176.22599
4	**5.1.25**	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.	13176.50	Cum	**165.12**	2175650.45
5	**5.1.46**	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)				
A.	**5.1.46.1**	Lead Beyond 150 m but upto 500 m (30 % of net filling)	3952.95	Cum	**174.89**	691331.43
B.	**5.1.46.2**	Lead Beyond 500 m but upto 1 km (25% of net filling)	3294.13	Cum	**217.92**	717855.72
C.	**5.1.46.4**	Lead Beyond 1.5 km but upto 2 km (45% of net filling)	5929.43	Cum	**319.14**	1892316.69
6	**5.1.21**	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.				
			870.30	Cum	**196.10**	170665.83

Sl. No.	Reference Clause no.	Particular	Quantity	Unit	Rate (in Rs.)	Amount in Rs.
7	**WRD 5.1.39**	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.	14944.50	Cum	**61.88**	924800.70
TOTAL COST OF EARTHWORK (in Rs.)						**6929978.12**
TOTAL COST OF EARTHWORK (in Rs. Lakhs)						**69.300**

DETAIL QUANTITIES OF HEAD REGULATOR GATE OF GAMHARIA MINOR				
Calculation procedure of Gate's weight for estimation purpose				
1	**Weight of 1 Vertical lift gate including embedded parts**	**0.1332x(L^2XHxh)^0.659**		
	(L) is length = clear vent width in m + 0.50m.	1.100	0.500	**1.60**
	(H) is height of gate in m = clear vent height in m+ 0.20m.	1.130	0.200	**1.33**
	(h) is head of water above sill of gate in m	1.130	0.3	**1.430**
	Weight of lift gate including embedded parts	**0.38**		**T**
2	**Capacity of screw hoist in tone including 25%reserve capacity (Hoist capacity shall be rounded off to next 1 tonne)**	**2.50 xWt of gate**		
		2.5	0.38	1
	Weight of screw hoist with all accessories	300 kg per tonne capacity of hoist		
		300	1	300.00
	Weight of screw hoist with all accessories	**0.30**		**T**
3	**Weight of hoist bridge:**			
(i)	Columns with bracings/Anchors/Stiffeners	400 kg per meter height		
		1.430	400	572
	Columns with bracings/Anchors/Stiffeners	**0.572**		**T**
(ii)	Beams with cross beams/stiffeners	400 kg per meter span		
		1.43	400	572
	Beams with cross beams/stiffeners	**0.572**		**T**
(iii)	Railing/ Chequered plate/Ladder etc	10% of wt. of columns/beams		
		1.144	10%	0.1144
	Railing/ Chequered plate/Ladder etc	**0.1144**		**T**
Total Weight of One Gate		**1.94**		**T**

DETAIL QUANTITIES OF HEAD REGULATOR GATE OF NAGWA MR.				
Calculation procedure of Gate's weight for estimation purpose				
1	**Weight of 1 Vertical lift gate including embedded parts**	**0.1332x(L^2XHxh)^0.659**		
	(L) is length = clear vent width in m + 0.50m.	1.500	0.500	**2.00**
	(H) is height of gate in m = clear vent height in m+ 0.20m.	1.902	0.200	**2.10**
	(h) is head of water above sill of gate in m	1.902	0.3	**2.202**
	Weight of lift gate including embedded parts	**0.91**		**T**
2	**Capacity of screw hoist in tone including 25%reserve capacity (Hoist capacity shall be rounded off to next 1 tonne)**	**2.50 xWt of gate**		
		2.5	0.91	1
	Weight of screw hoist with all accessories	300 kg per tonne capacity of hoist		
		300	1	300.00
	Weight of screw hoist with all accessories	**0.30**		**T**
3	**Weight of hoist bridge:**			
(i)	Columns with bracings/Anchors/Stiffeners	400 kg per meter height		
		2.202	400	880.8
	Columns with bracings/Anchors/Stiffeners	**0.8808**		**T**
(ii)	Beams with cross beams/stiffeners	400 kg per meter span		
		2.202	400	880.8
	Beams with cross beams/stiffeners	**0.8808**		**T**
(iii)	Railing/ Chequered plate/Ladder etc	10% of wt. of columns/beams		
		1.7616	10%	0.17616
	Railing/ Chequered plate/Ladder etc	**0.17616**		**T**
Total Weight of One Gate		**3.15**		**T**

DETAIL QUANTITIES OF HEAD REGULATOR GATE OF PAWAI MINOR				
Calculation procedure of Gate's weight for estimation purpose				
1	**Weight of 1 Vertical lift gate including embedded parts**	**0.1332x(L^2XHxh)^0.659**		
	(L) is length = clear vent width in m + 0.50m.	1.500	0.500	**2.00**
	(H) is height of gate in m = clear vent height in m+ 0.20m.	1.115	0.200	**1.32**
	(h) is head of water above sill of gate in m	1.115	0.3	**1.415**
	Weight of lift gate including embedded parts	**0.50**		**T**
2	**Capacity of screw hoist in tone including 25%reserve capacity (Hoist capacity shall be rounded off to next 1 tonne)**	**2.50 xWt of gate**		
		2.5	0.50	1
	Weight of screw hoist with all accessories	300 kg per tonne capacity of hoist		
		300	1	300.00
	Weight of screw hoist with all accessories	**0.30**		**T**
3	**Weight of hoist bridge:**			
(i)	Columns with bracings/Anchors/Stiffeners	400 kg per meter height		
		1.415	400	566
	Columns with bracings/Anchors/Stiffeners	**0.566**		**T**
(ii)	Beams with cross beams/stiffeners	400 kg per meter span		
		1.415	400	566
	Beams with cross beams/stiffeners	**0.566**		**T**
(iii)	Railing/ Chequered plate/Ladder etc	10% of wt. of columns/beams		
		1.132	10%	0.1132
	Railing/ Chequered plate/Ladder etc	**0.1132**		**T**
Total Weight of One Gate		**2.05**		**T**

DETAIL QUANTITIES OF HEAD REGULATOR GATE OF BHUTAILI MINOR				
Calculation procedure of Gate's weight for estimation purpose				
1	**Weight of 1 Vertical lift gate including embedded parts**	**0.1332x(L^2XHxh)^0.659**		
	(L) is length = clear vent width in m + 0.50m.	1.200	0.500	**1.70**
	(H) is height of gate in m = clear vent height in m+ 0.20m.	1.100	0.200	**1.30**
	(h) is head of water above sill of gate in m	1.100	0.3	**1.400**
	Weight of lift gate including embedded parts	**0.40**		**T**
2	**Capacity of screw hoist in tone including 25%reserve capacity (Hoist capacity shall be rounded off to next 1 tonne)**	**2.50 xWt of gate**		
		2.5	0.40	1
	Weight of screw hoist with all accessories	300 kg per tonne capacity of hoist		
		300	1	300.00
	Weight of screw hoist with all accessories	**0.30**		**T**
3	**Weight of hoist bridge:**			
(i)	Columns with bracings/Anchors/Stiffeners	400 kg per meter height		
		1.400	400	560
	Columns with bracings/Anchors/Stiffeners	**0.56**		**T**
(ii)	Beams with cross beams/stiffeners	400 kg per meter span		
		1.4	400	560
	Beams with cross beams/stiffeners	**0.56**		**T**
(iii)	Railing/ Chequered plate/Ladder etc	10% of wt. of columns/beams		
		1.12	10%	0.112
	Railing/ Chequered plate/Ladder etc	**0.112**		**T**
Total Weight of One Gate		**1.93**		**T**

DETAIL QUANTITIES OF HEAD REGULATOR GATE OF SALOPURA MINOR				
Calculation procedure of Gate's weight for estimation purpose				
1	**Weight of 1 Vertical lift gate including embedded parts**	**0.1332x(L^2XHxh)^0.659**		
	(L) is length = clear vent width in m + 0.50m.	1.200	0.500	**1.70**
	(H) is height of gate in m = clear vent height in m+ 0.20m.	1.150	0.200	**1.35**
	(h) is head of water above sill of gate in m	1.150	0.3	**1.450**
	Weight of lift gate including embedded parts	**0.42**		**T**
2	**Capacity of screw hoist in tone including 25%reserve capacity (Hoist capacity shall be rounded off to next 1 tonne)**	**2.50 xWt of gate**		
		2.5	0.42	1
	Weight of screw hoist with all accessories	300 kg per tonne capacity of hoist		
		300	1	300.00
	Weight of screw hoist with all accessories	**0.30**		**T**
3	**Weight of hoist bridge:**			
(i)	Columns with bracings/Anchors/Stiffeners	400 kg per meter height		
		1.450	400	580
	Columns with bracings/Anchors/Stiffeners	**0.58**		**T**
(ii)	Beams with cross beams/stiffeners	400 kg per meter span		
		1.45	400	580
	Beams with cross beams/stiffeners	**0.58**		**T**
(iii)	Railing/ Chequered plate/Ladder etc	10% of wt. of columns/beams		
		1.16	10%	0.116
	Railing/ Chequered plate/Ladder etc	**0.116**		**T**
Total Weight of One Gate		**1.99**		**T**

DETAIL QUANTITIES OF HEAD REGULATOR GATE OF SINGHI SUB DY.				
Calculation procedure of Gate's weight for estimation purpose				
1	**Weight of 1 Vertical lift gate including embedded parts**	**0.1332x(L^2XHxh)^0.659**		
	(L) is length = clear vent width in m + 0.50m.	2.000	0.500	**2.50**
	(H) is height of gate in m = clear vent height in m+ 0.20m.	1.750	0.200	**1.95**
	(h) is head of water above sill of gate in m	1.750	0.3	**2.050**
	Weight of lift gate including embedded parts	**1.11**		**T**
2	**Capacity of screw hoist in tone including 25%reserve capacity (Hoist capacity shall be rounded off to next 1 tonne)**	**2.50 xWt of gate**		
		2.5	1.11	1
	Weight of screw hoist with all accessories	300 kg per tonne capacity of hoist		
		300	1	300.00
	Weight of screw hoist with all accessories	**0.30**		**T**
3	**Weight of hoist bridge:**			
(i)	Columns with bracings/Anchors/Stiffeners	400 kg per meter height		
		2.050	400	820
	Columns with bracings/Anchors/Stiffeners	**0.82**		**T**
(ii)	Beams with cross beams/stiffeners	400 kg per meter span		
		2.05	400	820
	Beams with cross beams/stiffeners	**0.82**		**T**
(iii)	Railing/ Chequered plate/Ladder etc	10% of wt. of columns/beams		
		1.64	10%	0.164
	Railing/ Chequered plate/Ladder etc	**0.164**		**T**
Total Weight of One Gate		**3.21**		**T**
Total Weight of Two Gates		**6.43**		**T**

DETAIL QUANTITIES OF HEAD REGULATOR GATE OF SAHOKARMA MINOR				
Calculation procedure of Gate's weight for estimation purpose				
1	**Weight of 1 Vertical lift gate including embedded parts**	**0.1332x(L^2XHxh)^0.659**		
	(L) is length = clear vent width in m + 0.50m.	1.050	0.500	**1.55**
	(H) is height of gate in m = clear vent height in m+ 0.20m.	1.150	0.200	**1.35**
	(h) is head of water above sill of gate in m	1.150	0.3	**1.450**
	Weight of lift gate including embedded parts	**0.37**		**T**
2	**Capacity of screw hoist in tone including 25%reserve capacity (Hoist capacity shall be rounded off to next 1 tonne)**	**2.50 xWt of gate**		
		2.5	0.37	1
	Weight of screw hoist with all accessories	300 kg per tonne capacity of hoist		
		300	1	300.00
	Weight of screw hoist with all accessories	**0.30**		**T**
3	**Weight of hoist bridge:**			
(i)	Columns with bracings/Anchors/Stiffeners	400 kg per meter height		
		1.450	400	580
	Columns with bracings/Anchors/Stiffeners	**0.58**		**T**
(ii)	Beams with cross beams/stiffeners	400 kg per meter span		
		1.45	400	580
	Beams with cross beams/stiffeners	**0.58**		**T**
(iii)	Railing/ Chequered plate/Ladder etc	10% of wt. of columns/beams		
		1.16	10%	0.116
	Railing/ Chequered plate/Ladder etc	**0.116**		**T**
Total Weight of One Gate		**1.95**		**T**

DETAIL QUANTITIES OF HEAD REGULATOR GATE OF DHAMNI MINOR				
Calculation procedure of Gate's weight for estimation purpose				
1	**Weight of 1 Vertical lift gate including embedded parts**	**0.1332x(L^2XHxh)^0.659**		
	(L) is length = clear vent width in m + 0.50m.	1.700	0.500	**2.20**
	(H) is height of gate in m = clear vent height in m+ 0.20m.	1.250	0.200	**1.45**
	(h) is head of water above sill of gate in m	1.250	0.3	**1.550**
	Weight of lift gate including embedded parts	**0.64**		**T**
2	**Capacity of screw hoist in tone including 25%reserve capacity (Hoist capacity shall be rounded off to next 1 tonne)**	**2.50 xWt of gate**		
		2.5	0.64	1
	Weight of screw hoist with all accessories	300 kg per tonne capacity of hoist		
		300	1	300.00
	Weight of screw hoist with all accessories	**0.30**		**T**
3	**Weight of hoist bridge:**			
(i)	Columns with bracings/Anchors/Stiffeners	400 kg per meter height		
		1.550	400	620
	Columns with bracings/Anchors/Stiffeners	**0.62**		**T**
(ii)	Beams with cross beams/stiffeners	400 kg per meter span		
		1.55	400	620
	Beams with cross beams/stiffeners	**0.62**		**T**
(iii)	Railing/ Chequered plate/Ladder etc	10% of wt. of columns/beams		
		1.24	10%	0.124
	Railing/ Chequered plate/Ladder etc	**0.124**		**T**
Total Weight of One Gate		**2.31**		**T**

DETAIL QUANTITIES OF HEAD REGULATOR GATE OF BHADWA MINOR				
Calculation procedure of Gate's weight for estimation purpose				
1	**Weight of 1 Vertical lift gate including embedded parts**	**0.1332x(L^2XHxh)^0.659**		
	(L) is length = clear vent width in m + 0.50m.	1.400	0.500	**1.90**
	(H) is height of gate in m = clear vent height in m+ 0.20m.	1.200	0.200	**1.40**
	(h) is head of water above sill of gate in m	1.200	0.3	**1.500**
	Weight of lift gate including embedded parts	**0.51**		**T**
2	**Capacity of screw hoist in tone including 25%reserve capacity (Hoist**	**2.50 xWt of gate**		
		2.5	0.51	1
	Weight of screw hoist with all accessories	300 kg per tonne capacity of hoist		
		300	1	300.00
	Weight of screw hoist with all accessories	**0.30**		**T**
3	**Weight of hoist bridge:**			
(i)	Columns with bracings/Anchors/Stiffeners	400 kg per meter height		
		1.500	400	600
	Columns with bracings/Anchors/Stiffeners	**0.6**		**T**
(ii)	Beams with cross beams/stiffeners	400 kg per meter span		
		1.5	400	600
	Beams with cross beams/stiffeners	**0.6**		**T**
(iii)	Railing/ Chequered plate/Ladder etc	10% of wt. of columns/beams		
		1.2	10%	0.12
	Railing/ Chequered plate/Ladder etc	**0.12**		**T**
Total Weight of One Gate		**2.13**		**T**

NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND ANALYSIS OF RATE OF HEAD REGULATOR GATE			
1	Cost of material **(A)** (Structural Steel WRD M-181)	Rs.	55116.67
2	Wastage **5%** =	Rs.	2755.83
3	Cost of miscellaneous material like electrodes,oxygen, acetylene nut bolt, rope	Rs.	35825.84
	Total 1+2+3= ***(B)*** =	Rs.	93698.34
4	Labour charge 30%(B) =	Rs.	28109.50
5	Overhead charge + Contractor profit **@15% A**	Rs.	8267.50
6	Workshop and energy charge ,**12 % of (B)**	Rs.	11243.80
7	Transportation and erection charge ,**15 % of B**	Rs.	14054.75
	Total = B+4+5+6+7 = ***C***	Rs.	155373.89
8	Other incidental charge , **3 % = of C**	Rs.	4661.22
	Total C+8 = D	Rs.	**160035.11**

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND								
ABSTRACT OF COST FOR HR FOR GAMHARIA MR OFFTAKING FROM RD-0+005 KM (R.) AT KOTWARA DY.								
S. No.	**Item of Works**	**Qty.**	**Unit**	**Rate (As per WRD SOR 2025 & PL MARCH 2025)**	**Amount (Rs)**	**Cement (MT)**	**Coarse Sand (Cum)**	**Coarse Aggregate (Cum)**
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	146.003	Cum	**195.20**	28499.88			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	16.80	Cum	**6381.70**	107201.63	5.44	7.56	15.12
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	77.49	Cum	**6914.20**	535786.67	31.96	33.32	66.64
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	14.75	Cum	**8151.40**	120216.23	8.36	5.75	11.65

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	2.24	MT	**73574.90**	164571.33			
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	1.94	MT	**160035.11**	309895.78			
7	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	274.73	Sqm	**578.60**	158961.27			
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	12.02	Sqm	**680.10**	8177.52			
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry. (WRD M-002)	1.35	Cum	**694.61**	937.72			
10	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	1.35	Cum	**1237.00**	1669.95			
11	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)	0.73	Cum	**1377.70**	1000.21			
12	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.73	Cum	**516.50**	374.98			
13	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	3.35	Sqm	**63.20**	211.59			
14	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	Cum	**5588.70**	11177.40			
15	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications. (3.18 PWD NH SOR CHHATISGARH 2025)	4.20	Sqm	**66.00**	277.20			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
16	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. (RCD 15.22 - (ii))	10.50	RM	**499.80**	5247.90			
17	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	32.00	Sqm	**149.30**	4778.15			
18	**Carriage of materials**							
	Coarse Sand (60 Km lead)	46.632	Cum	**1075.00**	50129.35			
	Coarse Aggregates (100 Km lead)	94.137	Cum	**1398.00**	131604.06			
	Cement (30 km lead)	45.770	MT	**742.00**	33961.09			
	Boulder (60 Km lead)	1.35	Cum	**1159.00**	1564.65			
	Steel (30 Km lead)	4.17	MT	**742.00**	3096.52			
TOTAL (In Rs.)					**1679341.07**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	46.63	Cum	**584.64**	27262.90	2726.29		
	Coarse Aggregate	94.14	Cum	**944.26**	88890.16	8889.02		
	Boulders	1.35	Cum	**694.61**	937.72	93.77		
	Total					11709.08		
	For 1 nos. HR, Total Seigniorage charges					**11709.08**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST FOR HR FOR NAGWA MR OFFTAKING FROM RD-1+140 KM (R.) AT KOTWARA DY								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	150.531	Cum	**195.20**	29383.58			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	19.37	Cum	**6381.70**	123613.82	6.28	8.72	17.43
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	80.40	Cum	**6914.20**	555867.20	33.16	34.57	69.14
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	18.53	Cum	**8151.40**	151037.80	10.51	7.23	14.64

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	2.28	MT	**73574.90**	167566.23			
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	3.15	MT	**160035.11**	504004.48			
7	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	309.00	Sqm	**578.60**	178785.73			
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	22.23	Sqm	**680.10**	15118.62			
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry. (WRD M-002)	2.43	Cum	**694.61**	1687.90			
10	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	2.43	Cum	**1237.00**	3005.91			
11	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)	0.99	Cum	**1377.70**	1363.92			
12	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.99	Cum	**516.50**	511.34			
13	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	3.60	Sqm	**63.20**	227.82			
14	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	Cum	**5588.70**	11177.40			
15	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications. (3.18 PWD NH SOR CHHATISGARH 2025)	4.20	Sqm	**66.00**	277.20			
16	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. (RCD 15.22 - (ii))	10.50	RM	**499.80**	5247.90			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
17	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	29.06	Sqm	**149.30**	4338.44			
18	**Carriage of materials**							
	Coarse Sand (60 Km lead)	50.513	Cum	**1075.00**	54301.16			
	Coarse Aggregates (100 Km lead)	102.201	Cum	**1398.00**	142876.59			
	Cement (30 km lead)	49.945	MT	**742.00**	37059.05			
	Boulder (60 Km lead)	2.43	Cum	**1159.00**	2816.37			
	Steel (30 Km lead)	5.43	MT	**742.00**	4026.71			
TOTAL (In Rs.)					**1994295.16**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	50.51	Cum	**584.64**	29531.75	2953.18		
	Coarse Aggregate	102.20	Cum	**944.26**	96504.04	9650.40		
	Boulders	2.43	Cum	**694.61**	1687.90	168.79		
	Total					12772.37		
	For 1 nos. HR, Total Seigniorage charges					**12772.37**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST FOR HR FOR PAWAI MR OFFTAKING FROM RD-5.120 KM (R.) AT KOTWARA DY								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	189.227	Cum	**195.20**	36937.07			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	19.25	Cum	**6381.70**	122851.69	6.24	8.66	17.33
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	92.01	Cum	**6914.20**	636209.40	37.96	39.57	79.13
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	16.46	Cum	**8151.40**	134189.92	9.33	6.42	13.01

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	2.51	MT	**73574.90**	184581.32			
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	2.05	MT	**160035.11**	327306.08			
7	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	328.23	Sqm	**578.60**	189916.49			
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	11.70	Sqm	**680.10**	7957.17			
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry. (WRD M-002)	2.43	Cum	**694.61**	1687.90			
10	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	2.43	Cum	**1237.00**	3005.91			
11	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)	0.99	Cum	**1377.70**	1363.92			
12	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.99	Cum	**516.50**	511.34			
13	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	3.80	Sqm	**63.20**	240.04			
14	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	Cum	**5588.70**	11177.40			
15	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications. (3.18 PWD NH SOR CHHATISGARH 2025)	4.20	Sqm	**66.00**	277.20			
16	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. (RCD 15.22 - (ii))	10.50	RM	**499.80**	5247.90			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
17	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	33.36	Sqm	**149.30**	4980.94			
18	**Carriage of materials**							
	Coarse Sand (60 Km lead)	54.649	Cum	**1075.00**	58748.15			
	Coarse Aggregates (100 Km lead)	110.454	Cum	**1398.00**	154414.00			
	Cement (30 km lead)	53.527	MT	**742.00**	39717.34			
	Boulder (60 Km lead)	2.43	Cum	**1159.00**	2816.37			
	Steel (30 Km lead)	4.55	MT	**742.00**	3379.04			
TOTAL (In Rs.)					**1927516.58**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	54.65	Cum	**584.64**	31950.25	3195.02		
	Coarse Aggregate	110.45	Cum	**944.26**	104296.82	10429.68		
	Boulders	2.43	Cum	**694.61**	1687.90	168.79		
	Total					13793.50		
	For 1 nos. HR, Total Seigniorage charges					**13793.50**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST FOR HR FOR BHUTAILI MR OFFTAKING FROM RD-9.875 KM (R.) AT KOTWARA DY CANAL								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	193.589	Cum	**195.20**	37788.59			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	18.73	Cum	**6381.70**	119528.01	6.07	8.43	16.86
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	94.56	Cum	**6914.20**	653798.76	39.01	40.66	81.32
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	15.47	Cum	**8151.40**	126105.68	8.77	6.03	12.22

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	2.48	MT	**73574.90**	182310.16			
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	1.93	MT	**160035.11**	308829.62			
7	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	327.73	Sqm	**578.60**	189623.00			
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	11.70	Sqm	**680.10**	7957.17			
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry. (WRD M-002)	1.62	Cum	**694.61**	1125.27			
10	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	1.62	Cum	**1237.00**	2003.94			
11	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)	0.79	Cum	**1377.70**	1091.14			
12	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.79	Cum	**516.50**	409.07			
13	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	3.07	Sqm	**63.20**	193.96			
14	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	Cum	**5588.70**	11177.40			
15	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications. (3.18 PWD NH SOR CHHATISGARH 2025)	4.20	Sqm	**66.00**	277.20			
16	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. (RCD 15.22 - (ii))	10.50	RM	**499.80**	5247.90			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
17	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	36.78	Sqm	**149.30**	5490.66			
18	**Carriage of materials**							
	Coarse Sand (60 Km lead)	55.122	Cum	**1075.00**	59256.35			
	Coarse Aggregates (100 Km lead)	111.191	Cum	**1398.00**	155445.12			
	Cement (30 km lead)	53.846	MT	**742.00**	39953.52			
	Boulder (60 Km lead)	1.62	Cum	**1159.00**	1877.58			
	Steel (30 Km lead)	4.41	MT	**742.00**	3270.47			
TOTAL (In Rs.)					**1912760.57**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	55.12	Cum	**584.64**	32226.63	3222.66		
	Coarse Aggregate	111.19	Cum	**944.26**	104993.28	10499.33		
	Boulders	1.62	Cum	**694.61**	1125.27	112.53		
	Total					13834.52		
	For 1 nos. HR, Total Seigniorage charges					**13834.52**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST FOR HR FOR SALOPURA MR. OFFTAKING FROM RD-10+660 KM (R.) AT KOTWARA DY CANAL								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	201.767	Cum	**195.20**	39384.91			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	23.02	Cum	**6381.70**	146895.52	7.46	10.36	20.72
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	122.52	Cum	**6914.20**	847134.23	50.54	52.68	105.37
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	22.66	Cum	**8151.40**	184744.88	12.85	8.84	17.90

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	3.06	MT	**73574.90**	225230.34			
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	1.99	MT	**160035.11**	319000.90			
7	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	396.47	Sqm	**578.60**	229395.72			
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	12.23	Sqm	**680.10**	8320.34			
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry. (WRD M-002)	1.62	Cum	**694.61**	1125.27			
10	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	1.62	Cum	**1237.00**	2003.94			
11	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)	0.79	Cum	**1377.70**	1091.14			
12	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.79	Cum	**516.50**	409.07			
13	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	3.21	Sqm	**63.20**	202.78			
14	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	Cum	**5588.70**	11177.40			
15	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications. (3.18 PWD NH SOR CHHATISGARH 2025)	4.20	Sqm	**66.00**	277.20			
16	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. (RCD 15.22 - (ii))	10.50	RM	**499.80**	5247.90			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
17	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	35.13	Sqm	**149.30**	5244.23			
18	**Carriage of materials**							
	Coarse Sand (60 Km lead)	71.881	Cum	**1075.00**	77272.34			
	Coarse Aggregates (100 Km lead)	144.781	Cum	**1398.00**	202404.02			
	Cement (30 km lead)	70.848	MT	**742.00**	52569.51			
	Boulder (60 Km lead)	1.62	Cum	**1159.00**	1877.58			
	Steel (30 Km lead)	5.05	MT	**742.00**	3750.48			
TOTAL (In Rs.)					**2364759.69**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	71.88	Cum	**584.64**	42024.65	4202.47		
	Coarse Aggregate	144.78	Cum	**944.26**	136711.03	13671.10		
	Boulders	1.62	Cum	**694.61**	1125.27	112.53		
	Total					17986.09		
	For 1 nos. HR, Total Seigniorage charges					**17986.09**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST FOR HR FOR SINGHI SUB DY. OFFTAKING FROM RD-13+020 KM (R.) AT KOTWARA DY CANAL								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	274.930	Cum	**195.20**	53666.33			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	33.96	Cum	**6381.70**	216698.79	11.00	15.28	30.56
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	147.78	Cum	**6914.20**	1021783.81	60.96	63.55	127.09
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	37.73	Cum	**8151.40**	6323.69	21.39	14.72	29.81

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	4.48	MT	**73574.90**	329718.17			
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	6.43	MT	**160035.11**	1028905.99			
7	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	452.98	Sqm	**578.60**	262094.75			
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	31.93	Sqm	**680.10**	21712.87			
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry. (WRD M-002)	9.05	Cum	**694.61**	6282.75			
10	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	9.05	Cum	**1237.00**	11188.67			
11	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)	2.61	Cum	**1377.70**	3591.66			
12	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	2.61	Cum	**516.50**	1346.52			
13	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	4.13	Sqm	**63.20**	260.97			
14	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	Cum	**5588.70**	11177.40			
15	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications. (3.18 PWD NH SOR CHHATISGARH 2025)	4.20	Sqm	**66.00**	277.20			
16	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. (RCD 15.22 - (ii))	10.50	RM	**499.80**	5247.90			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
17	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	43.07	Sqm	**149.30**	6431.04			
18	**Carriage of materials**							
	Coarse Sand (60 Km lead)	93.541	Cum	**1075.00**	100556.62			
	Coarse Aggregates (100 Km lead)	190.066	Cum	**1398.00**	265712.83			
	Cement (30 km lead)	93.355	MT	**742.00**	69269.26			
	Boulder (60 Km lead)	9.05	Cum	**1159.00**	10483.16			
	Steel (30 Km lead)	10.91	MT	**742.00**	8095.70			
TOTAL (In Rs.)					**3440826.07**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	93.54	Cum	**584.64**	54687.84	5468.78		
	Coarse Aggregate	190.07	Cum	**944.26**	179472.10	17947.21		
	Boulders	9.05	Cum	**694.61**	6282.75	628.27		
	Total					24044.27		
	For 1 nos. HR, Total Seigniorage charges					**24044.27**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST FOR HR FOR SAHOKARMA MR. OFFTAKING FROM RD-16+200 KM (R.) AT KOTWARA DY CANAL								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	149.931	Cum	**195.20**	29266.47			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	17.01	Cum	**6381.70**	108576.46	5.51	7.66	15.31
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	74.21	Cum	**6914.20**	513104.30	30.61	31.91	63.82
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	14.84	Cum	**8151.40**	120926.59	8.41	5.79	11.72

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	2.05	MT	**73574.90**	150697.76			
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	1.95	MT	**160035.11**	311345.37			
7	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	286.22	Sqm	**578.60**	165607.64			
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	12.24	Sqm	**680.10**	8324.42			
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry. (WRD M-002)	1.22	Cum	**694.61**	843.95			
10	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	1.22	Cum	**1237.00**	1502.96			
11	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)	0.69	Cum	**1377.70**	954.75			
12	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.69	Cum	**516.50**	357.93			
13	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	3.21	Sqm	**63.20**	202.78			
14	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	Cum	**5588.70**	11177.40			
15	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications. (3.18 PWD NH SOR CHHATISGARH 2025)	4.20	Sqm	**66.00**	277.20			
16	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. (RCD 15.22 - (ii))	10.50	RM	**499.80**	5247.90			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
17	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	23.31	Sqm	**149.30**	3480.66			
18	**Carriage of materials**							
	Coarse Sand (60 Km lead)	45.352	Cum	**1075.00**	48753.66			
	Coarse Aggregates (100 Km lead)	91.546	Cum	**1398.00**	127981.09			
	Cement (30 km lead)	44.536	MT	**742.00**	33045.45			
	Boulder (60 Km lead)	1.22	Cum	**1159.00**	1408.19			
	Steel (30 Km lead)	3.99	MT	**742.00**	2963.33			
TOTAL (In Rs.)					**1646046.25**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	45.35	Cum	**584.64**	26514.74	2651.47		
	Coarse Aggregate	91.55	Cum	**944.26**	86443.08	8644.31		
	Boulders	1.22	Cum	**694.61**	843.95	84.40		
	Total					11380.18		
	For 1 nos. HR, Total Seigniorage charges					**11380.18**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST FOR HR FOR DHAMNI MR. OFFTAKING FROM RD-17+300 KM (L.) AT KOTWARA DY CANAL								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	101.919	Cum	**195.20**	19894.69			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	20.02	Cum	**6381.70**	127745.43	6.49	9.01	18.02
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	103.64	Cum	**6914.20**	716560.80	42.75	44.56	89.13
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	17.77	Cum	**8151.40**	144821.61	10.07	6.93	14.04

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	2.79	MT	**73574.90**	205066.02			
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	2.31	MT	**160035.11**	369053.36			
7	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	367.79	Sqm	**578.60**	212803.27			
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	13.32	Sqm	**680.10**	9058.93			
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry. (WRD M-002)	2.97	Cum	**694.61**	2062.99			
10	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	2.97	Cum	**1237.00**	3673.89			
11	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)	1.12	Cum	**1377.70**	1545.78			
12	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	1.12	Cum	**516.50**	579.51			
13	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	3.49	Sqm	**63.20**	220.29			
14	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	Cum	**5588.70**	11177.40			
15	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications. (3.18 PWD NH SOR CHHATISGARH 2025)	4.20	Sqm	**66.00**	277.20			
16	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. (RCD 15.22 - (ii))	10.50	RM	**499.80**	5247.90			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
17	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	17.62	Sqm	**149.30**	2630.85			
18	**Carriage of materials**							
	Coarse Sand (60 Km lead)	60.500	Cum	**1075.00**	65037.83			
	Coarse Aggregates (100 Km lead)	122.300	Cum	**1398.00**	170975.79			
	Cement (30 km lead)	59.309	MT	**742.00**	44007.38			
	Boulder (60 Km lead)	2.97	Cum	**1159.00**	3442.23			
	Steel (30 Km lead)	5.09	MT	**742.00**	3779.19			
TOTAL (In Rs.)					**2119662.34**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	60.50	Cum	**584.64**	35370.90	3537.09		
	Coarse Aggregate	122.30	Cum	**944.26**	115483.26	11548.33		
	Boulders	2.97	Cum	**694.61**	2062.99	206.30		
	Total					15291.72		
	For 1 nos. HR, Total Seigniorage charges					**15291.72**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST FOR PIPE HR OF NAWAKHAP MR OFFTAKING FROM RD- 23+830 KM (R.),KOTWARA DY								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	29.965	Cum	**195.20**	5849.24			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	9.57	Cum	**6381.70**	61086.15	3.10	4.31	8.61
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	6.21	Cum	**6914.20**	42929.47	2.56	2.67	5.34
4	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	0.12	MT	**73574.90**	8965.06			
5	Structural Steel (Average rate of Angle, Joint and Channel) etc.	0.08	MT	**160035.11**	12278.01			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	71.84	Sqm	**578.60**	41566.00			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
7	Providing 600 mm NP3 RCC Hume Pipe with collar as per I.S.S. 458-1971 including fixing and fitting NP3 hume pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .	7.50	RM	**2532.61**	18994.58			
8	Labour for laying 600 mm NP3 RCC Hume Pipe with collar as per I.S.S. 458-1971 including fixing and fitting NP3 hume pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .	7.50	RM	**711.27**	5334.49			
9	Providing compacted 75 mm thick sand filter of required F.M. as per design on slopes and in bed of canal with local sand inclusing cost of water, ramming, levelling and dressing, etc. all complete as per specification and direction of E/I. (5.2.1)	1.03	Cum	**339.90**	351.17			
10	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	8.12	Sqm	**149.30**	1212.66			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
11	**Carriage of materials**							
	Coarse Sand (60 Km lead)	6.977	Cum	**1075.00**	7500.55			
	Coarse Aggregates (100 Km lead)	13.955	Cum	**1398.00**	19508.41			
	Cement (30 km lead)	5.663	MT	**742.00**	4201.59			
	Steel (30 Km lead)	0.20	MT	**742.00**	147.34			
	Hume Pipe (30 km Lead)	7.50	RM	**919.00**	6892.50			
TOTAL (In Rs.)					**236817.22**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	6.98	Cum	**584.64**	4079.18	407.92		
	Coarse Aggregate	13.95	Cum	**944.26**	13176.69	1317.67		
	Total					1725.59		
	For 1 nos. HR, Total Seigniorage charges					**1725.59**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST FOR HR FOR BHADWA MR OFFTAKING FROM RD-27+075 KM (L.) AT KOTWARA DY CANAL								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	126.520	Cum	**195.20**	24696.66			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	18.09	Cum	**6381.70**	115461.82	5.86	8.14	16.28
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	71.13	Cum	**6914.20**	491836.01	29.34	30.59	61.18
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	16.08	Cum	**8151.40**	131102.37	9.12	6.27	12.71

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	2.10	MT	**73574.90**	154309.88			
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	2.13	MT	**160035.11**	340252.07			
7	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	285.74	Sqm	**578.60**	165329.82			
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	12.78	Sqm	**680.10**	8691.68			
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry. (WRD M-002)	2.16	Cum	**694.61**	1500.36			
10	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	2.16	Cum	**1237.00**	2671.92			
11	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)	0.92	Cum	**1377.70**	1272.99			
12	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.92	Cum	**516.50**	477.25			
13	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	3.35	Sqm	**63.20**	211.59			
14	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	Cum	**5588.70**	11177.40			
15	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications. (3.18 PWD NH SOR CHHATISGARH 2025)	4.20	Sqm	**66.00**	277.20			
16	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. (RCD 15.22 - (ii))	10.50	RM	**499.80**	5247.90			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
17	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	20.42	Sqm	**149.30**	3049.17			
18	**Carriage of materials**							
	Coarse Sand (60 Km lead)	45.002	Cum	**1075.00**	48377.07			
	Coarse Aggregates (100 Km lead)	91.089	Cum	**1398.00**	127341.98			
	Cement (30 km lead)	44.324	MT	**742.00**	32888.53			
	Boulder (60 Km lead)	2.16	Cum	**1159.00**	2503.44			
	Steel (30 Km lead)	4.22	MT	**742.00**	3133.78			
TOTAL (In Rs.)					**1671810.89**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	45.00	Cum	**584.64**	26309.92	2630.99		
	Coarse Aggregate	91.09	Cum	**944.26**	86011.40	8601.14		
	Boulders	2.16	Cum	**694.61**	1500.36	150.04		
	Total					11382.17		
	For 1 nos. HR, Total Seigniorage charges					**11382.17**		

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND							
DETAILS OF QUANTITIES OF HR FOR GAMHARIA MR OFFTAKING FROM RD-0+005 KM (R.) AT KOTWARA DY.							
S.No.	**Items**	**No.**	**Length**	**Width**	**Height**	**Quantity**	**Unit**
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section A-A	*2*	*1.01*	*1.60*	*2.630*	*8.448*	*Cum*
	Section B-B	*2*	*5.25*	*1.69*	*3.102*	*54.980*	*Cum*
	Section C-C	*2*	*0.50*	*1.69*	*3.102*	*5.236*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.52*	*1.23*	*2.630*	*11.355*	*Cum*
	Left Bank Sec a to d	1	3.14	2.61	1.980	*16.237*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.49*	*1.10*	*2.803*	*3.040*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.63*	*1.89*	*2.803*	*27.792*	*Cum*
	Floor						
	U/S key	*1*	*1.2975*	*2.107*	*0.850*	*2.324*	*Cum*
	Floor	*1*	*3.33*	*2.107*	*0.650*	*4.561*	*Cum*
		1	*0.418*	*1.1*	*0.450*	*0.207*	*Cum*
		1	*0.718*	*1.1*	*0.350*	*0.276*	*Cum*
		1	*0.418*	*1.1*	*0.300*	*0.460*	*Cum*
		1	*3.079*	*1.1*	*0.950*	*3.218*	*Cum*
		1	*0.9*	*1.1*	*0.200*	*0.198*	*Cum*
		2	*0.135*	*1.1*	*0.200*	*0.059*	*Cum*
		1	*1.22*	*1.1*	*0.650*	*0.872*	*Cum*
		1	*0.725*	*1.1*	*0.650*	*0.518*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*1*	*2.000*	*1.100*	*0.600*	*1.320*	*Cum*
	Toe Wall Base D/S Portion	*1*	*1.100*	*0.850*	*1.200*	*1.122*	*Cum*
	Toe Wall Base (For Brick Pitching)	*2*	*3.000*	*0.600*	*1.050*	*3.780*	*Cum*
						146.00	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor						
		1	*0.618*	*2.481*	*0.150*	*0.23*	*Cum*
		1	*1.560*	*1.474*	*0.150*	*0.34*	*Cum*
		1	*1.280*	*1.100*	*0.150*	*0.21*	*Cum*
		1	*0.670*	*1.100*	*0.150*	*0.11*	*Cum*
		1	*3.338*	*1.100*	*0.150*	*0.55*	*Cum*
		1	*0.973*	*1.100*	*0.150*	*0.16*	*Cum*
		1	*0.147*	*1.100*	*0.150*	*0.02*	*Cum*
		1	*0.567*	*1.100*	*0.150*	*0.09*	*Cum*
		1	*0.692*	*1.100*	*0.150*	*0.11*	*Cum*
	PCC Below Abutment						
	Section A-A	*2*	*1.005*	*1.598*	*0.300*	*0.96*	*Cum*
	Section B-B	*2*	*5.250*	*1.688*	*0.300*	*5.32*	*Cum*
	Section C-C	*2*	*0.500*	*1.688*	*0.300*	*0.51*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.516*	*1.228*	*0.300*	*1.30*	*Cum*
	Left Bank Sec a to d	*1*	*3.142*	*2.610*	*0.150*	*1.23*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.493*	*1.100*	*0.300*	*0.33*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.630*	*1.885*	*0.300*	*2.97*	*Cum*
	Toe Wall Base D/S Portion	*1*	*1.100*	*0.850*	*0.300*	*0.28*	*Cum*
	Toe Wall Stem D/S Portion	*1*	*1.100*	*0.450*	*0.900*	*0.45*	*Cum*
	Toe Wall Base (For Brick Pitching)	*1*	*3.000*	*0.600*	*0.150*	*0.27*	*Cum*
	Toe Wall Stem (For Brick Pitching)	*1*	*3.000*	*0.300*	*0.900*	*0.81*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*5*	*0.600*	*0.600*	*0.300*	*0.54*	*Cum*
	TOTAL					**16.80**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Abutment						
	Section A-A	*2*	*1.01*	*0.82*	*0.50*	*0.82*	*Cum*
		2	*1.01*	*1.01*	*0.63*	*1.28*	*Cum*
		2	*1.01*	*1.20*	*1.20*	*2.89*	*Cum*
	Section B-B	*2*	*5.25*	*1.05*	*1.28*	*14.11*	*Cum*
		2	*5.25*	*1.29*	*0.90*	*12.17*	*Cum*
	Section C-C	*2*	*0.50*	*1.05*	*0.98*	*1.03*	*Cum*
		2	*0.50*	*1.29*	*1.20*	*1.55*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.52*	*0.45*	*0.50*	*0.79*	*Cum*
		1	*3.52*	*0.64*	*0.63*	*1.42*	*Cum*
		1	*3.52*	*0.83*	*1.20*	*3.49*	*Cum*
	Left Bank						
	Section a-a	*1*		*2.475*	*0.50*	*1.24*	*Sqm*
		1		*2.33*	*0.20*	*0.47*	*Sqm*
		1		*1.33*	*1.13*	*1.50*	*Sqm*
						3.20	***Sqm***
	Section b-b	*1*		*2.48*	*0.50*	*1.24*	*Sqm*
		1		*2.10*	*0.20*	*0.42*	*Sqm*
		1		*1.29*	*1.13*	*1.46*	*Sqm*
						3.12	***Sqm***
	Section c-c	*1*		*2.48*	*0.50*	*1.24*	*Sqm*
		1		*1.68*	*0.20*	*0.34*	*Sqm*
		1		*1.08*	*1.13*	*1.22*	*Sqm*
						2.80	***Sqm***
	Section d-d	*1*		*2.48*	*0.50*	*1.24*	*Sqm*
		1		*0.48*	*0.20*	*0.10*	*Sqm*
		1		*0.48*	*1.13*	*0.54*	*Sqm*
						1.88	***Sqm***
	Bottom Key	*1*	*3.14*	*1.30*	*0.70*	*2.85*	*Cum*
	Top Stem Area	*1*	*3.14*	*2.75*		*8.63*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.49*	*0.70*	*0.90*	*0.62*	*Cum*
		2	*0.49*	*0.53*	*1.10*	*0.57*	*Cum*
		2	*0.49*	*0.35*	*0.50*	*0.17*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.63*	*1.49*	*0.90*	*7.04*	*Cum*
		2	*2.63*	*1.21*	*1.10*	*7.00*	*Cum*
		2	*2.63*	*0.74*	*0.50*	*1.94*	*Cum*
	TOTAL					**68.38**	**Cum**
	Floor						
	U/S key	*1*	*1.30*	*2.11*	*0.70*	*1.91*	*Cum*
	Floor	*1*	*3.33*	*2.11*	*0.50*	*3.51*	*Cum*
		1	*0.42*	*1.10*	*0.30*	*0.14*	*Cum*
		1	*0.72*	*1.10*	*0.20*	*0.16*	*Cum*
		1	*0.42*	*1.10*	*0.30*	*0.14*	*Cum*
		1	*3.08*	*1.10*	*0.50*	*1.69*	*Cum*
		1	*0.90*	*1.10*	*0.20*	*0.20*	*Cum*
		2	*0.14*	*1.10*		*0.30*	*Cum*
		1	*1.22*	*1.10*	*0.50*	*0.67*	*Cum*
	D/S key	*1*	*0.73*	*1.10*	*0.50*	*0.40*	*Cum*
	TOTAL					**77.49**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Floor	*1*	*3.20*	*2.11*	*0.20*	*1.35*	*Cum*
		1	*0.67*	*1.10*	*0.20*	*0.15*	*Cum*
		1	*3.08*	*1.10*	*0.20*	*0.68*	*Cum*
		1	*0.95*	*1.10*	*0.20*	*0.21*	*Cum*
		1	*1.22*	*1.10*	*0.20*	*0.27*	*Cum*
	Top Slab	*1*	*5.25*	*1.90*	*0.33*	*3.26*	*Cum*
	75mm Th. Wearing coat on top slab	*1*	*4.25*	*1.90*	*0.08*	*0.61*	*Cum*
	Dirt wall	*2*	*5.75*	*0.82*	*0.50*	*4.72*	*Cum*
		2	*5.75*	*0.40*	*0.43*	*1.96*	*Cum*
	Parapet	*2*	*2.74*	*0.45*	*0.18*	*0.43*	*Cum*
		2	*2.74*	*0.35*	*0.25*	*0.48*	*Cum*
		2	*2.74*	*0.22*	*0.55*	*0.66*	*Cum*
	TOTAL					**14.75**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
5	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Dia of Bars	**Length**	**Nos.**		**Weight per m**	**Quantity**	**Unit**
	Slab Per Span						
a1	*16*	*2.360*	*29*		*1.578*	*108.008*	*Kg*
a2	*10*	*5.650*	*10*		*0.616*	*34.830*	*Kg*
a3	*10*	*5.150*	*2*		*0.616*	*6.350*	*Kg*
a4	*10*	*2.280*	*18*		*0.616*	*25.300*	*Kg*
a5	*10*	*5.550*	*7*		*0.616*	*23.949*	*Kg*
	Dirt Wall						
d1	*12*	*4.460*	*26*		*0.888*	*102.938*	*Kg*
d2	*12*	*5.550*	*14*		*0.888*	*68.975*	*Kg*
	Crash Barrier						
x1	*12*	*2.501*	*30*		*0.888*	*66.604*	*Kg*
x2	*16*	*1.265*	*30*		*1.578*	*59.890*	*Kg*
x3	*10*	*1.800*	*24*		*0.616*	*26.631*	*Kg*
	Floor R/F						
	U/S Key						
	12	*6.675*	*10*		*0.888*	*59.254*	*Kg*
	12	*1.800*	*25*		*0.888*	*39.947*	*Kg*
	floor raft						
	12	*3.395*	*10*		*0.888*	*30.138*	*Kg*
	12	*7.425*	*20*		*0.888*	*131.824*	*Kg*
	12	*1.800*	*69*		*0.888*	*110.253*	*Kg*
	0.25 % Skin Reinforcement for Transition walls	*68.38*	*0.25%*	*0.17*	*7850*	*1341.90*	*Kg*
	TOTAL Weight of steel (in kg)					2236.79	Kg
	TOTAL Weight of Steel (in Tonne)					**2.24**	**MT**
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	1		1.94		**1.94**	**MT**
	*Separate sheet attached						
7	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section A-A	*4*	*1.01*		*0.50*	*2.01*	*Sqm*
		4		*0.82*	*0.50*	*1.64*	*Sqm*
		4	*1.01*		*0.63*	*2.53*	*Sqm*
		4		*1.01*	*0.63*	*2.54*	*Sqm*
		4	*1.01*		*1.20*	*4.82*	*Sqm*
		4		*1.20*	*1.20*	*5.75*	*Sqm*
	Section B-B	*4*	*5.25*		*1.28*	*26.78*	*Sqm*
		4		*1.05*	*1.28*	*5.38*	*Sqm*
		4	*5.25*		*0.90*	*18.90*	*Sqm*
		4		*1.29*	*0.90*	*4.64*	*Sqm*
	Section C-C	*4*	*0.50*		*0.98*	*1.95*	*Sqm*
		4		*1.05*	*0.98*	*4.11*	*Sqm*
		4	*0.50*		*1.20*	*2.40*	*Sqm*
		4		*1.29*	*1.20*	*6.18*	*Sqm*
	U/S Transition wall						
	Right Bank (Section D-D)	*2*	*3.52*		*0.50*	*3.52*	*Sqm*
		2		*0.45*	*0.50*	*0.45*	*Sqm*
		2	*3.52*		*0.63*	*4.43*	*Sqm*
		2		*0.64*	*0.63*	*0.81*	*Sqm*
		2	*3.52*		*1.20*	*8.44*	*Sqm*
		2		*0.83*	*1.20*	*1.99*	*Sqm*
	Left Bank						
	Bottom Key	*2*	*3.14*		*0.70*	*4.40*	*Sqm*
		2		*1.30*	*0.70*	*1.82*	*Sqm*
	Section a-a	*2*	*1.05*		*0.50*	*1.05*	*Sqm*
		2		*2.48*	*0.50*	*2.48*	*Sqm*
		2	*1.05*		*0.20*	*0.42*	*Sqm*
		2		*2.33*	*0.20*	*0.93*	*Sqm*
		2	*1.05*		*1.13*	*2.37*	*Sqm*
		2		*1.33*	*1.13*	*3.00*	*Sqm*
	Section b-b	*2*	*1.05*		*0.50*	*1.05*	*Sqm*
		2		*2.48*	*0.50*	*2.48*	*Sqm*
		2	*1.05*		*0.20*	*0.42*	*Sqm*
		2		*2.10*	*0.20*	*0.84*	*Sqm*
		2	*1.05*		*1.13*	*2.37*	*Sqm*
		2		*1.29*	*1.13*	*2.92*	*Sqm*
	Section c-c	*2*	*1.05*		*0.50*	*1.05*	*Sqm*
		2		*2.48*	*0.50*	*2.48*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	1.05		0.20	0.42	Sqm
		2		1.68	0.20	0.67	Sqm
		2	1.05		1.13	2.37	Sqm
		2		1.08	1.13	2.44	Sqm
	Section d-d	2	1.05		0.50	1.05	Sqm
		2		2.48	0.50	2.48	Sqm
		2	1.05		0.20	0.42	Sqm
		2		0.48	0.20	0.19	Sqm
		2	1.05		1.13	2.37	Sqm
		2		0.48	1.13	1.08	Sqm
	D/S Transition wall						
	Sec 4-4	4	0.49		0.90	1.77	Sqm
		4		0.70	0.90	2.52	Sqm
		4	0.49		1.10	2.18	Sqm
		4		0.53	1.10	2.32	Sqm
		4	0.49		0.50	0.99	Sqm
		4		0.35	0.50	0.70	Sqm
	Avg. of Sec 1-1 & 3-3	4	2.63		0.90	9.47	Sqm
		4		1.49	0.90	5.36	Sqm
		4	2.63		1.10	11.60	Sqm
		4		1.21	1.10	5.32	Sqm
		4	2.63		0.50	5.26	Sqm
		4		0.74	0.50	1.48	Sqm
	Floor						
	U/S key	2	1.30		0.70	1.82	Sqm
		2		2.11	0.70	2.95	Sqm
	Floor	2	3.33		0.50	3.33	Sqm
		2		2.11	0.50	2.11	Sqm
		2	0.42		0.30	0.25	Sqm
		2		1.10	0.30	0.66	Sqm
		2	0.72		0.20	0.29	Sqm
		2		1.10	0.20	0.44	Sqm
		2	0.42		0.30	0.84	Sqm
		2		1.10	0.30	2.20	Sqm
		2	3.08		0.50	3.08	Sqm
		2		1.10	0.50	1.10	Sqm
		2	0.90		0.20	0.36	Sqm
		2		1.10	0.20	0.44	Sqm
		4	0.14			0.54	Sqm
		4		1.10		4.40	Sqm
		2	1.22		0.50	1.22	Sqm
		2		1.10	0.50	1.10	Sqm
	D/S key	2	0.73		0.50	0.73	Sqm
		2		1.10	0.50	1.10	Sqm
	Toe Wall Base D/S Portion	2	1.10		0.30	0.66	Sqm
		2		0.85	0.30	0.51	Sqm
	Toe Wall Stem D/S Portion	2	1.10		0.90	1.98	Sqm
		2		0.45	0.90	0.81	Sqm
	Top Slab	2	5.25		0.33	3.43	Sqm
		2		1.90	0.33	1.24	Sqm
	Dirt wall	4	5.75		0.50	11.50	Sqm
		4		0.82	0.50	1.64	Sqm
		4	5.75		0.43	9.78	Sqm
		4		0.40	0.43	0.68	Sqm
	Parapet	4	2.74		0.18	1.92	Sqm
		4		0.45	0.18	0.31	Sqm
		4	2.74		0.25	2.74	Sqm
		4		0.35	0.25	0.35	Sqm
		4	2.74		0.55	6.03	Sqm
		4		0.22	0.55	0.48	Sqm
	TOTAL					**274.73**	**Sqm**
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	2	3.00	2.00		12.02	Sqm
	TOTAL					**12.02**	**Sqm**
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.**(WRD M-002)**						
	Boulder Apron in D/S Portion	1	3.00	0.50	0.90	1.35	***Cum***
	TOTAL					**1.35**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)						
	In D/S Portion below C.C. Blocks	*1*	*2.20*	*1.10*	*0.15*	*0.36*	*Cum*
	In D/S Portion below Stone Chips	*1*	*2.20*	*1.10*	*0.15*	*0.36*	*Cum*
	TOTAL					**0.73**	**Cum**
11	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	U/S transition	*2*	*1.80*	*0.48*		*1.73*	*Sqm*
	On Abutment Top	*2*	*4.82*	*0.45*		*1.62*	*Sqm*
	TOTAL					**3.35**	**Sqm**
12	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2	1			**2.00**	**No.**
13	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications**. (3.18 PWD NH SOR CHHATISGARH 2025)**	2	5.25	0.40		**4.20**	**Sqm**
14	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. **(RCD 15.22 - (ii))**	2	5.25			**10.50**	**RM**
15	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compa.cted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Abutment						
	Section A-A	2	*1.01*	*0.84*		*1.696*	*Cum*
	Section B-B	2	*5.25*	*1.14*		*11.970*	*Cum*
	Section C-C	2	*0.50*	*1.07*		*1.068*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	1	*3.52*	*0.78*		*2.725*	*Cum*
	D/S Transition wall						
	Sec 4-4	2	*0.49*	*0.87*		*0.858*	*Cum*
	Avg. of Sec 1-1 & 3-3	2	*2.63*	*2.60*		*13.687*	*Cum*
	TOTAL					**32.00**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF HR FOR NAGWA MR OFFTAKING FROM RD-1+140 KM (R.) AT KOTWARA DY						
1	0						
	Abutment						
	Section A-A	*2*	*1.00*	*1.70*	*2.297*	*7.787*	*Cum*
	Section B-B	*2*	*4.82*	*1.71*	*2.297*	*37.909*	*Cum*
	Section C-C	*2*	*1.94*	*1.53*	*2.297*	*13.675*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.47*	*1.10*	*2.297*	*8.760*	*Cum*
	Left Bank Sec a to d	1	3.52	2.88	2.842	*28.854*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.50*	*1.10*	*2.220*	*2.427*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.66*	*1.92*	*2.220*	*22.630*	*Cum*
	Floor						
	U/S key	*1*	*1.419*	*2.81*	*0.850*	*3.389*	*Cum*
	Floor	*1*	*2.238*	*2.81*	*0.650*	*4.088*	*Cum*
		1	*1.393*	*1.5*	*0.650*	*1.358*	*Cum*
		1	*2.314*	*1.5*	*0.650*	*2.256*	*Cum*
		1	*1.5*	*0.144*		*0.216*	*Cum*
		1	*2.179*	*1.5*	*1.200*	*3.922*	*Cum*
		1	*1.418*	*1.5*	*0.525*	*1.117*	*Cum*
		1	*0.900*	*1.5*	*0.525*	*0.709*	*Cum*
		1	*1.01*	*1.5*	*0.750*	*1.136*	*Cum*
		1	*0.7*	*1.5*	*0.550*	*0.578*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*1*	*2.200*	*1.500*	*0.600*	*1.980*	*Cum*
	Toe Wall Base D/S Portion	*1*	*1.500*	*0.850*	*1.200*	*1.530*	*Cum*
	Toe Wall Base (For Brick Pitching)	*2*	*3.000*	*0.600*	*1.050*	*3.780*	*Cum*
	Boulder Pitching (D/S Portion)	*1*	*3.000*	*0.900*	*0.900*	*2.430*	*Cum*
						150.53	**Cum**
2	Item of Works						
	PCC Below Floor						
		1	*0.618*	*3.347*	*0.150*	*0.31*	*Cum*
		1	*1.782*	*2.038*	*0.150*	*0.54*	*Cum*
		1	*1.281*	*1.500*	*0.150*	*0.29*	*Cum*
		1	*2.594*	*1.500*	*0.150*	*0.58*	*Cum*
		1	*2.238*	*1.500*	*0.150*	*0.50*	*Cum*
		1	*1.448*	*1.500*	*0.150*	*0.33*	*Cum*
		1	*0.135*	*1.500*	*0.150*	*0.03*	*Cum*
		1	*0.456*	*1.500*	*0.150*	*0.10*	*Cum*
		1	*0.692*	*1.500*	*0.150*	*0.16*	*Cum*
	PCC Below Abutment						
	Section A-A	*2*	*1.000*	*1.695*	*0.300*	*1.02*	*Cum*
	Section B-B	*2*	*4.820*	*1.712*	*0.300*	*4.95*	*Cum*
	Section C-C	*2*	*1.943*	*1.532*	*0.300*	*1.79*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.467*	*1.100*	*0.300*	*1.14*	*Cum*
	Left Bank Sec a to d	*1*	*3.524*	*2.881*	*0.150*	*1.52*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.497*	*1.100*	*0.300*	*0.33*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.656*	*1.919*	*0.300*	*3.06*	*Cum*
	Toe Wall Base D/S Portion	*1*	*1.500*	*0.850*	*0.300*	*0.38*	*Cum*
	Toe Wall Stem D/S Portion	*1*	*1.500*	*0.450*	*0.900*	*0.61*	*Cum*
	Toe Wall Base (For Brick Pitching)	*1*	*3.000*	*0.600*	*0.150*	*0.27*	*Cum*
	Toe Wall Stem (For Brick Pitching)	*1*	*3.000*	*0.300*	*0.900*	*0.81*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*6*	*0.600*	*0.600*	*0.300*	*0.65*	*Cum*
	TOTAL					**19.37**	**Cum**
3	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Abutment						
	Section A-A	*2*	*1.00*	*0.82*	*0.50*	*0.82*	*Cum*
		2	*1.00*	*1.06*	*0.79*	*1.68*	*Cum*
		2	*1.00*	*1.30*	*1.81*	*4.69*	*Cum*
	Section B-B	*2*	*4.82*	*1.07*	*0.82*	*8.43*	*Cum*
		2	*4.82*	*1.31*	*0.90*	*11.38*	*Cum*
	Section C-C	*2*	*1.94*	*0.98*	*0.52*	*1.97*	*Cum*
		2	*1.94*	*1.13*	*1.20*	*5.28*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.47*	*0.35*	*0.50*	*0.61*	*Cum*
		1	*3.47*	*0.53*	*0.52*	*0.95*	*Cum*
		1	*3.47*	*0.70*	*0.90*	*2.18*	*Cum*
	Left Bank						
	Section a-a	*1*		2.718	*0.50*	*1.36*	*Sqm*
		1		*2.57*	*0.20*	*0.51*	*Sqm*
		1		*1.45*	*1.29*	*1.87*	*Sqm*
						3.74	***Sqm***
	Section b-b	*1*		*2.72*	*0.50*	*1.36*	*Sqm*
		1		*2.16*	*0.20*	*0.43*	*Sqm*
		1		*1.32*	*1.29*	*1.71*	*Sqm*
						3.50	***Sqm***
	Section c-c	*1*		*2.72*	*0.50*	*1.36*	*Sqm*
		1		*1.78*	*0.20*	*0.36*	*Sqm*
		1		*1.13*	*1.29*	*1.46*	*Sqm*
						3.17	***Sqm***
	Section d-d	*1*		*2.72*	*0.50*	*1.36*	*Sqm*
		1		*0.48*	*0.20*	*0.10*	*Sqm*
		1		*0.48*	*1.29*	*0.62*	*Sqm*
						2.08	***Sqm***
	Bottom Key	*1*	*3.52*	*1.42*	*0.70*	*3.50*	*Cum*
	Top Stem Area	*1*	*3.52*	*3.12*		*11.00*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.50*	*0.35*	*0.50*	*0.17*	*Cum*
		2	*0.50*	*0.53*	*0.52*	*0.27*	*Cum*
		2	*0.50*	*0.70*	*0.90*	*0.63*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.66*	*0.74*	*0.50*	*1.96*	*Cum*
		2	*2.66*	*1.22*	*0.52*	*3.38*	*Cum*
		2	*2.66*	*1.52*	*0.90*	*7.26*	*Cum*
	TOTAL					**66.16**	**Cum**
	Floor						
	U/S key	*1*	*1.42*	*2.81*	*0.70*	*2.79*	*Cum*
	Floor	*1*	*2.24*	*2.81*	*0.50*	*3.14*	*Cum*
		1	*1.39*	*1.50*	*0.50*	*1.04*	*Cum*
		1	*2.31*	*1.50*	*0.50*	*1.74*	*Cum*
		1	*1.50*	*0.14*		*0.22*	*Cum*
		1	*2.18*	*1.50*	*0.75*	*2.45*	*Cum*
		1	*1.42*	*1.50*	*0.53*	*1.12*	*Cum*
		1	*0.90*	*1.50*	*0.30*	*0.41*	*Cum*
		1	*1.01*	*1.50*	*0.60*	*0.91*	*Cum*
	D/S key	*1*	*0.70*	*1.50*	*0.40*	*0.42*	*Cum*
	TOTAL					**80.40**	**Cum**
4	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	Over Floor	*1*	*3.69*	*2.81*	*0.20*	*2.07*	*Cum*
		1	*2.04*	*1.50*	*0.20*	*0.61*	*Cum*
		1	*3.08*	*1.50*	*0.20*	*0.92*	*Cum*
		1	*0.95*	*1.50*	*0.20*	*0.28*	*Cum*
		1	*1.01*	*1.50*	*0.20*	*0.30*	*Cum*
	Top Slab	*1*	*5.25*	*2.30*	*0.33*	*3.94*	*Cum*
	75mm Th. Wearing coat on top slab	*1*	*4.25*	*2.30*	*0.08*	*0.73*	*Cum*
	Dirt wall	*2*	*6.76*	0.82	*0.50*	*5.55*	*Cum*
		2	*6.76*	*0.40*	*0.43*	*2.32*	*Cum*
	Parapet	*2*	*3.14*	*0.45*	*0.18*	*0.49*	*Cum*
		2	*3.14*	*0.35*	*0.25*	*0.55*	*Cum*
		2	*3.14*	*0.22*	*0.55*	*0.75*	*Cum*
	TOTAL					**18.53**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Dia of Bars	**Length**	**Nos.**		**Weight per m**	**Quantity**	**Unit**
	Slab Per Span						
a1	*16*	*2.760*	*29*		*1.578*	*126.314*	*Kg*
a2	*10*	*5.650*	*12*		*0.616*	*41.796*	*Kg*
a3	*10*	*5.150*	*2*		*0.616*	*6.350*	*Kg*
a4	*10*	*2.680*	*18*		*0.616*	*29.738*	*Kg*
a5	*10*	*5.550*	*9*		*0.616*	*30.792*	*Kg*
	Dirt Wall						
d1	*12*	*4.460*	*26*		*0.888*	*102.938*	*Kg*
d2	*12*	*5.550*	*14*		*0.888*	*68.975*	*Kg*
	Crash Barrier						
x1	*12*	*2.501*	*38*		*0.888*	*84.366*	*Kg*
x2	*16*	*1.265*	*38*		*1.578*	*75.861*	*Kg*
x3	*10*	*2.200*	*24*		*0.616*	*32.549*	*Kg*
	Floor R/F						
	U/S Key						
	12	*7.219*	*6*		*0.888*	*38.450*	*Kg*
	12	*2.200*	*27*		*0.888*	*52.730*	*Kg*
	floor raft						
	12	*3.395*	*6*		*0.888*	*18.083*	*Kg*
	12	*8.676*	*12*		*0.888*	*92.421*	*Kg*
	12	*2.600*	*77*		*0.888*	*177.718*	*Kg*
	0.25 % Skin Reinforcement for Transition walls	*66.16*	*0.25%*	*0.17*	*7850*	*1298.41*	*Kg*
	TOTAL Weight of steel (in kg)					2277.49	Kg
	TOTAL Weight of Steel (in Tonne)					**2.28**	**MT**
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	1	3.15			**3.15**	**MT**
	*Separate sheet attached						
7	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Abutment						
	Section A-A	*4*	*1.00*		*0.50*	*2.00*	*Sqm*
		4		*0.82*	*0.50*	*1.64*	*Sqm*
		4	*1.00*		*0.79*	*3.17*	*Sqm*
		4		*1.06*	*0.79*	*3.35*	*Sqm*
		4	*1.00*		*1.81*	*7.24*	*Sqm*
		4		*1.30*	*1.81*	*9.38*	*Sqm*
	Section B-B	*4*	*4.82*		*0.82*	*15.81*	*Sqm*
		4		*1.07*	*0.82*	*3.50*	*Sqm*
		4	*4.82*		*0.90*	*17.35*	*Sqm*
		4		*1.31*	*0.90*	*4.72*	*Sqm*
	Section C-C	*4*	*1.94*		*0.52*	*4.04*	*Sqm*
		4		*0.98*	*0.52*	*2.03*	*Sqm*
		4	*1.94*		*1.20*	*9.33*	*Sqm*
		4		*1.13*	*1.20*	*5.43*	*Sqm*
	U/S Transition wall						
	Right Bank (Section D-D)	*2*	*3.47*		*0.50*	*3.47*	*Sqm*
		2		*0.35*	*0.50*	*0.35*	*Sqm*
		2	*3.47*		*0.52*	*3.61*	*Sqm*
		2		*0.53*	*0.52*	*0.55*	*Sqm*
		2	*3.47*		*0.90*	*6.24*	*Sqm*
		2		*0.70*	*0.90*	*1.26*	*Sqm*
	Left Bank						
	Bottom Key	*2*	*3.52*		*0.70*	*4.93*	*Sqm*
		2		*1.42*	*0.70*	*1.99*	*Sqm*
	Section a-a	*2*	*1.17*		*0.50*	*1.17*	*Sqm*
		2		*2.72*	*0.50*	*2.72*	*Sqm*
		2	*1.17*		*0.20*	*0.47*	*Sqm*
		2		*2.57*	*0.20*	*1.03*	*Sqm*
		2	*1.17*		*1.29*	*3.04*	*Sqm*
		2		*1.45*	*1.29*	*3.74*	*Sqm*
	Section b-b	*2*	*1.17*		*0.50*	*1.17*	*Sqm*
		2		*2.72*	*0.50*	*2.72*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	1.17		0.20	0.47	Sqm
		2		2.16	0.20	0.86	Sqm
		2	1.17		1.29	3.04	Sqm
		2		1.32	1.29	3.41	Sqm
	Section c-c	2	1.17		0.50	1.17	Sqm
		2		2.72	0.50	2.72	Sqm
		2	1.17		0.20	0.47	Sqm
		2		1.78	0.20	0.71	Sqm
		2	1.17		1.29	3.04	Sqm
		2		1.13	1.29	2.92	Sqm
	Section d-d	2	1.17		0.50	1.17	Sqm
		2		2.72	0.50	2.72	Sqm
		2	1.17		0.20	0.47	Sqm
		2		0.48	0.20	0.19	Sqm
		2	1.17		1.29	3.04	Sqm
		2		0.48	1.29	1.24	Sqm
	D/S Transition wall						
	Sec 4-4	4	0.50		0.50	0.99	Sqm
		4		0.35	0.50	0.70	Sqm
		4	0.50		0.52	1.03	Sqm
		4		0.53	0.52	1.09	Sqm
		4	0.50		0.90	1.79	Sqm
		4		0.70	0.90	2.52	Sqm
	Avg. of Sec 1-1 & 3-3	4	2.66		0.50	5.31	Sqm
		4		0.74	0.50	1.48	Sqm
		4	2.66		0.52	5.52	Sqm
		4		1.22	0.52	2.54	Sqm
		4	2.66		0.90	9.56	Sqm
		4		1.52	0.90	5.47	Sqm
	Floor						
	U/S key	2	1.42		0.70	1.99	Sqm
		2		2.81	0.70	3.93	Sqm
	Floor	2	2.24		0.50	2.24	Sqm
		2		2.81	0.50	2.81	Sqm
		2	1.39		0.50	1.39	Sqm
		2		1.50	0.50	1.50	Sqm
		2	2.31		0.50	2.31	Sqm
		2		1.50	0.50	1.50	Sqm
		2	1.50		0.00	3.00	Sqm
		2		0.14	0.00	0.29	Sqm
		2	2.18		0.75	3.27	Sqm
		2		1.50	0.75	2.25	Sqm
		2	1.42		0.53	1.49	Sqm
		2		1.50	0.53	1.58	Sqm
		2	0.90			1.80	Sqm
		2		1.50		3.00	Sqm
		2	1.01		0.60	1.21	Sqm
		2		1.50	0.60	1.80	Sqm
	D/S key	2	0.70		0.40	0.56	Sqm
		2		1.50	0.40	1.20	Sqm
	Toe Wall Base D/S Portion	2	1.50		0.30	0.90	Sqm
		2		0.85	0.30	0.51	Sqm
	Toe Wall Stem D/S Portion	2	1.50		0.90	2.70	Sqm
		2		0.45	0.90	0.81	Sqm
	Toe Wall Base (For Brick Pitching)	4	3.00		0.15	1.80	Sqm
		4		0.60	0.15	0.36	Sqm
	Toe Wall Stem (For Brick Pitching)	4	3.00		0.90	10.80	Sqm
		4		0.30	0.90	1.08	Sqm
	Top Slab	2	5.25		0.33	3.43	Sqm
		2		2.30	0.33	1.50	Sqm
		1	5.25	2.30		12.08	Sqm
	Dirt wall	4	6.76		0.50	13.53	Sqm
		4		0.82	0.50	1.64	Sqm
		4	6.76		0.43	11.58	Sqm
		4		0.40	0.43	0.68	Sqm
	Parapet	4	3.14		0.18	2.20	Sqm
		4		0.45	0.18	0.31	Sqm
		4	3.14		0.25	3.14	Sqm
		4		0.35	0.25	0.35	Sqm
		4	3.14		0.55	6.91	Sqm
		4		0.22	0.55	0.48	Sqm
	TOTAL					**309.00**	**Sqm**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*3.00*	*3.71*		*22.23*	*Sqm*
	TOTAL					**22.23**	**Sqm**
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.**(WRD M-002)**						
	Boulder Apron in D/S Portion	*1*	*3.00*	*0.90*	*0.90*	*2.43*	***Cum***
	TOTAL					**2.43**	**Cum**
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)						
	In D/S Portion below C.C. Blocks	*1*	*2.20*	*1.50*	*0.15*	*0.50*	*Cum*
	In D/S Portion below Stone Chips	*1*	*2.20*	*1.50*	*0.15*	*0.50*	*Cum*
	TOTAL					**0.99**	**Cum**
11	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	U/S transition	*2*	*1.94*	*0.48*		*1.86*	*Sqm*
	On Abutment Top	*2*	*5.66*	*0.45*		*1.74*	*Sqm*
	TOTAL					**3.60**	**Sqm**
12	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2	1			**2.00**	**No.**
13	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications**. (3.18 PWD NH SOR CHHATISGARH 2025)**	2	5.25	0.40		**4.20**	**Sqm**
14	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. **(RCD 15.22 - (ii))**	2	5.25			**10.50**	**RM**
15	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compa.cted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Abutment						
	Section A-A	2	*1.00*	*1.12*		*2.234*	*Cum*
	Section B-B	2	*4.82*	*0.98*		*9.428*	*Cum*
	Section C-C	2	*1.94*	*0.77*		*2.992*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	1	*3.47*	*1.12*		*3.873*	*Cum*
	D/S Transition wall						
	Sec 4-4	2	*0.50*	*0.65*		*0.646*	*Cum*
	Avg. of Sec 1-1 & 3-3	2	*2.66*	*1.86*		*9.886*	*Cum*
	TOTAL					**29.06**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF HR FOR PAWAI MR OFFTAKING FROM RD-5.120 KM (R.) AT KOTWARA DY						
1	0						
	Abutment						
	Section A-A	*2*	*1.00*	*1.59*	*3.399*	*10.802*	*Cum*
	Section B-B	*2*	*3.60*	*2.16*	*3.399*	*52.935*	*Cum*
	Section C-C	*2*	*2.18*	*1.98*	*3.399*	*29.320*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.94*	*1.22*	*3.399*	*16.333*	*Cum*
	Left Bank Sec a to d	1	3.11	2.64	2.665	*21.875*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.49*	*1.10*	*3.099*	*3.348*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.61*	*1.86*	*3.099*	*30.092*	*Cum*
	Floor						
	U/S key	*1*	*1.28625*	*2.3775*	*0.850*	*2.599*	*Cum*
	Floor	*1*	*1.9725*	*2.3775*	*0.650*	*3.048*	*Cum*
		1	*1.3935*	*1.5*	*0.650*	*1.359*	*Cum*
		1	*0.671*	*1.5*	*0.650*	*0.654*	*Cum*
		1	*1.5*	*0.02951*		*0.044*	*Cum*
		1	*3.161*	*1.5*	*0.950*	*4.504*	*Cum*
		1	*0.9*	*1.5*	*0.350*	*0.473*	*Cum*
		1	*0.531*	*1.5*	*0.350*	*0.279*	*Cum*
		1	*1.164*	*1.5*	*0.650*	*1.135*	*Cum*
		1	*0.725*	*1.5*	*0.650*	*0.707*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*1*	*2.200*	*1.500*	*0.600*	*1.980*	*Cum*
	Toe Wall Base D/S Portion	*1*	*1.500*	*0.850*	*1.200*	*1.530*	*Cum*
	Toe Wall Base (For Brick Pitching)	*2*	*3.000*	*0.600*	*1.050*	*3.780*	*Cum*
	Boulder Pitching (D/S Portion)	*1*	*3.000*	*0.900*	*0.900*	*2.430*	*Cum*
						189.23	**Cum**
2	Item of Works						
	PCC Below Floor						
		1	*0.618*	*2.721*	*0.150*	*0.25*	*Cum*
		1	*1.541*	*1.843*	*0.150*	*0.43*	*Cum*
		1	*1.281*	*1.500*	*0.150*	*0.29*	*Cum*
		1	*0.671*	*1.500*	*0.150*	*0.15*	*Cum*
		1	*3.339*	*1.500*	*0.150*	*0.75*	*Cum*
		1	*0.973*	*1.500*	*0.150*	*0.22*	*Cum*
		1	*0.170*	*1.500*	*0.150*	*0.04*	*Cum*
		1	*0.567*	*1.500*	*0.150*	*0.13*	*Cum*
		1	*0.693*	*1.500*	*0.150*	*0.16*	*Cum*
	PCC Below Abutment						
	Section A-A	*2*	*1.000*	*1.589*	*0.300*	*0.95*	*Cum*
	Section B-B	*2*	*3.600*	*2.163*	*0.300*	*4.67*	*Cum*
	Section C-C	*2*	*2.175*	*1.983*	*0.300*	*2.59*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.942*	*1.219*	*0.300*	*1.44*	*Cum*
	Left Bank Sec a to d	*1*	*3.108*	*2.641*	*0.150*	*1.23*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.491*	*1.100*	*0.300*	*0.32*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.611*	*1.860*	*0.300*	*2.91*	*Cum*
	Toe Wall Base D/S Portion	*1*	*1.500*	*0.850*	*0.300*	*0.38*	*Cum*
	Toe Wall Stem D/S Portion	*1*	*1.500*	*0.450*	*0.900*	*0.61*	*Cum*
	Toe Wall Base (For Brick Pitching)	*1*	*3.000*	*0.600*	*0.150*	*0.27*	*Cum*
	Toe Wall Stem (For Brick Pitching)	*1*	*3.000*	*0.300*	*0.900*	*0.81*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*6*	*0.600*	*0.600*	*0.300*	*0.65*	*Cum*
	TOTAL					**19.25**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
3	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section A-A	*2*	*1.00*	*0.82*	*0.50*	*0.82*	*Cum*
		2	*1.00*	*1.00*	*0.62*	*1.24*	*Cum*
		2	*1.00*	*1.19*	*1.20*	*2.85*	*Cum*
	Section B-B	*2*	*3.60*	*1.29*	*1.57*	*14.61*	*Cum*
		2	*3.60*	*1.76*	*0.90*	*11.42*	*Cum*
	Section C-C	*2*	*2.18*	*1.20*	*1.27*	*6.64*	*Cum*
		2	*2.18*	*1.58*	*1.20*	*8.26*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.94*	*0.45*	*0.50*	*0.89*	*Cum*
		1	*3.94*	*0.63*	*0.62*	*1.54*	*Cum*
		1	*3.94*	*0.82*	*1.20*	*3.87*	*Cum*
	Left Bank						
	Section a-a	*1*		2.453	*0.50*	*1.23*	*Sqm*
		1		*2.30*	*0.20*	*0.46*	*Sqm*
		1		*1.32*	*1.12*	*1.47*	*Sqm*
						3.15	***Sqm***
	Section b-b	*1*		*2.45*	*0.50*	*1.23*	*Sqm*
		1		*2.08*	*0.20*	*0.42*	*Sqm*
		1		*1.28*	*1.12*	*1.43*	*Sqm*
						3.07	***Sqm***
	Section c-c	*1*		*2.45*	*0.50*	*1.23*	*Sqm*
		1		*1.67*	*0.20*	*0.33*	*Sqm*
		1		*1.08*	*1.12*	*1.20*	*Sqm*
						2.76	***Sqm***
	Section d-d	*1*		*2.45*	*0.50*	*1.23*	*Sqm*
		1		*0.48*	*0.20*	*0.10*	*Sqm*
		1		*0.48*	*1.12*	*0.54*	*Sqm*
						1.86	***Sqm***
	Bottom Key	*1*	*3.11*	*1.29*	*0.70*	*2.80*	*Cum*
	Top Stem Area	*1*	*3.11*	*2.71*		*8.42*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.49*	*0.35*	*0.50*	*0.17*	*Cum*
		2	*0.49*	*0.53*	*1.40*	*0.72*	*Cum*
		2	*0.49*	*0.70*	*0.90*	*0.62*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.61*	*0.64*	*0.50*	*1.68*	*Cum*
		2	*2.61*	*1.10*	*1.40*	*8.02*	*Cum*
		2	*2.61*	*1.46*	*0.90*	*6.86*	*Cum*
	TOTAL					**81.44**	**Cum**
	Floor						
	U/S key	*1*	*1.29*	*2.38*	*0.70*	*2.14*	*Cum*
	Floor	*1*	*1.97*	*2.38*	*0.50*	*2.34*	*Cum*
		1	*1.39*	*1.50*	*0.50*	*1.05*	*Cum*
		1	*0.67*	*1.50*	*0.50*	*0.50*	*Cum*
		1	*1.50*	*0.03*		*0.04*	*Cum*
		1	*3.16*	*1.50*	*0.50*	*2.37*	*Cum*
		1	*0.90*	*1.50*	*0.35*	*0.47*	*Cum*
		1	*0.53*	*1.50*	*0.30*	*0.24*	*Cum*
		1	*1.16*	*1.50*	*0.50*	*0.87*	*Cum*
	D/S key	*1*	*0.73*	*1.50*	*0.50*	*0.54*	*Cum*
	TOTAL					**92.01**	**Cum**
4	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	Over Floor	*1*	*3.17*	*2.38*	*0.20*	*1.51*	*Cum*
		1	*0.67*	*1.50*	*0.20*	*0.20*	*Cum*
		1	*3.00*	*1.50*	*0.20*	*0.90*	*Cum*
		1	*0.95*	*1.50*	*0.20*	*0.28*	*Cum*
		1	*1.28*	*1.50*	*0.20*	*0.38*	*Cum*
	Top Slab	*1*	*5.25*	*2.30*	*0.33*	*3.94*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	75mm Th. Wearing coat on top slab	*1*	*4.25*	*2.30*	*0.08*	*0.73*	*Cum*
	Dirt wall	*2*	*5.78*	*0.82*	*0.50*	*4.74*	*Cum*
		2	*5.78*	*0.40*	*0.43*	*1.98*	*Cum*
	Parapet	*2*	*3.14*	*0.45*	*0.18*	*0.49*	*Cum*
		2	*3.14*	*0.35*	*0.25*	*0.55*	*Cum*
		2	*3.14*	*0.22*	*0.55*	*0.75*	*Cum*
	TOTAL					**16.46**	**Cum**
5	Providing & laying P.C.C. of R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as						
	Dia of Bars	**Length**	**Nos.**		**Weight per m**	**Quantity**	**Unit**
	Slab Per Span						
a1	*16*	*2.760*	*29*		*1.578*	*126.314*	*Kg*
a2	*10*	*5.650*	*12*		*0.616*	*41.796*	*Kg*
a3	*10*	*5.150*	*2*		*0.616*	*6.350*	*Kg*
a4	*10*	*2.680*	*18*		*0.616*	*29.738*	*Kg*
a5	*10*	*5.550*	*9*		*0.616*	*30.792*	*Kg*
	Dirt Wall						
d1	*12*	*4.460*	*26*		*0.888*	*102.938*	*Kg*
d2	*12*	*5.550*	*14*		*0.888*	*68.975*	*Kg*
	Crash Barrier						
x1	*12*	*2.501*	*38*		*0.888*	*84.366*	*Kg*
x2	*16*	*1.265*	*38*		*1.578*	*75.861*	*Kg*
x3	*10*	*2.200*	*24*		*0.616*	*32.549*	*Kg*
	Floor R/F						
	U/S Key						
	12	*6.710*	*6*		*0.888*	*35.739*	*Kg*
	12	*2.200*	*24*		*0.888*	*46.871*	*Kg*
	floor raft						
	12	*3.395*	*6*		*0.888*	*18.083*	*Kg*
	12	*7.446*	*12*		*0.888*	*79.318*	*Kg*
	12	*2.200*	*67*		*0.888*	*130.847*	*Kg*
	0.25 % Skin Reinforcement for Transition walls	*81.44*	*0.25%*	*0.20*	*7850*	*1598.22*	*Kg*
	TOTAL Weight of steel (in kg)					2508.75	Kg
	TOTAL Weight of Steel (in Tonne)					**2.51**	**MT**
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	1	2.05			**2.05**	**MT**
	*Separate sheet attached						
7	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Abutment						
	Section A-A	*4*	*1.00*		*0.50*	*2.00*	*Sqm*
		4		*0.82*	*0.50*	*1.64*	*Sqm*
		4	*1.00*		*0.62*	*2.46*	*Sqm*
		4		*1.00*	*0.62*	*2.47*	*Sqm*
		4	*1.00*		*1.20*	*4.80*	*Sqm*
		4		*1.19*	*1.20*	*5.71*	*Sqm*
	Section B-B	*4*	*3.60*		*1.57*	*22.62*	*Sqm*
		4		*1.29*	*1.57*	*8.12*	*Sqm*
		4	*3.60*		*0.90*	*12.96*	*Sqm*
		4		*1.76*	*0.90*	*6.35*	*Sqm*
	Section C-C	*4*	*2.18*		*1.27*	*11.06*	*Sqm*
		4		*1.20*	*1.27*	*6.11*	*Sqm*
		4	*2.18*		*1.20*	*10.44*	*Sqm*
		4		*1.58*	*1.20*	*7.60*	*Sqm*
	U/S Transition wall						
	Right Bank (Section D-D)	*2*	*3.94*		*0.50*	*3.94*	*Sqm*
		2		*0.45*	*0.50*	*0.45*	*Sqm*
		2	*3.94*		*0.62*	*4.85*	*Sqm*
		2		*0.63*	*0.62*	*0.78*	*Sqm*
		2	*3.94*		*1.20*	*9.46*	*Sqm*
		2		*0.82*	*1.20*	*1.97*	*Sqm*
	Left Bank						
	Bottom Key	*2*	*3.11*		*0.70*	*4.35*	*Sqm*
		2		*1.29*	*0.70*	*1.80*	*Sqm*
	Section a-a	*2*	*1.04*		*0.50*	*1.04*	*Sqm*
		2		*2.45*	*0.50*	*2.45*	*Sqm*
		2	*1.04*		*0.20*	*0.41*	*Sqm*
		2		*2.30*	*0.20*	*0.92*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	1.04		1.12	2.31	Sqm
		2		1.32	1.12	2.94	Sqm
	Section b-b	2	1.04		0.50	1.04	Sqm
		2		2.45	0.50	2.45	Sqm
		2	1.04		0.20	0.41	Sqm
		2		2.08	0.20	0.83	Sqm
		2	1.04		1.12	2.31	Sqm
		2		1.28	1.12	2.85	Sqm
	Section c-c	2	1.04		0.50	1.04	Sqm
		2		2.45	0.50	2.45	Sqm
		2	1.04		0.20	0.41	Sqm
		2		1.67	0.20	0.67	Sqm
		2	1.04		1.12	2.31	Sqm
		2		1.08	1.12	2.40	Sqm
	Section d-d	2	1.04		0.50	1.04	Sqm
		2		2.45	0.50	2.45	Sqm
		2	1.04		0.20	0.41	Sqm
		2		0.48	0.20	0.19	Sqm
		2	1.04		1.12	2.31	Sqm
		2		0.48	1.12	1.07	Sqm
	D/S Transition wall						
	Sec 4-4	4	0.49		0.50	0.98	Sqm
		4		0.35	0.50	0.70	Sqm
		4	0.49		1.40	2.75	Sqm
		4		0.53	1.40	2.94	Sqm
		4	0.49		0.90	1.77	Sqm
		4		0.70	0.90	2.52	Sqm
	Avg. of Sec 1-1 & 3-3	4	2.61		0.50	5.22	Sqm
		4		0.64	0.50	1.28	Sqm
		4	2.61		1.40	14.61	Sqm
		4		1.10	1.40	6.14	Sqm
		4	2.61		0.90	9.40	Sqm
		4		1.46	0.90	5.25	Sqm
	Floor						
	U/S key	2	1.29		0.70	1.80	Sqm
		2		2.38	0.70	3.33	Sqm
	Floor	2	1.97		0.50	1.97	Sqm
		2		2.38	0.50	2.38	Sqm
		2	1.39		0.50	1.39	Sqm
		2		1.50	0.50	1.50	Sqm
		2	0.67		0.50	0.67	Sqm
		2		1.50	0.50	1.50	Sqm
		2	1.50		0.00	3.00	Sqm
		2		0.03	0.00	0.06	Sqm
		2	3.16		0.50	3.16	Sqm
		2		1.50	0.50	1.50	Sqm
		2	0.90		0.35	0.63	Sqm
		2		1.50	0.35	1.05	Sqm
		2	0.53			1.06	Sqm
		2		1.50		3.00	Sqm
		2	1.16		0.50	1.16	Sqm
		2		1.50	0.50	1.50	Sqm
	D/S key	2	0.73		0.50	0.73	Sqm
		2		1.50	0.50	1.50	Sqm
	Toe Wall Base D/S Portion	2	1.50		0.30	0.90	Sqm
		2		0.85	0.30	0.51	Sqm
	Toe Wall Stem D/S Portion	2	1.50		0.90	2.70	Sqm
		2		0.45	0.90	0.81	Sqm
	Toe Wall Base (For Brick Pitching)	4	3.00		0.15	1.80	Sqm
		4		0.60	0.15	0.36	Sqm
	Toe Wall Stem (For Brick Pitching)	4	3.00		0.90	10.80	Sqm
		4		0.30	0.90	1.08	Sqm
	Top Slab	2	5.25		0.33	3.43	Sqm
		2		2.30	0.33	1.50	Sqm
		1	5.25	2.30		12.08	Sqm
	Dirt wall	4	5.78		0.50	11.55	Sqm
		4		0.82	0.50	1.64	Sqm
		4	5.78		0.43	9.89	Sqm
		4		0.40	0.43	0.68	Sqm
	Parapet	4	3.14		0.18	2.20	Sqm
		4		0.45	0.18	0.31	Sqm
		4	3.14		0.25	3.14	Sqm
		4		0.35	0.25	0.35	Sqm
		4	3.14		0.55	6.91	Sqm
		4		0.22	0.55	0.48	Sqm

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	TOTAL					**328.23**	**Sqm**
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*3.00*	*1.95*		*11.70*	*Sqm*
	TOTAL					**11.70**	**Sqm**
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.**(WRD M-002)**						
	Boulder Apron in D/S Portion	*1*	*3.00*	*0.90*	*0.90*	*2.43*	***Cum***
	TOTAL					**2.43**	**Cum**
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)						
	In D/S Portion below C.C. Blocks	*1*	*2.20*	*1.50*	*0.15*	*0.50*	*Cum*
	In D/S Portion below Stone Chips	*1*	*2.20*	*1.50*	*0.15*	*0.50*	*Cum*
	TOTAL					**0.99**	**Cum**
11	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	U/S transition	*2*	*2.04*	*0.48*		*1.96*	*Sqm*
	On Abutment Top	*2*	*4.63*	*0.45*		*1.84*	*Sqm*
	TOTAL					**3.80**	**Sqm**
12	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2	1			**2.00**	**No.**
13	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications**. (3.18 PWD NH SOR CHHATISGARH 2025)**	2	5.25	0.40		**4.20**	**Sqm**
14	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. **(RCD 15.22 - (ii))**	2	5.25			**10.50**	**RM**
15	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compa.cted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Abutment						
	Section A-A	2	*1.00*	*0.83*		*1.662*	*Cum*
	Section B-B	2	*3.60*	*1.82*		*13.126*	*Cum*
	Section C-C	2	*2.18*	*1.53*		*6.660*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	1	*3.94*	*0.83*		*3.276*	*Cum*
	D/S Transition wall						
	Sec 4-4	2	*0.49*	*0.98*		*0.962*	*Cum*
	Avg. of Sec 1-1 & 3-3	2	*2.61*	*1.47*		*7.676*	*Cum*
	TOTAL					**33.36**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF HR FOR BHUTAILI MR OFFTAKING FROM RD-9.875 KM (R.) AT KOTWARA DY CANAL						
1	0						
	Abutment						
	Section A-A	*2*	*1.00*	*1.58*	*3.555*	*11.234*	*Cum*
	Section B-B	*2*	*3.60*	*2.25*	*3.555*	*57.514*	*Cum*
	Section C-C	*2*	*2.20*	*2.07*	*3.555*	*32.332*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.47*	*1.21*	*3.555*	*14.909*	*Cum*
	Left Bank Sec a to d	1	3.07	2.62	2.650	*21.337*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.49*	*1.10*	*3.255*	*3.516*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.61*	*1.86*	*3.255*	*31.607*	*Cum*
	Floor						
	U/S key	*1*	*1.275*	*2.3775*	*0.850*	*2.577*	*Cum*
	Floor	*1*	*1.95*	*2.3775*	*0.650*	*3.013*	*Cum*
		1	*1.3935*	*1.2*	*0.650*	*1.087*	*Cum*
		1	*0.671*	*1.2*	*0.650*	*0.523*	*Cum*
		1	*1.2*	*0.02951*		*0.035*	*Cum*
		1	*3.161*	*1.2*	*0.950*	*3.604*	*Cum*
		1	*0.9*	*1.2*	*0.350*	*0.378*	*Cum*
		1	*0.531*	*1.2*	*0.350*	*0.223*	*Cum*
		1	*1.187*	*1.2*	*0.650*	*0.926*	*Cum*
		1	*0.725*	*1.2*	*0.650*	*0.566*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*1*	*2.200*	*1.200*	*0.600*	*1.584*	*Cum*
	Toe Wall Base D/S Portion	*1*	*1.200*	*0.850*	*1.200*	*1.224*	*Cum*
	Toe Wall Base (For Brick Pitching)	*2*	*3.000*	*0.600*	*1.050*	*3.780*	*Cum*
	Boulder Pitching (D/S Portion)	*1*	*3.000*	*0.600*	*0.900*	*1.620*	*Cum*
						193.59	**Cum**
2	Item of Works						
	PCC Below Floor						
		1	*0.618*	*2.521*	*0.150*	*0.23*	*Cum*
		1	*1.521*	*1.553*	*0.150*	*0.35*	*Cum*
		1	*1.281*	*1.200*	*0.150*	*0.23*	*Cum*
		1	*0.671*	*1.200*	*0.150*	*0.12*	*Cum*
		1	*3.339*	*1.200*	*0.150*	*0.60*	*Cum*
		1	*0.973*	*1.200*	*0.150*	*0.18*	*Cum*
		1	*0.192*	*1.200*	*0.150*	*0.03*	*Cum*
		1	*0.567*	*1.200*	*0.150*	*0.10*	*Cum*
		1	*0.693*	*1.200*	*0.150*	*0.12*	*Cum*
	PCC Below Abutment						
	Section A-A	*2*	*1.000*	*1.580*	*0.300*	*0.95*	*Cum*
	Section B-B	*2*	*3.600*	*2.247*	*0.300*	*4.85*	*Cum*
	Section C-C	*2*	*2.200*	*2.067*	*0.300*	*2.73*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.466*	*1.210*	*0.300*	*1.26*	*Cum*
	Left Bank Sec a to d	*1*	*3.072*	*2.621*	*0.150*	*1.21*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.491*	*1.100*	*0.300*	*0.32*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.611*	*1.860*	*0.300*	*2.91*	*Cum*
	Toe Wall Base D/S Portion	*1*	*1.200*	*0.850*	*0.300*	*0.31*	*Cum*
	Toe Wall Stem D/S Portion	*1*	*1.200*	*0.450*	*0.900*	*0.49*	*Cum*
	Toe Wall Base (For Brick Pitching)	*1*	*3.000*	*0.600*	*0.150*	*0.27*	*Cum*
	Toe Wall Stem (For Brick Pitching)	*1*	*3.000*	*0.300*	*0.900*	*0.81*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*6*	*0.600*	*0.600*	*0.300*	*0.65*	*Cum*
	TOTAL					**18.73**	**Cum**
3	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section A-A	*2*	*1.00*	*0.82*	*0.50*	*0.82*	*Cum*
		2	*1.00*	*1.00*	*0.60*	*1.20*	*Cum*
		2	*1.00*	*1.18*	*1.20*	*2.83*	*Cum*
	Section B-B	*2*	*3.60*	*1.33*	*1.71*	*16.44*	*Cum*
		2	*3.60*	*1.85*	*0.90*	*11.97*	*Cum*
	Section C-C	*2*	*2.20*	*1.24*	*1.41*	*7.73*	*Cum*
		2	*2.20*	*1.67*	*1.20*	*8.80*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.47*	*0.45*	*0.50*	*0.78*	*Cum*
		1	*3.47*	*0.63*	*0.60*	*1.31*	*Cum*
		1	*3.47*	*0.81*	*1.20*	*3.37*	*Cum*
	Left Bank						

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Section a-a	*1*		2.453	*0.50*	*1.23*	*Sqm*
		1		*2.29*	*0.20*	*0.46*	*Sqm*
		1		*1.32*	*1.10*	*1.45*	*Sqm*
						3.13	***Sqm***
	Section b-b	*1*		*2.45*	*0.50*	*1.23*	*Sqm*
		1		*2.05*	*0.20*	*0.41*	*Sqm*
		1		*1.27*	*1.10*	*1.39*	*Sqm*
						3.03	***Sqm***
	Section c-c	*1*		*2.45*	*0.50*	*1.23*	*Sqm*
		1		*1.66*	*0.20*	*0.33*	*Sqm*
		1		*1.07*	*1.10*	*1.18*	*Sqm*
						2.74	***Sqm***
	Section d-d	*1*		*2.45*	*0.50*	*1.23*	*Sqm*
		1		*0.48*	*0.20*	*0.10*	*Sqm*
		1		*0.48*	*1.10*	*0.53*	*Sqm*
						1.85	***Sqm***
	Bottom Key	*1*	*3.07*	*1.29*	*0.70*	*2.77*	*Cum*
	Top Stem Area	*1*	*3.07*	*2.69*		*8.26*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.49*	*0.35*	*0.50*	*0.17*	*Cum*
		2	*0.49*	*0.53*	*1.56*	*0.80*	*Cum*
		2	*0.49*	*0.70*	*0.90*	*0.62*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.61*	*0.64*	*0.50*	*1.66*	*Cum*
		2	*2.61*	*1.09*	*1.56*	*8.86*	*Cum*
		2	*2.61*	*1.46*	*0.90*	*6.86*	*Cum*
	TOTAL					**85.23**	**Cum**
	Floor						
	U/S key	*1*	*1.28*	*2.38*	*0.70*	*2.12*	*Cum*
	Floor	*1*	*1.95*	*2.38*	*0.50*	*2.32*	*Cum*
		1	*1.39*	*1.20*	*0.50*	*0.84*	*Cum*
		1	*0.67*	*1.20*	*0.50*	*0.40*	*Cum*
		1	*1.20*	*0.03*		*0.04*	*Cum*
		1	*3.16*	*1.20*	*0.50*	*1.90*	*Cum*
		1	*0.90*	*1.20*	*0.35*	*0.38*	*Cum*
		1	*0.53*	*1.20*	*0.30*	*0.19*	*Cum*
		1	*1.19*	*1.20*	*0.50*	*0.71*	*Cum*
	D/S key	*1*	*0.73*	*1.20*	*0.50*	*0.44*	*Cum*
	TOTAL					**94.56**	**Cum**
4	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	Over Floor	*1*	*3.40*	*2.38*	*0.20*	*1.62*	*Cum*
		1	*0.67*	*1.20*	*0.20*	*0.16*	*Cum*
		1	*3.00*	*1.20*	*0.20*	*0.72*	*Cum*
		1	*0.95*	*1.20*	*0.20*	*0.23*	*Cum*
		1	*1.30*	*1.20*	*0.20*	*0.31*	*Cum*
	Top Slab	*1*	*5.25*	*2.00*	*0.33*	*3.43*	*Cum*
	75mm Th. Wearing coat on top slab	*1*	*4.25*	*2.00*	*0.08*	*0.64*	*Cum*
	Dirt wall	*2*	*5.80*	*0.82*	*0.50*	*4.76*	*Cum*
		2	*5.80*	*0.40*	*0.43*	*1.99*	*Cum*
	Parapet	*2*	*2.84*	*0.45*	*0.18*	*0.44*	*Cum*
		2	*2.84*	*0.35*	*0.25*	*0.50*	*Cum*
		2	*2.84*	*0.22*	*0.55*	*0.68*	*Cum*
	TOTAL					**15.47**	**Cum**
5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Dia of Bars	**Length**	**Nos.**		**Weight per m**	**Quantity**	**Unit**
	Slab Per Span						
a1	*16*	*2.460*	*29*		*1.578*	*112.584*	*Kg*
a2	*10*	*5.650*	*10*		*0.616*	*34.830*	*Kg*
a3	*10*	*5.150*	*2*		*0.616*	*6.350*	*Kg*
a4	*10*	*2.380*	*18*		*0.616*	*26.409*	*Kg*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
a5	*10*	*5.550*	*7*		*0.616*	*23.949*	*Kg*
	Dirt Wall						
d1	*12*	*4.460*	*26*		*0.888*	*102.938*	*Kg*
d2	*12*	*5.550*	*14*		*0.888*	*68.975*	*Kg*
	Crash Barrier						
x1	*12*	*2.501*	*32*		*0.888*	*71.045*	*Kg*
x2	*16*	*1.265*	*32*		*1.578*	*63.883*	*Kg*
x3	*10*	*1.900*	*24*		*0.616*	*28.111*	*Kg*
	Floor R/F						
	U/S Key						
	12	*6.668*	*5*		*0.888*	*29.596*	*Kg*
	12	*1.900*	*25*		*0.888*	*42.166*	*Kg*
	floor raft						
	12	*3.395*	*5*		*0.888*	*15.069*	*Kg*
	12	*7.469*	*10*		*0.888*	*66.303*	*Kg*
	12	*1.900*	*67*		*0.888*	*113.005*	*Kg*
	0.25 % Skin Reinforcement for Transition walls	*85.23*	*0.25%*	*0.21*	*7850*	*1672.67*	*Kg*
	TOTAL Weight of steel (in kg)					2477.89	Kg
	TOTAL Weight of Steel (in Tonne)					**2.48**	**MT**
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	1	1.93			**1.93**	**MT**
	*Separate sheet attached						
7	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Abutment						
	Section A-A	*4*	*1.00*		*0.50*	*2.00*	*Sqm*
		4		*0.82*	*0.50*	*1.64*	*Sqm*
		4	*1.00*		*0.60*	*2.40*	*Sqm*
		4		*1.00*	*0.60*	*2.40*	*Sqm*
		4	*1.00*		*1.20*	*4.80*	*Sqm*
		4		*1.18*	*1.20*	*5.66*	*Sqm*
	Section B-B	*4*	*3.60*		*1.71*	*24.65*	*Sqm*
		4		*1.33*	*1.71*	*9.13*	*Sqm*
		4	*3.60*		*0.90*	*12.96*	*Sqm*
		4		*1.85*	*0.90*	*6.65*	*Sqm*
	Section C-C	*4*	*2.20*		*1.41*	*12.43*	*Sqm*
		4		*1.24*	*1.41*	*7.02*	*Sqm*
		4	*2.20*		*1.20*	*10.56*	*Sqm*
		4		*1.67*	*1.20*	*8.00*	*Sqm*
	U/S Transition wall						
	Right Bank (Section D-D)	*2*	*3.47*		*0.50*	*3.47*	*Sqm*
		2		*0.45*	*0.50*	*0.45*	*Sqm*
		2	*3.47*		*0.60*	*4.16*	*Sqm*
		2		*0.63*	*0.60*	*0.76*	*Sqm*
		2	*3.47*		*1.20*	*8.32*	*Sqm*
		2		*0.81*	*1.20*	*1.94*	*Sqm*
	Left Bank						
	Bottom Key	*2*	*3.07*		*0.70*	*4.30*	*Sqm*
		2		*1.29*	*0.70*	*1.80*	*Sqm*
	Section a-a	*2*	*1.02*		*0.50*	*1.02*	*Sqm*
		2		*2.45*	*0.50*	*2.45*	*Sqm*
		2	*1.02*		*0.20*	*0.41*	*Sqm*
		2		*2.29*	*0.20*	*0.92*	*Sqm*
		2	*1.02*		*1.10*	*2.25*	*Sqm*
		2		*1.32*	*1.10*	*2.90*	*Sqm*
	Section b-b	*2*	*1.02*		*0.50*	*1.02*	*Sqm*
		2		*2.45*	*0.50*	*2.45*	*Sqm*
		2	*1.02*		*0.20*	*0.41*	*Sqm*
		2		*2.05*	*0.20*	*0.82*	*Sqm*
		2	*1.02*		*1.10*	*2.25*	*Sqm*
		2		*1.27*	*1.10*	*2.79*	*Sqm*
	Section c-c	*2*	*1.02*		*0.50*	*1.02*	*Sqm*
		2		*2.45*	*0.50*	*2.45*	*Sqm*
		2	*1.02*		*0.20*	*0.41*	*Sqm*
		2		*1.66*	*0.20*	*0.67*	*Sqm*
		2	*1.02*		*1.10*	*2.25*	*Sqm*
		2		*1.07*	*1.10*	*2.36*	*Sqm*
	Section d-d	*2*	*1.02*		*0.50*	*1.02*	*Sqm*
		2		*2.45*	*0.50*	*2.45*	*Sqm*
		2	*1.02*		*0.20*	*0.41*	*Sqm*
		2		*0.48*	*0.20*	*0.19*	*Sqm*
		2	*1.02*		*1.10*	*2.25*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2		0.48	1.10	1.06	Sqm
	D/S Transition wall						
	Sec 4-4	4	0.49		0.50	0.98	Sqm
		4		0.35	0.50	0.70	Sqm
		4	0.49		1.56	3.05	Sqm
		4		0.53	1.56	3.27	Sqm
		4	0.49		0.90	1.77	Sqm
		4		0.70	0.90	2.52	Sqm
	Avg. of Sec 1-1 & 3-3	4	2.61		0.50	5.22	Sqm
		4		0.64	0.50	1.27	Sqm
		4	2.61		1.56	16.24	Sqm
		4		1.09	1.56	6.78	Sqm
		4	2.61		0.90	9.40	Sqm
		4		1.46	0.90	5.25	Sqm
	Floor						
	U/S key	2	1.28		0.70	1.79	Sqm
		2		2.38	0.70	3.33	Sqm
	Floor	2	1.95		0.50	1.95	Sqm
		2		2.38	0.50	2.38	Sqm
		2	1.39		0.50	1.39	Sqm
		2		1.20	0.50	1.20	Sqm
		2	0.67		0.50	0.67	Sqm
		2		1.20	0.50	1.20	Sqm
		2	1.20		0.00	2.40	Sqm
		2		0.03	0.00	0.06	Sqm
		2	3.16		0.50	3.16	Sqm
		2		1.20	0.50	1.20	Sqm
		2	0.90		0.35	0.63	Sqm
		2		1.20	0.35	0.84	Sqm
		2	0.53			1.06	Sqm
		2		1.20		2.40	Sqm
		2	1.19		0.50	1.19	Sqm
		2		1.20	0.50	1.20	Sqm
	D/S key	2	0.73		0.50	0.73	Sqm
		2		1.20	0.50	1.20	Sqm
	Toe Wall Base D/S Portion	2	1.20		0.30	0.72	Sqm
		2		0.85	0.30	0.51	Sqm
	Toe Wall Stem D/S Portion	2	1.20		0.90	2.16	Sqm
		2		0.45	0.90	0.81	Sqm
	Toe Wall Base (For Brick Pitching)	4	3.00		0.15	1.80	Sqm
		4		0.60	0.15	0.36	Sqm
	Toe Wall Stem (For Brick Pitching)	4	3.00		0.90	10.80	Sqm
		4		0.30	0.90	1.08	Sqm
	Top Slab	2	5.25		0.33	3.43	Sqm
		2		2.00	0.33	1.31	Sqm
		1	5.25	2.00		10.50	Sqm
	Dirt wall	4	5.80		0.50	11.60	Sqm
		4		0.82	0.50	1.64	Sqm
		4	5.80		0.43	9.93	Sqm
		4		0.40	0.43	0.68	Sqm
	Parapet	4	2.84		0.18	1.99	Sqm
		4		0.45	0.18	0.31	Sqm
		4	2.84		0.25	2.84	Sqm
		4		0.35	0.25	0.35	Sqm
		4	2.84		0.55	6.25	Sqm
		4		0.22	0.55	0.48	Sqm
	TOTAL					**327.73**	**Sqm**
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	2	3.00	1.95		11.70	Sqm
	TOTAL					**11.70**	**Sqm**
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.**(WRD M-002)**						
	Boulder Apron in D/S Portion	1	3.00	0.60	0.90	1.62	***Cum***
	TOTAL					**1.62**	**Cum**
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)						
	In D/S Portion below C.C. Blocks	1	2.20	1.20	0.15	0.40	Cum
	In D/S Portion below Stone Chips	1	2.20	1.20	0.15	0.40	Cum

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	TOTAL					**0.79**	**Cum**
11	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	U/S transition	*2*	*1.65*	*0.48*		*1.58*	*Sqm*
	On Abutment Top	*2*	*4.65*	*0.45*		*1.49*	*Sqm*
	TOTAL					**3.07**	**Sqm**
12	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2	1			**2.00**	**No.**
13	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications**. (3.18 PWD NH SOR CHHATISGARH 2025)**	2	5.25	0.40		**4.20**	**Sqm**
14	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. **(RCD 15.22 - (ii))**	2	5.25			**10.50**	**RM**
15	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compa.cted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Abutment						
	Section A-A	2	*1.00*	*0.82*		*1.640*	*Cum*
	Section B-B	2	*3.60*	*2.15*		*15.480*	*Cum*
	Section C-C	2	*2.20*	*1.72*		*7.568*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	1	*3.47*	*0.82*		*2.842*	*Cum*
	D/S Transition wall						
	Sec 4-4	2	*0.49*	*1.04*		*1.021*	*Cum*
	Avg. of Sec 1-1 & 3-3	2	*2.61*	*1.58*		*8.225*	*Cum*
	TOTAL					**36.78**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF HR FOR SALOPURA MR. OFFTAKING FROM RD-10+660 KM (R.) AT KOTWARA DY CANAL						
1	0						
	Abutment						
	Section A-A	*2*	*1.00*	*1.61*	*0.300*	*0.966*	*Cum*
	Section B-B	*2*	*7.76*	*1.70*	*3.426*	*90.368*	*Cum*
	Section C-C	*2*	*2.97*	*1.52*	*3.426*	*30.901*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.43*	*1.24*	*0.300*	*1.274*	*Cum*
	Left Bank Sec a to d	1	3.07	2.69	2.700	*22.295*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.50*	*1.10*	*2.200*	*2.401*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.64*	*1.90*	*2.200*	*22.119*	*Cum*
	Floor						
	U/S key	*1*	*1.3125*	*2.3775*	*0.600*	*1.872*	*Cum*
	Floor	*1*	*2.025*	*2.3775*	*0.900*	*4.333*	*Cum*
		1	*1.3875*	*1.2*	*0.900*	*1.499*	*Cum*
		1	*4.8725*	*1.2*	*0.900*	*5.262*	*Cum*
		1	*1.2*	*0.01*		*0.012*	*Cum*
		1	*3.671*	*1.2*	*1.200*	*5.286*	*Cum*
		1	*1.2*	*1.2*	*0.650*	*0.936*	*Cum*
		1	*0.864*	*1.2*	*0.650*	*0.674*	*Cum*
		1	*1.621*	*1.2*	*0.900*	*1.751*	*Cum*
		1	*0.925*	*1.2*	*1.450*	*1.610*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*1*	*2.200*	*1.200*	*0.600*	*1.584*	*Cum*
	Toe Wall Base D/S Portion	*1*	*1.200*	*0.850*	*1.200*	*1.224*	*Cum*
	Toe Wall Base (For Brick Pitching)	*2*	*3.000*	*0.600*	*1.050*	*3.780*	*Cum*
	Boulder Pitching (D/S Portion)	*1*	*3.000*	*0.600*	*0.900*	*1.620*	*Cum*
						201.77	**Cum**
2	Item of Works						
	PCC Below Floor						
		1	*0.623*	*2.684*	*0.150*	*0.25*	*Cum*
		1	*1.495*	*1.601*	*0.150*	*0.36*	*Cum*
		1	*1.216*	*1.200*	*0.150*	*0.22*	*Cum*
		1	*4.984*	*1.200*	*0.150*	*0.90*	*Cum*
		1	*3.730*	*1.200*	*0.150*	*0.67*	*Cum*
		1	*1.265*	*1.200*	*0.150*	*0.23*	*Cum*
		1	*0.254*	*1.200*	*0.150*	*0.05*	*Cum*
		1	*1.453*	*1.200*	*0.150*	*0.26*	*Cum*
		1	*0.693*	*1.200*	*0.150*	*0.12*	*Cum*
	PCC Below Abutment						
	Section A-A	*2*	*1.000*	*1.610*	*0.300*	*0.97*	*Cum*
	Section B-B	*2*	*7.758*	*1.700*	*0.300*	*7.91*	*Cum*
	Section C-C	*2*	*2.967*	*1.520*	*0.300*	*2.71*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.425*	*1.240*	*0.300*	*1.27*	*Cum*
	Left Bank Sec a to d	*1*	*3.072*	*2.688*	*0.150*	*1.24*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.496*	*1.100*	*0.300*	*0.33*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.643*	*1.902*	*0.300*	*3.02*	*Cum*
	Toe Wall Base D/S Portion	*1*	*1.200*	*0.850*	*0.300*	*0.31*	*Cum*
	Toe Wall Stem D/S Portion	*1*	*1.200*	*0.450*	*0.900*	*0.49*	*Cum*
	Toe Wall Base (For Brick Pitching)	*1*	*3.000*	*0.600*	*0.150*	*0.27*	*Cum*
	Toe Wall Stem (For Brick Pitching)	*1*	*3.000*	*0.300*	*0.900*	*0.81*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*6*	*0.600*	*0.600*	*0.300*	*0.65*	*Cum*
	TOTAL					**23.02**	**Cum**
3	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section A-A	*2*	*1.00*	*0.82*	*0.50*	*0.82*	*Cum*
		2	*1.00*	*1.02*	*0.65*	*1.32*	*Cum*
		2	*1.00*	*1.21*	*0.95*	*2.30*	*Cum*
	Section B-B	*2*	*7.76*	*1.06*	*0.80*	*13.16*	*Cum*
		2	*7.76*	*1.30*	*1.95*	*39.33*	*Cum*
	Section C-C	*2*	*2.97*	*0.97*	*0.50*	*2.88*	*Cum*
		2	*2.97*	*1.12*	*2.25*	*14.95*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.43*	*0.45*	*0.50*	*0.77*	*Cum*
		1	*3.43*	*0.65*	*0.65*	*1.44*	*Cum*
		1	*3.43*	*0.84*	*0.95*	*2.73*	*Cum*
	Left Bank						

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Section a-a	*1*		2.505	*0.50*	*1.25*	*Sqm*
		1		*2.21*	*0.20*	*0.44*	*Sqm*
		1		*1.34*	*1.15*	*1.54*	*Sqm*
						3.24	***Sqm***
	Section b-b	*1*		*2.51*	*0.50*	*1.25*	*Sqm*
		1		*2.05*	*0.20*	*0.41*	*Sqm*
		1		*1.26*	*1.15*	*1.45*	*Sqm*
						3.11	***Sqm***
	Section c-c	*1*		*2.51*	*0.50*	*1.25*	*Sqm*
		1		*1.69*	*0.20*	*0.34*	*Sqm*
		1		*1.09*	*1.15*	*1.25*	*Sqm*
						2.84	***Sqm***
	Section d-d	*1*		*2.51*	*0.50*	*1.25*	*Sqm*
		1		*0.48*	*0.20*	*0.10*	*Sqm*
		1		*0.48*	*1.15*	*0.55*	*Sqm*
						1.90	***Sqm***
	Bottom Key	*1*	*3.07*	*1.31*	*0.70*	*2.82*	*Cum*
	Top Stem Area	*1*	*3.07*	*2.77*		*8.52*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.50*	*0.35*	*0.50*	*0.17*	*Cum*
		2	*0.50*	*0.53*	*0.50*	*0.26*	*Cum*
		2	*0.50*	*0.70*	*0.90*	*0.62*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.64*	*0.74*	*0.50*	*1.95*	*Cum*
		2	*2.64*	*1.21*	*0.50*	*3.21*	*Cum*
		2	*2.64*	*1.50*	*0.90*	*7.15*	*Cum*
	TOTAL					**104.41**	**Cum**
	Floor						
	U/S key	*1*	*1.31*	*2.38*	*0.45*	*1.40*	*Cum*
	Floor	*1*	*2.03*	*2.38*	*0.75*	*3.61*	*Cum*
		1	*1.39*	*1.20*	*0.75*	*1.25*	*Cum*
		1	*4.87*	*1.20*	*0.75*	*4.39*	*Cum*
		1	*1.20*	*0.01*		*0.01*	*Cum*
		1	*3.67*	*1.20*	*0.75*	*3.30*	*Cum*
		1	*1.20*	*1.20*	*0.65*	*0.94*	*Cum*
		1	*0.86*	*1.20*	*0.30*	*0.31*	*Cum*
		1	*1.62*	*1.20*	*0.75*	*1.46*	*Cum*
	D/S key	*1*	*0.93*	*1.20*	*1.30*	*1.44*	*Cum*
	TOTAL					**122.52**	**Cum**
4	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	Over Floor	*1*	*3.48*	*2.38*	*0.20*	*1.65*	*Cum*
		1	*4.76*	*1.20*	*0.20*	*1.14*	*Cum*
		1	*3.50*	*1.20*	*0.20*	*0.84*	*Cum*
		1	*0.95*	*1.20*	*0.20*	*0.23*	*Cum*
		1	*2.68*	*1.20*	*0.20*	*0.64*	*Cum*
	Top Slab	*1*	*5.25*	*2.00*	*0.33*	*3.43*	*Cum*
	75mm Th. Wearing coat on top slab	*1*	*4.25*	*2.00*	*0.08*	*0.64*	*Cum*
	Dirt wall	*2*	*10.73*	*0.82*	*0.50*	*8.79*	*Cum*
		2	*10.73*	*0.40*	*0.43*	*3.67*	*Cum*
	Parapet	*2*	*2.84*	*0.45*	*0.18*	*0.44*	*Cum*
		2	*2.84*	*0.35*	*0.25*	*0.50*	*Cum*
		2	*2.84*	*0.22*	*0.55*	*0.68*	*Cum*
	TOTAL					**22.66**	**Cum**
5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Dia of Bars	**Length**	**Nos.**		**Weight per m**	**Quantity**	**Unit**
	Slab Per Span						
a1	*16*	*2.460*	*29*		*1.578*	*112.584*	*Kg*
a2	*10*	*5.650*	*10*		*0.616*	*34.830*	*Kg*
a3	*10*	*5.150*	*2*		*0.616*	*6.350*	*Kg*
a4	*10*	*2.380*	*18*		*0.616*	*26.409*	*Kg*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
a5	*10*	*5.550*	*7*		*0.616*	*23.949*	*Kg*
	Dirt Wall						
d1	*12*	*4.460*	*26*		*0.888*	*102.938*	*Kg*
d2	*12*	*5.550*	*14*		*0.888*	*68.975*	*Kg*
	Crash Barrier						
x1	*12*	*2.501*	*32*		*0.888*	*71.045*	*Kg*
x2	*16*	*1.265*	*32*		*1.578*	*63.883*	*Kg*
x3	*10*	*1.900*	*24*		*0.616*	*28.111*	*Kg*
	Floor R/F						
	U/S Key						
	12	*6.812*	*5*		*0.888*	*30.235*	*Kg*
	12	*1.900*	*25*		*0.888*	*42.166*	*Kg*
	floor raft						
	12	*6.143*	*5*		*0.888*	*27.266*	*Kg*
	12	*13.326*	*10*		*0.888*	*118.295*	*Kg*
	12	*2.500*	*115*		*0.888*	*255.215*	*Kg*
	0.25 % Skin Reinforcement for Transition walls	*104.41*	*0.25%*	*0.26*	*7850*	*2048.99*	*Kg*
	TOTAL Weight of steel (in kg)					3061.24	Kg
	TOTAL Weight of Steel (in Tonne)					**3.06**	**MT**
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	1	1.99			**1.99**	**MT**
	*Separate sheet attached						
7	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Abutment						
	Section A-A	*4*	*1.00*		*0.50*	*2.00*	*Sqm*
		4		*0.82*	*0.50*	*1.64*	*Sqm*
		4	*1.00*		*0.65*	*2.60*	*Sqm*
		4		*1.02*	*0.65*	*2.64*	*Sqm*
		4	*1.00*		*0.95*	*3.80*	*Sqm*
		4		*1.21*	*0.95*	*4.60*	*Sqm*
	Section B-B	*4*	*7.76*		*0.80*	*24.83*	*Sqm*
		4		*1.06*	*0.80*	*3.39*	*Sqm*
		4	*7.76*		*1.95*	*60.51*	*Sqm*
		4		*1.30*	*1.95*	*10.14*	*Sqm*
	Section C-C	*4*	*2.97*		*0.50*	*5.93*	*Sqm*
		4		*0.97*	*0.50*	*1.94*	*Sqm*
		4	*2.97*		*2.25*	*26.70*	*Sqm*
		4		*1.12*	*2.25*	*10.08*	*Sqm*
	U/S Transition wall						
	Right Bank (Section D-D)	*2*	*3.43*		*0.50*	*3.43*	*Sqm*
		2		*0.45*	*0.50*	*0.45*	*Sqm*
		2	*3.43*		*0.65*	*4.45*	*Sqm*
		2		*0.65*	*0.65*	*0.84*	*Sqm*
		2	*3.43*		*0.95*	*6.51*	*Sqm*
		2		*0.84*	*0.95*	*1.60*	*Sqm*
	Left Bank						
	Bottom Key	*2*	*3.07*		*0.70*	*4.30*	*Sqm*
		2		*1.31*	*0.70*	*1.84*	*Sqm*
	Section a-a	*2*	*1.02*		*0.50*	*1.02*	*Sqm*
		2		*2.51*	*0.50*	*2.51*	*Sqm*
		2	*1.02*		*0.20*	*0.41*	*Sqm*
		2		*2.21*	*0.20*	*0.88*	*Sqm*
		2	*1.02*		*1.15*	*2.36*	*Sqm*
		2		*1.34*	*1.15*	*3.09*	*Sqm*
	Section b-b	*2*	*1.02*		*0.50*	*1.02*	*Sqm*
		2		*2.51*	*0.50*	*2.51*	*Sqm*
		2	*1.02*		*0.20*	*0.41*	*Sqm*
		2		*2.05*	*0.20*	*0.82*	*Sqm*
		2	*1.02*		*1.15*	*2.36*	*Sqm*
		2		*1.26*	*1.15*	*2.90*	*Sqm*
	Section c-c	*2*	*1.02*		*0.50*	*1.02*	*Sqm*
		2		*2.51*	*0.50*	*2.51*	*Sqm*
		2	*1.02*		*0.20*	*0.41*	*Sqm*
		2		*1.69*	*0.20*	*0.68*	*Sqm*
		2	*1.02*		*1.15*	*2.36*	*Sqm*
		2		*1.09*	*1.15*	*2.50*	*Sqm*
	Section d-d	*2*	*1.02*		*0.50*	*1.02*	*Sqm*
		2		*2.51*	*0.50*	*2.51*	*Sqm*
		2	*1.02*		*0.20*	*0.41*	*Sqm*
		2		*0.48*	*0.20*	*0.19*	*Sqm*
		2	*1.02*		*1.15*	*2.36*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2		0.48	1.15	1.10	Sqm
	D/S Transition wall						
	Sec 4-4	4	0.50		0.50	0.99	Sqm
		4		0.35	0.50	0.70	Sqm
		4	0.50		0.50	0.99	Sqm
		4		0.53	0.50	1.05	Sqm
		4	0.50		0.90	1.79	Sqm
		4		0.70	0.90	2.52	Sqm
	Avg. of Sec 1-1 & 3-3	4	2.64		0.50	5.29	Sqm
		4		0.74	0.50	1.48	Sqm
		4	2.64		0.50	5.29	Sqm
		4		1.21	0.50	2.43	Sqm
		4	2.64		0.90	9.51	Sqm
		4		1.50	0.90	5.41	Sqm
	Floor						
	U/S key	2	1.31		0.45	1.18	Sqm
		2		2.38	0.45	2.14	Sqm
	Floor	2	2.03		0.75	3.04	Sqm
		2		2.38	0.75	3.57	Sqm
		2	1.39		0.75	2.08	Sqm
		2		1.20	0.75	1.80	Sqm
		2	4.87		0.75	7.31	Sqm
		2		1.20	0.75	1.80	Sqm
		2	1.20		0.00	2.40	Sqm
		2		0.01	0.00	0.02	Sqm
		2	3.67		0.75	5.51	Sqm
		2		1.20	0.75	1.80	Sqm
		2	1.20		0.65	1.56	Sqm
		2		1.20	0.65	1.56	Sqm
		2	0.86			1.73	Sqm
		2		1.20		2.40	Sqm
		2	1.62		0.75	2.43	Sqm
		2		1.20	0.75	1.80	Sqm
	D/S key	2	0.93		1.30	2.41	Sqm
		2		1.20	1.30	3.12	Sqm
	Toe Wall Base D/S Portion	2	1.20		0.30	0.72	Sqm
		2		0.85	0.30	0.51	Sqm
	Toe Wall Stem D/S Portion	2	1.20		0.90	2.16	Sqm
		2		0.45	0.90	0.81	Sqm
	Toe Wall Base (For Brick Pitching)	4	3.00		0.15	1.80	Sqm
		4		0.60	0.15	0.36	Sqm
	Toe Wall Stem (For Brick Pitching)	4	3.00		0.90	10.80	Sqm
		4		0.30	0.90	1.08	Sqm
	Top Slab	2	5.25		0.33	3.43	Sqm
		2		2.00	0.33	1.31	Sqm
		1	5.25	2.00		10.50	Sqm
	Dirt wall	4	10.73		0.50	21.45	Sqm
		4		0.82	0.50	1.64	Sqm
		4	10.73		0.43	18.36	Sqm
		4		0.40	0.43	0.68	Sqm
	Parapet	4	2.84		0.18	1.99	Sqm
		4		0.45	0.18	0.31	Sqm
		4	2.84		0.25	2.84	Sqm
		4		0.35	0.25	0.35	Sqm
		4	2.84		0.55	6.25	Sqm
		4		0.22	0.55	0.48	Sqm
	TOTAL					**396.47**	**Sqm**
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	2	3.00	2.04		12.23	Sqm
	TOTAL					**12.23**	**Sqm**
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.**(WRD M-002)**						
	Boulder Apron in D/S Portion	1	3.00	0.60	0.90	1.62	***Cum***
	TOTAL					**1.62**	**Cum**
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)						
	In D/S Portion below C.C. Blocks	1	2.20	1.20	0.15	0.40	Cum
	In D/S Portion below Stone Chips	1	2.20	1.20	0.15	0.40	Cum

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	TOTAL					**0.79**	**Cum**
11	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	U/S transition	*2*	*1.73*	*0.48*		*1.66*	*Sqm*
	On Abutment Top	*2*	*9.61*	*0.45*		*1.55*	*Sqm*
	TOTAL					**3.21**	**Sqm**
12	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2	1			**2.00**	**No.**
13	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications**. (3.18 PWD NH SOR CHHATISGARH 2025)**	2	5.25	0.40		**4.20**	**Sqm**
14	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. **(RCD 15.22 - (ii))**	2	5.25			**10.50**	**RM**
15	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compa.cted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Abutment						
	Section A-A	2	*1.00*	*0.74*		*1.484*	*Cum*
	Section B-B	2	*7.76*	*1.23*		*19.116*	*Cum*
	Section C-C	2	*2.97*	*1.11*		*6.557*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	1	*3.43*	*0.74*		*2.541*	*Cum*
	D/S Transition wall						
	Sec 4-4	2	*0.50*	*0.65*		*0.645*	*Cum*
	Avg. of Sec 1-1 & 3-3	2	*2.64*	*0.90*		*4.783*	*Cum*
	TOTAL					**35.13**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF HR FOR SINGHI SUB DY. OFFTAKING FROM RD-13+020 KM (R.) AT KOTWARA DY CANAL						
1	0						
	Abutment						
	Section A-A	*2*	*1.00*	*1.81*	*1.571*	*5.681*	*Cum*
	Section B-B	*2*	*6.43*	*2.06*	*2.985*	*79.053*	*Cum*
	Section C-C	*2*	*2.05*	*1.88*	*2.985*	*23.031*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.03*	*1.44*	*1.571*	*6.846*	*Cum*
	Left Bank Sec a to d	1	3.96	3.16	3.330	*41.726*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.55*	*1.10*	*2.800*	*3.357*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*3.10*	*2.42*	*2.800*	*42.087*	*Cum*
	Floor						
	U/S key	*1*	*1.56*	*6.1725*	*0.850*	*8.185*	*Cum*
	Floor	*1*	*2.52*	*6.1725*	*0.650*	*10.111*	*Cum*
		1	*1.3935*	*3.95*	*0.650*	*3.578*	*Cum*
		1	*2.715*	*3.95*	*0.650*	*6.971*	*Cum*
		1	*3.95*	*0.0295*		*0.117*	*Cum*
		1	*4.161*	*3.95*	*0.950*	*15.614*	*Cum*
		1	*0.9*	*3.95*	*0.350*	*1.244*	*Cum*
		1	*0.531*	*3.95*	*0.350*	*0.734*	*Cum*
		1	*1.039*	*3.95*	*0.650*	*2.668*	*Cum*
		1	*0.725*	*3.95*	*0.650*	*1.861*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*1*	*2.200*	*3.950*	*0.600*	*5.214*	*Cum*
	Toe Wall Base D/S Portion	*1*	*3.950*	*0.850*	*1.200*	*4.029*	*Cum*
	Toe Wall Base (For Brick Pitching)	*2*	*3.000*	*0.600*	*1.050*	*3.780*	*Cum*
	Boulder Pitching (D/S Portion)	*1*	*3.000*	*3.350*	*0.900*	*9.045*	*Cum*
						274.93	**Cum**
2	Item of Works						
	PCC Below Floor						
		1	*0.627*	*7.381*	*0.150*	*0.69*	*Cum*
		1	*2.520*	*5.161*	*0.150*	*1.95*	*Cum*
		1	*1.272*	*3.950*	*0.150*	*0.75*	*Cum*
		1	*2.715*	*3.950*	*0.150*	*1.61*	*Cum*
		1	*4.339*	*3.950*	*0.150*	*2.57*	*Cum*
		1	*0.949*	*3.950*	*0.150*	*0.56*	*Cum*
		1	*0.072*	*3.950*	*0.150*	*0.04*	*Cum*
		1	*0.559*	*3.950*	*0.150*	*0.33*	*Cum*
		1	*0.693*	*3.950*	*0.150*	*0.41*	*Cum*
	PCC Below Abutment						
	Section A-A	*2*	*1.000*	*1.808*	*0.300*	*1.08*	*Cum*
	Section B-B	*2*	*6.428*	*2.060*	*0.300*	*7.95*	*Cum*
	Section C-C	*2*	*2.052*	*1.880*	*0.300*	*2.31*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.031*	*1.438*	*0.300*	*1.31*	*Cum*
	Left Bank Sec a to d	*1*	*3.964*	*3.161*	*0.150*	*1.88*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.545*	*1.100*	*0.300*	*0.36*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*3.103*	*2.422*	*0.300*	*4.51*	*Cum*
	Toe Wall Base D/S Portion	*1*	*3.950*	*0.850*	*0.300*	*1.01*	*Cum*
	Toe Wall Stem D/S Portion	*1*	*3.950*	*0.450*	*0.900*	*1.60*	*Cum*
	Toe Wall Base (For Brick Pitching)	*1*	*3.000*	*0.600*	*0.150*	*0.27*	*Cum*
	Toe Wall Stem (For Brick Pitching)	*1*	*3.000*	*0.300*	*0.900*	*0.81*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*18*	*0.600*	*0.600*	*0.300*	*1.94*	*Cum*
	TOTAL					**33.96**	**Cum**
3	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section A-A	*2*	*1.00*	*0.82*	*0.50*	*0.82*	*Cum*
		2	*1.00*	*1.11*	*0.98*	*2.18*	*Cum*
		2	*1.00*	*1.41*	*0.70*	*1.97*	*Cum*
	Section B-B	*2*	*6.43*	*1.24*	*1.40*	*22.32*	*Cum*
		2	*6.43*	*1.66*	*0.90*	*19.21*	*Cum*
	Section C-C	*2*	*2.05*	*1.15*	*1.10*	*5.19*	*Cum*
		2	*2.05*	*1.48*	*1.20*	*7.29*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.03*	*0.45*	*0.50*	*0.68*	*Cum*
		1	*3.03*	*0.74*	*0.98*	*2.21*	*Cum*
		1	*3.03*	*1.04*	*0.70*	*2.20*	*Cum*
	Left Bank						

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Section a-a	*1*		3	*0.75*	*2.25*	*Sqm*
		1		*2.85*	*0.20*	*0.57*	*Sqm*
		1		*1.59*	*1.48*	*2.35*	*Sqm*
						5.17	***Sqm***
	Section b-b	*1*		*3.00*	*0.75*	*2.25*	*Sqm*
		1		*2.46*	*0.20*	*0.49*	*Sqm*
		1		*1.47*	*1.48*	*2.18*	*Sqm*
						4.92	***Sqm***
	Section c-c	*1*		*3.00*	*0.75*	*2.25*	*Sqm*
		1		*1.88*	*0.20*	*0.38*	*Sqm*
		1		*1.18*	*1.48*	*1.74*	*Sqm*
						4.37	***Sqm***
	Section d-d	*1*		*3.00*	*0.75*	*2.25*	*Sqm*
		1		*0.48*	*0.20*	*0.10*	*Sqm*
		1		*0.48*	*1.48*	*0.71*	*Sqm*
						3.06	***Sqm***
	Bottom Key	*1*	*3.96*	*1.56*	*0.75*	*4.64*	*Cum*
	Top Stem Area	*1*	*3.96*	*4.38*		*17.36*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.55*	*0.35*	*0.50*	*0.19*	*Cum*
		2	*0.55*	*0.53*	*1.10*	*0.63*	*Cum*
		2	*0.55*	*0.70*	*0.90*	*0.69*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*3.10*	*0.77*	*0.50*	*2.40*	*Cum*
		2	*3.10*	*1.49*	*1.10*	*10.18*	*Cum*
		2	*3.10*	*2.02*	*0.90*	*11.29*	*Cum*
	TOTAL					**111.46**	**Cum**
	Floor						
	U/S key	*1*	*1.56*	*6.17*	*0.70*	*6.74*	*Cum*
	Floor	*1*	*2.52*	*6.17*	*0.50*	*7.78*	*Cum*
		1	*1.39*	*3.95*	*0.50*	*2.75*	*Cum*
		1	*2.72*	*3.95*	*0.50*	*5.36*	*Cum*
		1	*3.95*	*0.03*		*0.12*	*Cum*
		1	*4.16*	*3.95*	*0.50*	*8.22*	*Cum*
		1	*0.90*	*3.95*	*0.35*	*1.24*	*Cum*
		1	*0.53*	*3.95*	*0.30*	*0.63*	*Cum*
		1	*1.04*	*3.95*	*0.50*	*2.05*	*Cum*
	D/S key	*1*	*0.73*	*3.95*	*0.50*	*1.43*	*Cum*
	TOTAL					**147.78**	**Cum**
4	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	Over Floor	*1*	*3.97*	*6.17*	*0.20*	*4.90*	*Cum*
		1	*2.72*	*3.95*	*0.20*	*2.14*	*Cum*
		1	*4.00*	*3.95*	*0.20*	*3.16*	*Cum*
		1	*0.95*	*3.95*	*0.20*	*0.75*	*Cum*
		1	*1.13*	*3.95*	*0.20*	*0.89*	*Cum*
	Top Slab	*1*	*5.25*	*4.75*	*0.43*	*10.64*	*Cum*
	75mm Th. Wearing coat on top slab	*1*	*4.25*	*4.75*	*0.08*	*1.51*	*Cum*
	Dirt wall	*2*	*8.48*	*0.82*	*0.50*	*6.95*	*Cum*
		2	*8.48*	*0.40*	*0.53*	*3.58*	*Cum*
	Parapet	*2*	*5.59*	*0.45*	*0.18*	*0.87*	*Cum*
		2	*5.59*	*0.35*	*0.25*	*0.98*	*Cum*
		2	*5.59*	*0.22*	*0.55*	*1.34*	*Cum*
	TOTAL					**37.73**	**Cum**
5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Dia of Bars	**Length**	**Nos.**		**Weight per m**	**Quantity**	**Unit**
	Slab Per Span						
a1	*20*	*5.410*	*34*		*2.466*	*453.567*	*Kg*
a2	*10*	*5.730*	*38*		*0.616*	*134.228*	*Kg*
a3	*10*	*5.150*	*2*		*0.616*	*6.350*	*Kg*
a4	*10*	*5.270*	*23*		*0.616*	*74.721*	*Kg*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
a5	*10*	*5.590*	*21*		*0.616*	*72.366*	*Kg*
	Dirt Wall						
d1	*12*	*4.460*	*26*		*0.888*	*102.938*	*Kg*
d2	*12*	*5.550*	*14*		*0.888*	*68.975*	*Kg*
	Crash Barrier						
x1	*12*	*2.601*	*78*		*0.888*	*180.095*	*Kg*
x2	*16*	*1.365*	*78*		*1.578*	*168.024*	*Kg*
x3	*10*	*4.650*	*24*		*0.616*	*68.797*	*Kg*
	Floor R/F						
	U/S Key						
	12	*8.581*	*16*		*0.888*	*121.878*	*Kg*
	12	*4.650*	*30*		*0.888*	*123.835*	*Kg*
	floor raft						
	12	*3.395*	*16*		*0.888*	*48.220*	*Kg*
	12	*10.365*	*32*		*0.888*	*294.433*	*Kg*
	12	*4.650*	*91*		*0.888*	*375.632*	*Kg*
	0.25 % Skin Reinforcement for Transition walls	*111.46*	*0.25%*	*0.28*	*7850*	*2187.34*	*Kg*
	TOTAL Weight of steel (in kg)					4481.39	Kg
	TOTAL Weight of Steel (in Tonne)					**4.48**	**MT**
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	1	6.43			**6.43**	**MT**
	*Separate sheet attached						
7	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Abutment						
	Section A-A	*4*	*1.00*		*0.50*	*2.00*	*Sqm*
		4		*0.82*	*0.50*	*1.64*	*Sqm*
		4	*1.00*		*0.98*	*3.92*	*Sqm*
		4		*1.11*	*0.98*	*4.37*	*Sqm*
		4	*1.00*		*0.70*	*2.80*	*Sqm*
		4		*1.41*	*0.70*	*3.94*	*Sqm*
	Section B-B	*4*	*6.43*		*1.40*	*36.00*	*Sqm*
		4		*1.24*	*1.40*	*6.94*	*Sqm*
		4	*6.43*		*0.90*	*23.14*	*Sqm*
		4		*1.66*	*0.90*	*5.98*	*Sqm*
	Section C-C	*4*	*2.05*		*1.10*	*9.03*	*Sqm*
		4		*1.15*	*1.10*	*5.06*	*Sqm*
		4	*2.05*		*1.20*	*9.85*	*Sqm*
		4		*1.48*	*1.20*	*7.10*	*Sqm*
	U/S Transition wall						
	Right Bank (Section D-D)	*2*	*3.03*		*0.50*	*3.03*	*Sqm*
		2		*0.45*	*0.50*	*0.45*	*Sqm*
		2	*3.03*		*0.98*	*5.94*	*Sqm*
		2		*0.74*	*0.98*	*1.46*	*Sqm*
		2	*3.03*		*0.70*	*4.24*	*Sqm*
		2		*1.04*	*0.70*	*1.45*	*Sqm*
	Left Bank						
	Bottom Key	*2*	*3.96*		*0.75*	*5.95*	*Sqm*
		2		*1.56*	*0.75*	*2.34*	*Sqm*
	Section a-a	*2*	*1.32*		*0.75*	*1.98*	*Sqm*
		2		*3.00*	*0.75*	*4.50*	*Sqm*
		2	*1.32*		*0.20*	*0.53*	*Sqm*
		2		*2.85*	*0.20*	*1.14*	*Sqm*
		2	*1.32*		*1.48*	*3.91*	*Sqm*
		2		*1.59*	*1.48*	*4.71*	*Sqm*
	Section b-b	*2*	*1.32*		*0.75*	*1.98*	*Sqm*
		2		*3.00*	*0.75*	*4.50*	*Sqm*
		2	*1.32*		*0.20*	*0.53*	*Sqm*
		2		*2.46*	*0.20*	*0.99*	*Sqm*
		2	*1.32*		*1.48*	*3.91*	*Sqm*
		2		*1.47*	*1.48*	*4.36*	*Sqm*
	Section c-c	*2*	*1.32*		*0.75*	*1.98*	*Sqm*
		2		*3.00*	*0.75*	*4.50*	*Sqm*
		2	*1.32*		*0.20*	*0.53*	*Sqm*
		2		*1.88*	*0.20*	*0.75*	*Sqm*
		2	*1.32*		*1.48*	*3.91*	*Sqm*
		2		*1.18*	*1.48*	*3.49*	*Sqm*
	Section d-d	*2*	*1.32*		*0.75*	*1.98*	*Sqm*
		2		*3.00*	*0.75*	*4.50*	*Sqm*
		2	*1.32*		*0.20*	*0.53*	*Sqm*
		2		*0.48*	*0.20*	*0.19*	*Sqm*
		2	*1.32*		*1.48*	*3.91*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2		0.48	1.48	1.42	Sqm
	D/S Transition wall						
	Sec 4-4	4	0.55		0.50	1.09	Sqm
		4		0.35	0.50	0.70	Sqm
		4	0.55		1.10	2.40	Sqm
		4		0.53	1.10	2.31	Sqm
		4	0.55		0.90	1.96	Sqm
		4		0.70	0.90	2.52	Sqm
	Avg. of Sec 1-1 & 3-3	4	3.10		0.50	6.21	Sqm
		4		0.77	0.50	1.55	Sqm
		4	3.10		1.10	13.65	Sqm
		4		1.49	1.10	6.56	Sqm
		4	3.10		0.90	11.17	Sqm
		4		2.02	0.90	7.28	Sqm
	Floor						
	U/S key	2	1.56		0.70	2.18	Sqm
		2		6.17	0.70	8.64	Sqm
	Floor	2	2.52		0.50	2.52	Sqm
		2		6.17	0.50	6.17	Sqm
		2	1.39		0.50	1.39	Sqm
		2		3.95	0.50	3.95	Sqm
		2	2.72		0.50	2.72	Sqm
		2		3.95	0.50	3.95	Sqm
		2	3.95		0.00	7.90	Sqm
		2		0.03	0.00	0.06	Sqm
		2	4.16		0.50	4.16	Sqm
		2		3.95	0.50	3.95	Sqm
		2	0.90		0.35	0.63	Sqm
		2		3.95	0.35	2.77	Sqm
		2	0.53			1.06	Sqm
		2		3.95		7.90	Sqm
		2	1.04		0.50	1.04	Sqm
		2		3.95	0.50	3.95	Sqm
	D/S key	2	0.73		0.50	0.73	Sqm
		2		3.95	0.50	3.95	Sqm
	Toe Wall Base D/S Portion	2	3.95		0.30	2.37	Sqm
		2		0.85	0.30	0.51	Sqm
	Toe Wall Stem D/S Portion	2	3.95		0.90	7.11	Sqm
		2		0.45	0.90	0.81	Sqm
	Toe Wall Base (For Brick Pitching)	4	3.00		0.15	1.80	Sqm
		4		0.60	0.15	0.36	Sqm
	Toe Wall Stem (For Brick Pitching)	4	3.00		0.90	10.80	Sqm
		4		0.30	0.90	1.08	Sqm
	Top Slab	2	5.25		0.43	4.48	Sqm
		2		4.75	0.43	4.05	Sqm
		1	5.25	4.75		24.94	Sqm
	Dirt wall	4	8.48		0.50	16.96	Sqm
		4		0.82	0.50	1.64	Sqm
		4	8.48		0.53	17.91	Sqm
		4		0.40	0.53	0.84	Sqm
	Parapet	4	5.59		0.18	3.91	Sqm
		4		0.45	0.18	0.31	Sqm
		4	5.59		0.25	5.59	Sqm
		4		0.35	0.25	0.35	Sqm
		4	5.59		0.55	12.30	Sqm
		4		0.22	0.55	0.48	Sqm
	TOTAL					**452.98**	**Sqm**
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	2	3.00	5.32		31.93	Sqm
	TOTAL					**31.93**	**Sqm**
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.**(WRD M-002)**						
	Boulder Apron in D/S Portion	1	3.00	3.35	0.90	9.05	***Cum***
	TOTAL					**9.05**	**Cum**
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)						
	In D/S Portion below C.C. Blocks	1	2.20	3.95	0.15	1.30	Cum
	In D/S Portion below Stone Chips	1	2.20	3.95	0.15	1.30	Cum

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	TOTAL					**2.61**	**Cum**
11	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	U/S transition	*2*	*2.22*	*0.48*		*2.13*	*Sqm*
	On Abutment Top	*2*	*7.90*	*0.45*		*2.00*	*Sqm*
	TOTAL					**4.13**	**Sqm**
12	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2	1			**2.00**	**No.**
13	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications**. (3.18 PWD NH SOR CHHATISGARH 2025)**	2	5.25	0.40		**4.20**	**Sqm**
14	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. **(RCD 15.22 - (ii))**	2	5.25			**10.50**	**RM**
15	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compa.cted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Abutment						
	Section A-A	2	*1.00*	*1.02*		*2.040*	*Cum*
	Section B-B	2	*6.43*	*1.57*		*20.184*	*Cum*
	Section C-C	2	*2.05*	*1.45*		*5.951*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	1	*3.03*	*1.02*		*3.091*	*Cum*
	D/S Transition wall						
	Sec 4-4	2	*0.55*	*0.87*		*0.948*	*Cum*
	Avg. of Sec 1-1 & 3-3	2	*3.10*	*1.75*		*10.861*	*Cum*
	TOTAL					**43.07**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF HR FOR SAHOKARMA MR. OFFTAKING FROM RD-16+200 KM (R.) AT KOTWARA DY CANAL						
1	0						
	Abutment						
	Section A-A	*2*	*1.00*	*1.61*	*2.839*	*9.142*	*Cum*
	Section B-B	*2*	*3.60*	*1.83*	*2.839*	*37.345*	*Cum*
	Section C-C	*2*	*2.13*	*1.65*	*2.839*	*19.872*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.43*	*1.24*	*2.839*	*12.057*	*Cum*
	Left Bank Sec a to d	1	3.19	2.69	2.700	*23.152*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.50*	*1.10*	*2.539*	*2.771*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.64*	*1.90*	*2.539*	*25.527*	*Cum*
	Floor						
	U/S key	*1*	*1.4025*	*2.3775*	*0.850*	*2.834*	*Cum*
	Floor	*1*	*2.205*	*2.3775*	*0.650*	*3.408*	*Cum*
		1	*1.3935*	*1.05*	*0.650*	*0.951*	*Cum*
		1	*0.671*	*1.05*	*0.650*	*0.458*	*Cum*
		1	*1.05*	*0.0295*		*0.031*	*Cum*
		1	*3.16*	*1.05*	*0.950*	*3.152*	*Cum*
		1	*0.9*	*1.05*	*0.350*	*0.331*	*Cum*
		1	*0.531*	*1.05*	*0.350*	*0.195*	*Cum*
		1	*1.111*	*1.05*	*0.650*	*0.758*	*Cum*
		1	*0.725*	*1.05*	*0.650*	*0.495*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*1*	*2.200*	*1.050*	*0.600*	*1.386*	*Cum*
	Toe Wall Base D/S Portion	*1*	*1.050*	*0.850*	*1.200*	*1.071*	*Cum*
	Toe Wall Base (For Brick Pitching)	*2*	*3.000*	*0.600*	*1.050*	*3.780*	*Cum*
	Boulder Pitching (D/S Portion)	*1*	*3.000*	*0.450*	*0.900*	*1.215*	*Cum*
						149.93	**Cum**
2	Item of Works						
	PCC Below Floor						
		1	*0.630*	*2.528*	*0.150*	*0.24*	*Cum*
		1	*1.588*	*1.445*	*0.150*	*0.34*	*Cum*
		1	*1.270*	*1.050*	*0.150*	*0.20*	*Cum*
		1	*0.670*	*1.050*	*0.150*	*0.11*	*Cum*
		1	*3.339*	*1.050*	*0.150*	*0.53*	*Cum*
		1	*0.973*	*1.050*	*0.150*	*0.15*	*Cum*
		1	*0.237*	*1.050*	*0.150*	*0.04*	*Cum*
		1	*0.568*	*1.050*	*0.150*	*0.09*	*Cum*
		1	*0.572*	*1.050*	*0.150*	*0.09*	*Cum*
	PCC Below Abutment						
	Section A-A	*2*	*1.000*	*1.610*	*0.300*	*0.97*	*Cum*
	Section B-B	*2*	*3.600*	*1.827*	*0.300*	*3.95*	*Cum*
	Section C-C	*2*	*2.125*	*1.647*	*0.300*	*2.10*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.425*	*1.240*	*0.300*	*1.27*	*Cum*
	Left Bank Sec a to d	*1*	*3.190*	*2.688*	*0.150*	*1.29*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.496*	*1.100*	*0.300*	*0.33*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.643*	*1.902*	*0.300*	*3.02*	*Cum*
	Toe Wall Base D/S Portion	*1*	*1.050*	*0.850*	*0.300*	*0.27*	*Cum*
	Toe Wall Stem D/S Portion	*1*	*1.050*	*0.450*	*0.900*	*0.43*	*Cum*
	Toe Wall Base (For Brick Pitching)	*1*	*3.000*	*0.600*	*0.150*	*0.27*	*Cum*
	Toe Wall Stem (For Brick Pitching)	*1*	*3.000*	*0.300*	*0.900*	*0.81*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*5*	*0.600*	*0.600*	*0.300*	*0.54*	*Cum*
	TOTAL					**17.01**	**Cum**
3	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section A-A	*2*	*1.00*	*0.82*	*0.50*	*0.82*	*Cum*
		2	*1.00*	*1.02*	*0.65*	*1.32*	*Cum*
		2	*1.00*	*1.21*	*1.20*	*2.90*	*Cum*
	Section B-B	*2*	*3.60*	*1.12*	*1.01*	*8.18*	*Cum*
		2	*3.60*	*1.43*	*0.90*	*9.25*	*Cum*
	Section C-C	*2*	*2.13*	*1.03*	*0.71*	*3.12*	*Cum*
		2	*2.13*	*1.25*	*1.20*	*6.36*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.43*	*0.45*	*0.50*	*0.77*	*Cum*
		1	*3.43*	*0.65*	*0.65*	*1.44*	*Cum*
		1	*3.43*	*0.84*	*1.20*	*3.45*	*Cum*
	Left Bank						

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Section a-a	*1*		2.505	*0.50*	*1.25*	*Sqm*
		1		*2.36*	*0.20*	*0.47*	*Sqm*
		1		*1.59*	*1.15*	*1.83*	*Sqm*
						3.55	***Sqm***
	Section b-b	*1*		*2.51*	*0.50*	*1.25*	*Sqm*
		1		*2.05*	*0.20*	*0.41*	*Sqm*
		1		*1.26*	*1.15*	*1.45*	*Sqm*
						3.11	***Sqm***
	Section c-c	*1*		*2.51*	*0.50*	*1.25*	*Sqm*
		1		*1.69*	*0.20*	*0.34*	*Sqm*
		1		*1.09*	*1.15*	*1.25*	*Sqm*
						2.84	***Sqm***
	Section d-d	*1*		*2.51*	*0.50*	*1.25*	*Sqm*
		1		*0.48*	*0.20*	*0.10*	*Sqm*
		1		*0.48*	*1.15*	*0.55*	*Sqm*
						1.90	***Sqm***
	Bottom Key	*1*	*3.19*	*1.31*	*0.70*	*2.93*	*Cum*
	Top Stem Area	*1*	*3.19*	*2.85*		*9.10*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.50*	*0.35*	*0.50*	*0.17*	*Cum*
		2	*0.50*	*0.53*	*0.84*	*0.44*	*Cum*
		2	*0.50*	*0.70*	*0.90*	*0.62*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.64*	*0.69*	*0.50*	*1.83*	*Cum*
		2	*2.64*	*1.17*	*0.84*	*5.17*	*Cum*
		2	*2.64*	*1.50*	*0.90*	*7.15*	*Cum*
	TOTAL					**65.02**	**Cum**
	Floor						
	U/S key	*1*	*1.40*	*2.38*	*0.70*	*2.33*	*Cum*
	Floor	*1*	*2.21*	*2.38*	*0.50*	*2.62*	*Cum*
		1	*1.39*	*1.05*	*0.50*	*0.73*	*Cum*
		1	*0.67*	*1.05*	*0.50*	*0.35*	*Cum*
		1	*1.05*	*0.03*		*0.03*	*Cum*
		1	*3.16*	*1.05*	*0.50*	*1.66*	*Cum*
		1	*0.90*	*1.05*	*0.35*	*0.33*	*Cum*
		1	*0.53*	*1.05*	*0.30*	*0.17*	*Cum*
		1	*1.11*	*1.05*	*0.50*	*0.58*	*Cum*
	D/S key	*1*	*0.73*	*1.05*	*0.50*	*0.38*	*Cum*
	TOTAL					**74.21**	**Cum**
4	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	Over Floor	*1*	*3.48*	*2.38*	*0.20*	*1.65*	*Cum*
		1	*0.67*	*1.05*	*0.20*	*0.14*	*Cum*
		1	*3.00*	*1.05*	*0.20*	*0.63*	*Cum*
		1	*0.95*	*1.05*	*0.20*	*0.20*	*Cum*
		1	*1.23*	*1.05*	*0.20*	*0.26*	*Cum*
	Top Slab	*1*	*5.25*	*1.85*	*0.33*	*3.17*	*Cum*
	75mm Th. Wearing coat on top slab	*1*	*4.25*	*1.85*	*0.08*	*0.59*	*Cum*
	Dirt wall	*2*	*5.73*	0.82	*0.50*	*4.69*	*Cum*
		2	*5.73*	*0.40*	*0.43*	*1.96*	*Cum*
	Parapet	*2*	*2.69*	*0.45*	*0.18*	*0.42*	*Cum*
		2	*2.69*	*0.35*	*0.25*	*0.47*	*Cum*
		2	*2.69*	*0.22*	*0.55*	*0.65*	*Cum*
	TOTAL					**14.84**	**Cum**
5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Dia of Bars	**Length**	**Nos.**		**Weight per m**	**Quantity**	**Unit**
	Slab Per Span						
a1	*16*	*2.310*	*29*		*1.578*	*105.720*	*Kg*
a2	*10*	*5.650*	*9*		*0.616*	*31.347*	*Kg*
a3	*10*	*5.150*	*2*		*0.616*	*6.350*	*Kg*
a4	*10*	*2.230*	*18*		*0.616*	*24.745*	*Kg*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
a5	*10*	*5.550*	*9*		*0.616*	*30.792*	*Kg*
	Dirt Wall						
d1	*12*	*4.460*	*26*		*0.888*	*102.938*	*Kg*
d2	*12*	*5.550*	*14*		*0.888*	*68.975*	*Kg*
	Crash Barrier						
x1	*12*	*2.501*	*30*		*0.888*	*66.604*	*Kg*
x2	*16*	*1.265*	*30*		*1.578*	*59.890*	*Kg*
x3	*10*	*1.750*	*24*		*0.616*	*25.891*	*Kg*
	Floor R/F						
	U/S Key						
	12	*6.812*	*5*		*0.888*	*30.235*	*Kg*
	12	*1.690*	*25*		*0.888*	*37.505*	*Kg*
	floor raft						
	12	*3.395*	*5*		*0.888*	*15.069*	*Kg*
	12	*7.395*	*10*		*0.888*	*65.646*	*Kg*
	12	*1.690*	*67*		*0.888*	*100.515*	*Kg*
	0.25 % Skin Reinforcement for Transition walls	*65.02*	*0.25%*	*0.16*	*7850*	*1276.00*	*Kg*
	TOTAL Weight of steel (in kg)					2048.22	Kg
	TOTAL Weight of Steel (in Tonne)					**2.05**	**MT**
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	1	1.95			**1.95**	**MT**
	*Separate sheet attached						
7	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Abutment						
	Section A-A	*4*	*1.00*		*0.50*	*2.00*	*Sqm*
		4		*0.82*	*0.50*	*1.64*	*Sqm*
		4	*1.00*		*0.65*	*2.60*	*Sqm*
		4		*1.02*	*0.65*	*2.64*	*Sqm*
		4	*1.00*		*1.20*	*4.80*	*Sqm*
		4		*1.21*	*1.20*	*5.81*	*Sqm*
	Section B-B	*4*	*3.60*		*1.01*	*14.56*	*Sqm*
		4		*1.12*	*1.01*	*4.54*	*Sqm*
		4	*3.60*		*0.90*	*12.96*	*Sqm*
		4		*1.43*	*0.90*	*5.14*	*Sqm*
	Section C-C	*4*	*2.13*		*0.71*	*6.04*	*Sqm*
		4		*1.03*	*0.71*	*2.94*	*Sqm*
		4	*2.13*		*1.20*	*10.20*	*Sqm*
		4		*1.25*	*1.20*	*5.99*	*Sqm*
	U/S Transition wall						
	Right Bank (Section D-D)	*2*	*3.43*		*0.50*	*3.43*	*Sqm*
		2		*0.45*	*0.50*	*0.45*	*Sqm*
		2	*3.43*		*0.65*	*4.45*	*Sqm*
		2		*0.65*	*0.65*	*0.84*	*Sqm*
		2	*3.43*		*1.20*	*8.22*	*Sqm*
		2		*0.84*	*1.20*	*2.02*	*Sqm*
	Left Bank						
	Bottom Key	*2*	*3.19*		*0.70*	*4.47*	*Sqm*
		2		*1.31*	*0.70*	*1.84*	*Sqm*
	Section a-a	*2*	*1.06*		*0.50*	*1.06*	*Sqm*
		2		*2.51*	*0.50*	*2.51*	*Sqm*
		2	*1.06*		*0.20*	*0.43*	*Sqm*
		2		*2.36*	*0.20*	*0.94*	*Sqm*
		2	*1.06*		*1.15*	*2.45*	*Sqm*
		2		*1.59*	*1.15*	*3.66*	*Sqm*
	Section b-b	*2*	*1.06*		*0.50*	*1.06*	*Sqm*
		2		*2.51*	*0.50*	*2.51*	*Sqm*
		2	*1.06*		*0.20*	*0.43*	*Sqm*
		2		*2.05*	*0.20*	*0.82*	*Sqm*
		2	*1.06*		*1.15*	*2.45*	*Sqm*
		2		*1.26*	*1.15*	*2.90*	*Sqm*
	Section c-c	*2*	*1.06*		*0.50*	*1.06*	*Sqm*
		2		*2.51*	*0.50*	*2.51*	*Sqm*
		2	*1.06*		*0.20*	*0.43*	*Sqm*
		2		*1.69*	*0.20*	*0.68*	*Sqm*
		2	*1.06*		*1.15*	*2.45*	*Sqm*
		2		*1.09*	*1.15*	*2.50*	*Sqm*
	Section d-d	*2*	*1.06*		*0.50*	*1.06*	*Sqm*
		2		*2.51*	*0.50*	*2.51*	*Sqm*
		2	*1.06*		*0.20*	*0.43*	*Sqm*
		2		*0.48*	*0.20*	*0.19*	*Sqm*
		2	*1.06*		*1.15*	*2.45*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2		0.48	1.15	1.10	Sqm
	D/S Transition wall						
	Sec 4-4	4	0.50		0.50	0.99	Sqm
		4		0.35	0.50	0.70	Sqm
		4	0.50		0.84	1.66	Sqm
		4		0.53	0.84	1.76	Sqm
		4	0.50		0.90	1.79	Sqm
		4		0.70	0.90	2.52	Sqm
	Avg. of Sec 1-1 & 3-3	4	2.64		0.50	5.29	Sqm
		4		0.69	0.50	1.38	Sqm
		4	2.64		0.84	8.87	Sqm
		4		1.17	0.84	3.91	Sqm
		4	2.64		0.90	9.51	Sqm
		4		1.50	0.90	5.41	Sqm
	Floor						
	U/S key	2	1.40		0.70	1.96	Sqm
		2		2.38	0.70	3.33	Sqm
	Floor	2	2.21		0.50	2.21	Sqm
		2		2.38	0.50	2.38	Sqm
		2	1.39		0.50	1.39	Sqm
		2		1.05	0.50	1.05	Sqm
		2	0.67		0.50	0.67	Sqm
		2		1.05	0.50	1.05	Sqm
		2	1.05		0.00	2.10	Sqm
		2		0.03	0.00	0.06	Sqm
		2	3.16		0.50	3.16	Sqm
		2		1.05	0.50	1.05	Sqm
		2	0.90		0.35	0.63	Sqm
		2		1.05	0.35	0.74	Sqm
		2	0.53			1.06	Sqm
		2		1.05		2.10	Sqm
		2	1.11		0.50	1.11	Sqm
		2		1.05	0.50	1.05	Sqm
	D/S key	2	0.73		0.50	0.73	Sqm
		2		1.05	0.50	1.05	Sqm
	Toe Wall Base D/S Portion	2	1.05		0.30	0.63	Sqm
		2		0.85	0.30	0.51	Sqm
	Toe Wall Stem D/S Portion	2	1.05		0.90	1.89	Sqm
		2		0.45	0.90	0.81	Sqm
	Toe Wall Base (For Brick Pitching)	4	3.00		0.15	1.80	Sqm
		4		0.60	0.15	0.36	Sqm
	Toe Wall Stem (For Brick Pitching)	4	3.00		0.90	10.80	Sqm
		4		0.30	0.90	1.08	Sqm
	Top Slab	2	5.25		0.33	3.43	Sqm
		2		1.85	0.33	1.21	Sqm
		1	5.25	1.85		9.71	Sqm
	Dirt wall	4	5.73		0.50	11.45	Sqm
		4		0.82	0.50	1.64	Sqm
		4	5.73		0.43	9.80	Sqm
		4		0.40	0.43	0.68	Sqm
	Parapet	4	2.69		0.18	1.88	Sqm
		4		0.45	0.18	0.31	Sqm
		4	2.69		0.25	2.69	Sqm
		4		0.35	0.25	0.35	Sqm
		4	2.69		0.55	5.92	Sqm
		4		0.22	0.55	0.48	Sqm
	TOTAL					**286.22**	**Sqm**
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	2	3.00	2.04		12.24	Sqm
	TOTAL					**12.24**	**Sqm**
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.**(WRD M-002)**						
	Boulder Apron in D/S Portion	1	3.00	0.45	0.90	1.22	***Cum***
	TOTAL					**1.22**	**Cum**
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)						
	In D/S Portion below C.C. Blocks	1	2.20	1.05	0.15	0.35	Cum
	In D/S Portion below Stone Chips	1	2.20	1.05	0.15	0.35	Cum

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	TOTAL					**0.69**	**Cum**
11	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	U/S transition	*2*	*1.73*	*0.48*		*1.66*	*Sqm*
	On Abutment Top	*2*	*4.61*	*0.45*		*1.55*	*Sqm*
	TOTAL					**3.21**	**Sqm**
12	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2	1			**2.00**	**No.**
13	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications**. (3.18 PWD NH SOR CHHATISGARH 2025)**	2	5.25	0.40		**4.20**	**Sqm**
14	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. **(RCD 15.22 - (ii))**	2	5.25			**10.50**	**RM**
15	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compa.cted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Abutment						
	Section A-A	2	*1.00*	*0.87*		*1.740*	*Cum*
	Section B-B	2	*3.60*	*1.10*		*7.920*	*Cum*
	Section C-C	2	*2.13*	*0.92*		*3.910*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	1	*3.43*	*0.87*		*2.980*	*Cum*
	D/S Transition wall						
	Sec 4-4	2	*0.50*	*0.77*		*0.764*	*Cum*
	Avg. of Sec 1-1 & 3-3	2	*2.64*	*1.14*		*6.000*	*Cum*
	TOTAL					**23.31**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF HR FOR DHAMNI MR. OFFTAKING FROM RD-17+300 KM (L.) AT KOTWARA DY CANAL						
1	0						
	Abutment						
	Section A-A	*2*	*1.00*	*1.67*	*1.500*	*5.007*	*Cum*
	Section B-B	*2*	*3.60*	*1.76*	*1.500*	*19.008*	*Cum*
	Section C-C	*2*	*2.48*	*1.58*	*1.500*	*11.736*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.26*	*1.30*	*1.500*	*6.355*	*Cum*
	Left Bank Sec a to d	1	3.42	2.82	1.649	*15.934*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.51*	*1.10*	*1.200*	*1.336*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.71*	*1.99*	*1.200*	*12.923*	*Cum*
	Floor						
	U/S key	*1*	*1.387*	*2.3775*	*0.850*	*2.803*	*Cum*
	Floor	*1*	*2.174*	*2.3775*	*0.650*	*3.360*	*Cum*
		1	*1.3945*	*1.7*	*0.650*	*1.541*	*Cum*
		1	*0.671*	*1.7*	*0.650*	*0.741*	*Cum*
		1	*1.7*	*0.0295*		*0.050*	*Cum*
		1	*3.16*	*1.7*	*0.950*	*5.103*	*Cum*
		1	*0.9*	*1.7*	*0.350*	*0.536*	*Cum*
		1	*0.531*	*1.7*	*0.350*	*0.316*	*Cum*
		1	*1.463*	*1.7*	*0.650*	*1.617*	*Cum*
		1	*0.925*	*1.7*	*1.453*	*2.285*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*1*	*2.200*	*1.700*	*0.600*	*2.244*	*Cum*
	Toe Wall Base D/S Portion	*1*	*1.700*	*0.850*	*1.200*	*1.734*	*Cum*
	Toe Wall Base (For Brick Pitching)	*2*	*3.000*	*0.600*	*1.200*	*4.320*	*Cum*
	Boulder Pitching (D/S Portion)	*1*	*3.000*	*1.100*	*0.900*	*2.970*	*Cum*
						101.92	**Cum**
2	Item of Works						
	PCC Below Floor						
		1	*0.630*	*3.683*	*0.150*	*0.35*	*Cum*
		1	*1.722*	*2.256*	*0.150*	*0.58*	*Cum*
		1	*1.270*	*1.700*	*0.150*	*0.32*	*Cum*
		1	*0.670*	*1.700*	*0.150*	*0.17*	*Cum*
		1	*3.339*	*1.700*	*0.150*	*0.85*	*Cum*
		1	*0.973*	*1.700*	*0.150*	*0.25*	*Cum*
		1	*0.670*	*1.700*	*0.150*	*0.17*	*Cum*
		1	*1.465*	*1.700*	*0.150*	*0.37*	*Cum*
		1	*0.692*	*1.700*	*0.150*	*0.18*	*Cum*
	PCC Below Abutment						
	Section A-A	*2*	*1.000*	*1.669*	*0.300*	*1.00*	*Cum*
	Section B-B	*2*	*3.600*	*1.760*	*0.300*	*3.80*	*Cum*
	Section C-C	*2*	*2.476*	*1.580*	*0.300*	*2.35*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.261*	*1.299*	*0.300*	*1.27*	*Cum*
	Left Bank Sec a to d	*1*	*3.423*	*2.823*	*0.150*	*1.45*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.506*	*1.100*	*0.300*	*0.33*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.710*	*1.987*	*0.300*	*3.23*	*Cum*
	Toe Wall Base D/S Portion	*1*	*1.700*	*0.850*	*0.300*	*0.43*	*Cum*
	Toe Wall Stem D/S Portion	*1*	*1.700*	*0.450*	*0.900*	*0.69*	*Cum*
	Toe Wall Base (For Brick Pitching)	*1*	*3.000*	*0.600*	*0.300*	*0.54*	*Cum*
	Toe Wall Stem (For Brick Pitching)	*1*	*3.000*	*0.300*	*0.900*	*0.81*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*8*	*0.600*	*0.600*	*0.300*	*0.86*	*Cum*
	TOTAL					**20.02**	**Cum**
3	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section A-A	*2*	*1.00*	*0.82*	*0.50*	*0.82*	*Cum*
		2	*1.00*	*1.04*	*0.75*	*1.56*	*Cum*
		2	*1.00*	*1.27*	*2.00*	*5.08*	*Cum*
	Section B-B	*2*	*3.60*	*1.09*	*0.90*	*7.06*	*Cum*
		2	*3.60*	*1.36*	*1.70*	*16.68*	*Cum*
	Section C-C	*2*	*2.48*	*1.00*	*0.60*	*2.97*	*Cum*
		2	*2.48*	*1.18*	*2.00*	*11.70*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.26*	*0.45*	*0.50*	*0.73*	*Cum*
		1	*3.26*	*0.67*	*0.75*	*1.65*	*Cum*
		1	*3.26*	*0.90*	*2.00*	*5.87*	*Cum*
	Left Bank						

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Section a-a	*1*		2.654	*0.50*	*1.33*	*Sqm*
		1		*2.50*	*0.20*	*0.50*	*Sqm*
		1		*1.42*	*1.25*	*1.77*	*Sqm*
						3.60	***Sqm***
	Section b-b	*1*		*2.65*	*0.50*	*1.33*	*Sqm*
		1		*2.05*	*0.20*	*0.41*	*Sqm*
		1		*1.26*	*1.25*	*1.58*	*Sqm*
						3.31	***Sqm***
	Section c-c	*1*		*2.65*	*0.50*	*1.33*	*Sqm*
		1		*1.69*	*0.20*	*0.34*	*Sqm*
		1		*1.09*	*1.25*	*1.36*	*Sqm*
						3.02	***Sqm***
	Section d-d	*1*		*2.65*	*0.50*	*1.33*	*Sqm*
		1		*0.48*	*0.20*	*0.10*	*Sqm*
		1		*0.48*	*1.25*	*0.60*	*Sqm*
						2.02	***Sqm***
	Bottom Key	*1*	*3.42*	*1.39*	*0.70*	*3.32*	*Cum*
	Top Stem Area	*1*	*3.42*	*2.99*		*10.23*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.51*	*0.35*	*0.50*	*0.18*	*Cum*
		2	*0.51*	*0.53*	*0.60*	*0.32*	*Cum*
		2	*0.51*	*0.70*	*1.70*	*1.21*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.71*	*0.74*	*0.50*	*2.01*	*Cum*
		2	*2.71*	*1.26*	*0.60*	*4.09*	*Cum*
		2	*2.71*	*1.59*	*1.70*	*14.65*	*Cum*
	TOTAL					**90.15**	**Cum**
	Floor						
	U/S key	*1*	*1.39*	*2.38*	*0.70*	*2.31*	*Cum*
	Floor	*1*	*2.17*	*2.38*	*0.50*	*2.58*	*Cum*
		1	*1.39*	*1.70*	*0.50*	*1.19*	*Cum*
		1	*0.67*	*1.70*	*0.50*	*0.57*	*Cum*
		1	*1.70*	*0.03*		*0.05*	*Cum*
		1	*3.16*	*1.70*	*0.50*	*2.69*	*Cum*
		1	*0.90*	*1.70*	*0.35*	*0.54*	*Cum*
		1	*0.53*	*1.70*	*0.30*	*0.27*	*Cum*
		1	*1.46*	*1.70*	*0.50*	*1.24*	*Cum*
	D/S key	*1*	*0.93*	*1.70*	*1.30*	*2.05*	*Cum*
	TOTAL					**103.64**	**Cum**
4	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	Over Floor	*1*	*3.37*	*2.38*	*0.20*	*1.60*	*Cum*
		1	*0.67*	*1.70*	*0.20*	*0.23*	*Cum*
		1	*3.00*	*1.70*	*0.20*	*1.02*	*Cum*
		1	*0.95*	*1.70*	*0.20*	*0.32*	*Cum*
		1	*1.58*	*1.70*	*0.20*	*0.54*	*Cum*
	Top Slab	*1*	*5.25*	*2.50*	*0.33*	*4.29*	*Cum*
	75mm Th. Wearing coat on top slab	*1*	*4.25*	*2.50*	*0.08*	*0.80*	*Cum*
	Dirt wall	*2*	*6.08*	0.82	*0.50*	*4.98*	*Cum*
		2	*6.08*	*0.40*	*0.43*	*2.08*	*Cum*
	Parapet	*2*	*3.34*	*0.45*	*0.18*	*0.52*	*Cum*
		2	*3.34*	*0.35*	*0.25*	*0.59*	*Cum*
		2	*3.34*	*0.22*	*0.55*	*0.80*	*Cum*
	TOTAL					**17.77**	**Cum**
5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Dia of Bars	**Length**	**Nos.**		**Weight per m**	**Quantity**	**Unit**
	Slab Per Span						
a1	*16*	*2.960*	*29*		*1.578*	*135.467*	*Kg*
a2	*10*	*5.650*	*13*		*0.616*	*45.279*	*Kg*
a3	*10*	*5.150*	*2*		*0.616*	*6.350*	*Kg*
a4	*10*	*2.880*	*18*		*0.616*	*31.957*	*Kg*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
a5	*10*	*5.550*	*10*		*0.616*	*34.214*	*Kg*
	Dirt Wall						
d1	*12*	*4.460*	*26*		*0.888*	*102.938*	*Kg*
d2	*12*	*5.550*	*14*		*0.888*	*68.975*	*Kg*
	Crash Barrier						
x1	*12*	*2.501*	*42*		*0.888*	*93.246*	*Kg*
x2	*16*	*1.265*	*42*		*1.578*	*83.847*	*Kg*
x3	*10*	*2.400*	*24*		*0.616*	*35.508*	*Kg*
	Floor R/F						
	U/S Key						
	12	*7.095*	*7*		*0.888*	*44.088*	*Kg*
	12	*2.340*	*26*		*0.888*	*54.008*	*Kg*
	floor raft						
	12	*5.497*	*7*		*0.888*	*34.158*	*Kg*
	12	*7.745*	*14*		*0.888*	*96.254*	*Kg*
	12	*2.340*	*73*		*0.888*	*151.637*	*Kg*
	0.25 % Skin Reinforcement for Transition walls	*90.15*	*0.25%*	*0.23*	*7850*	*1769.25*	*Kg*
	TOTAL Weight of steel (in kg)					2787.17	Kg
	TOTAL Weight of Steel (in Tonne)					**2.79**	**MT**
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	1	2.31			**2.31**	**MT**
	*Separate sheet attached						
7	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Abutment						
	Section A-A	*4*	*1.00*		*0.50*	*2.00*	*Sqm*
		4		*0.82*	*0.50*	*1.64*	*Sqm*
		4	*1.00*		*0.75*	*3.00*	*Sqm*
		4		*1.04*	*0.75*	*3.13*	*Sqm*
		4	*1.00*		*2.00*	*8.01*	*Sqm*
		4		*1.27*	*2.00*	*10.17*	*Sqm*
	Section B-B	*4*	*3.60*		*0.90*	*12.96*	*Sqm*
		4		*1.09*	*0.90*	*3.92*	*Sqm*
		4	*3.60*		*1.70*	*24.52*	*Sqm*
		4		*1.36*	*1.70*	*9.26*	*Sqm*
	Section C-C	*4*	*2.48*		*0.60*	*5.94*	*Sqm*
		4		*1.00*	*0.60*	*2.40*	*Sqm*
		4	*2.48*		*2.00*	*19.84*	*Sqm*
		4		*1.18*	*2.00*	*9.45*	*Sqm*
	U/S Transition wall						
	Right Bank (Section D-D)	*2*	*3.26*		*0.50*	*3.26*	*Sqm*
		2		*0.45*	*0.50*	*0.45*	*Sqm*
		2	*3.26*		*0.75*	*4.88*	*Sqm*
		2		*0.67*	*0.75*	*1.01*	*Sqm*
		2	*3.26*		*2.00*	*13.06*	*Sqm*
		2		*0.90*	*2.00*	*3.60*	*Sqm*
	Left Bank						
	Bottom Key	*2*	*3.42*		*0.70*	*4.79*	*Sqm*
		2		*1.39*	*0.70*	*1.94*	*Sqm*
	Section a-a	*2*	*1.14*		*0.50*	*1.14*	*Sqm*
		2		*2.65*	*0.50*	*2.65*	*Sqm*
		2	*1.14*		*0.20*	*0.46*	*Sqm*
		2		*2.50*	*0.20*	*1.00*	*Sqm*
		2	*1.14*		*1.25*	*2.85*	*Sqm*
		2		*1.42*	*1.25*	*3.54*	*Sqm*
	Section b-b	*2*	*1.14*		*0.50*	*1.14*	*Sqm*
		2		*2.65*	*0.50*	*2.65*	*Sqm*
		2	*1.14*		*0.20*	*0.46*	*Sqm*
		2		*2.05*	*0.20*	*0.82*	*Sqm*
		2	*1.14*		*1.25*	*2.85*	*Sqm*
		2		*1.26*	*1.25*	*3.15*	*Sqm*
	Section c-c	*2*	*1.14*		*0.50*	*1.14*	*Sqm*
		2		*2.65*	*0.50*	*2.65*	*Sqm*
		2	*1.14*		*0.20*	*0.46*	*Sqm*
		2		*1.69*	*0.20*	*0.68*	*Sqm*
		2	*1.14*		*1.25*	*2.85*	*Sqm*
		2		*1.09*	*1.25*	*2.72*	*Sqm*
	Section d-d	*2*	*1.14*		*0.50*	*1.14*	*Sqm*
		2		*2.65*	*0.50*	*2.65*	*Sqm*
		2	*1.14*		*0.20*	*0.46*	*Sqm*
		2		*0.48*	*0.20*	*0.19*	*Sqm*
		2	*1.14*		*1.25*	*2.85*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2		0.48	1.25	1.20	Sqm
	D/S Transition wall						
	Sec 4-4	4	0.51		0.50	1.01	Sqm
		4		0.35	0.50	0.70	Sqm
		4	0.51		0.60	1.21	Sqm
		4		0.53	0.60	1.26	Sqm
		4	0.51		1.70	3.45	Sqm
		4		0.70	1.70	4.77	Sqm
	Avg. of Sec 1-1 & 3-3	4	2.71		0.50	5.42	Sqm
		4		0.74	0.50	1.49	Sqm
		4	2.71		0.60	6.50	Sqm
		4		1.26	0.60	3.02	Sqm
		4	2.71		1.70	18.46	Sqm
		4		1.59	1.70	10.81	Sqm
	Floor						
	U/S key	2	1.39		0.70	1.94	Sqm
		2		2.38	0.70	3.33	Sqm
	Floor	2	2.17		0.50	2.17	Sqm
		2		2.38	0.50	2.38	Sqm
		2	1.39		0.50	1.39	Sqm
		2		1.70	0.50	1.70	Sqm
		2	0.67		0.50	0.67	Sqm
		2		1.70	0.50	1.70	Sqm
		2	1.70		0.00	3.40	Sqm
		2		0.03	0.00	0.06	Sqm
		2	3.16		0.50	3.16	Sqm
		2		1.70	0.50	1.70	Sqm
		2	0.90		0.35	0.63	Sqm
		2		1.70	0.35	1.19	Sqm
		2	0.53			1.06	Sqm
		2		1.70		3.40	Sqm
		2	1.46		0.50	1.46	Sqm
		2		1.70	0.50	1.70	Sqm
	D/S key	2	0.93		1.30	2.41	Sqm
		2		1.70	1.30	4.43	Sqm
	Toe Wall Base D/S Portion	2	1.70		0.30	1.02	Sqm
		2		0.85	0.30	0.51	Sqm
	Toe Wall Stem D/S Portion	2	1.70		0.90	3.06	Sqm
		2		0.45	0.90	0.81	Sqm
	Toe Wall Base (For Brick Pitching)	4	3.00		0.30	3.60	Sqm
		4		0.60	0.30	0.72	Sqm
	Toe Wall Stem (For Brick Pitching)	4	3.00		0.90	10.80	Sqm
		4		0.30	0.90	1.08	Sqm
	Top Slab	2	5.25		0.33	3.43	Sqm
		2		2.50	0.33	1.63	Sqm
		1	5.25	2.50		13.13	Sqm
	Dirt wall	4	6.08		0.50	12.15	Sqm
		4		0.82	0.50	1.64	Sqm
		4	6.08		0.43	10.40	Sqm
		4		0.40	0.43	0.68	Sqm
	Parapet	4	3.34		0.18	2.34	Sqm
		4		0.45	0.18	0.31	Sqm
		4	3.34		0.25	3.34	Sqm
		4		0.35	0.25	0.35	Sqm
		4	3.34		0.55	7.35	Sqm
		4		0.22	0.55	0.48	Sqm
	TOTAL					**367.79**	**Sqm**
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	2	3.00	2.22		13.32	Sqm
	TOTAL					**13.32**	**Sqm**
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.**(WRD M-002)**						
	Boulder Apron in D/S Portion	1	3.00	1.10	0.90	2.97	***Cum***
	TOTAL					**2.97**	**Cum**
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)						
	In D/S Portion below C.C. Blocks	1	2.20	1.70	0.15	0.56	Cum
	In D/S Portion below Stone Chips	1	2.20	1.70	0.15	0.56	Cum

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	TOTAL					**1.12**	**Cum**
11	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	U/S transition	*2*	*1.87*	*0.48*		*1.80*	*Sqm*
	On Abutment Top	*2*	*5.04*	*0.45*		*1.69*	*Sqm*
	TOTAL					**3.49**	**Sqm**
12	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2	1			**2.00**	**No.**
13	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications**. (3.18 PWD NH SOR CHHATISGARH 2025)**	2	5.25	0.40		**4.20**	**Sqm**
14	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. **(RCD 15.22 - (ii))**	2	5.25			**10.50**	**RM**
15	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compa.cted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Abutment						
	Section A-A	2	*1.00*	*0.18*		*0.360*	*Cum*
	Section B-B	2	*3.60*	*1.37*		*9.868*	*Cum*
	Section C-C	2	*2.48*	*1.14*		*5.648*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	1	*3.26*	*0.18*		*0.587*	*Cum*
	D/S Transition wall						
	Sec 4-4	2	*0.51*	*0.18*		*0.182*	*Cum*
	Avg. of Sec 1-1 & 3-3	2	*2.71*	*0.18*		*0.976*	*Cum*
	TOTAL					**17.62**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF HR FOR BHADWA MR OFFTAKING FROM RD-27+075 KM (L.) AT KOTWARA DY CANAL						
1	0						
	Abutment						
	Section A-A	*2*	*1.00*	*1.64*	*1.962*	*6.435*	*Cum*
	Section B-B	*2*	*3.60*	*1.73*	*1.962*	*24.439*	*Cum*
	Section C-C	*2*	*2.05*	*1.55*	*1.962*	*12.469*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.23*	*1.27*	*1.962*	*8.053*	*Cum*
	Left Bank Sec a to d	1	3.31	2.76	2.750	*25.062*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.50*	*1.10*	*2.250*	*2.480*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.68*	*1.94*	*2.250*	*23.416*	*Cum*
	Floor						
	U/S key	*1*	*1.35*	*2.3775*	*0.850*	*2.728*	*Cum*
	Floor	*1*	*2.1*	*2.3775*	*0.650*	*3.245*	*Cum*
		1	*1.444*	*1.4*	*0.650*	*1.314*	*Cum*
		1	*0.671*	*1.4*	*0.650*	*0.611*	*Cum*
		1	*1.4*	*0.005*		*0.007*	*Cum*
		1	*3.16*	*1.4*	*0.950*	*4.203*	*Cum*
		1	*0.9*	*1.4*	*0.350*	*0.441*	*Cum*
		1	*0.526*	*1.4*	*0.350*	*0.258*	*Cum*
		1	*1.037*	*1.4*	*0.650*	*0.944*	*Cum*
		1	*0.725*	*1.4*	*0.650*	*0.660*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*1*	*2.200*	*1.400*	*0.600*	*1.848*	*Cum*
	Toe Wall Base D/S Portion	*1*	*1.400*	*0.850*	*1.200*	*1.428*	*Cum*
	Toe Wall Base (For Brick Pitching)	*2*	*3.000*	*0.600*	*1.200*	*4.320*	*Cum*
	Boulder Pitching (D/S Portion)	*1*	*3.000*	*0.800*	*0.900*	*2.160*	*Cum*
						126.52	**Cum**
2	Item of Works						
	PCC Below Floor						
		1	*0.625*	*3.215*	*0.150*	*0.30*	*Cum*
		1	*1.655*	*1.902*	*0.150*	*0.47*	*Cum*
		1	*1.375*	*1.400*	*0.150*	*0.29*	*Cum*
		1	*0.670*	*1.400*	*0.150*	*0.14*	*Cum*
		1	*3.239*	*1.400*	*0.150*	*0.68*	*Cum*
		1	*0.949*	*1.400*	*0.150*	*0.20*	*Cum*
		1	*0.700*	*1.400*	*0.150*	*0.15*	*Cum*
		1	*0.559*	*1.400*	*0.150*	*0.12*	*Cum*
		1	*0.692*	*1.400*	*0.150*	*0.15*	*Cum*
	PCC Below Abutment						
	Section A-A	*2*	*1.000*	*1.640*	*0.300*	*0.98*	*Cum*
	Section B-B	*2*	*3.600*	*1.730*	*0.300*	*3.74*	*Cum*
	Section C-C	*2*	*2.050*	*1.550*	*0.300*	*1.91*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.232*	*1.270*	*0.300*	*1.23*	*Cum*
	Left Bank Sec a to d	*1*	*3.308*	*2.755*	*0.150*	*1.37*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.501*	*1.100*	*0.300*	*0.33*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.676*	*1.945*	*0.300*	*3.12*	*Cum*
	Toe Wall Base D/S Portion	*1*	*1.400*	*0.850*	*0.300*	*0.36*	*Cum*
	Toe Wall Stem D/S Portion	*1*	*1.400*	*0.450*	*0.900*	*0.57*	*Cum*
	Toe Wall Base (For Brick Pitching)	*1*	*3.000*	*0.600*	*0.300*	*0.54*	*Cum*
	Toe Wall Stem (For Brick Pitching)	*1*	*3.000*	*0.300*	*0.900*	*0.81*	*Cum*
	D/S Portion C.C. Blocks (600x600x300)mm	*6*	*0.600*	*0.600*	*0.300*	*0.65*	*Cum*
	TOTAL					**18.09**	**Cum**
3	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section A-A	*2*	*1.00*	*0.82*	*0.50*	*0.82*	*Cum*
		2	*1.00*	*1.03*	*0.70*	*1.44*	*Cum*
		2	*1.00*	*1.24*	*1.20*	*2.98*	*Cum*
	Section B-B	*2*	*3.60*	*1.08*	*0.85*	*6.58*	*Cum*
		2	*3.60*	*1.33*	*0.90*	*8.62*	*Cum*
	Section C-C	*2*	*2.05*	*0.99*	*0.55*	*2.22*	*Cum*
		2	*2.05*	*1.15*	*1.20*	*5.66*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	*1*	*3.23*	*0.45*	*0.50*	*0.73*	*Cum*
		1	*3.23*	*0.66*	*0.70*	*1.49*	*Cum*
		1	*3.23*	*0.87*	*1.20*	*3.37*	*Cum*
	Left Bank						

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Section a-a	*1*		*2.58*	*0.50*	*1.29*	*Sqm*
		1		*2.43*	*0.20*	*0.49*	*Sqm*
		1		*1.38*	*1.20*	*1.66*	*Sqm*
						3.43	***Sqm***
	Section b-b	*1*		*2.58*	*0.50*	*1.29*	*Sqm*
		1		*2.09*	*0.20*	*0.42*	*Sqm*
		1		*1.29*	*1.20*	*1.54*	*Sqm*
						3.25	***Sqm***
	Section c-c	*1*		*2.58*	*0.50*	*1.29*	*Sqm*
		1		*1.73*	*0.20*	*0.35*	*Sqm*
		1		*1.10*	*1.20*	*1.32*	*Sqm*
						2.96	***Sqm***
	Section d-d	*1*		*2.58*	*0.50*	*1.29*	*Sqm*
		1		*0.48*	*0.20*	*0.10*	*Sqm*
		1		*0.48*	*1.20*	*0.58*	*Sqm*
						1.96	***Sqm***
	Bottom Key	*1*	*3.31*	*1.35*	*0.70*	*3.13*	*Cum*
	Top Stem Area	*1*	*3.31*	*2.90*		*9.60*	*Cum*
	D/S Transition wall						
	Sec 4-4	*2*	*0.50*	*0.35*	*0.50*	*0.18*	*Cum*
		2	*0.50*	*0.53*	*0.55*	*0.29*	*Cum*
		2	*0.50*	*0.70*	*0.90*	*0.63*	*Cum*
	Avg. of Sec 1-1 & 3-3	*2*	*2.68*	*0.74*	*0.50*	*1.99*	*Cum*
		2	*2.68*	*1.24*	*0.55*	*3.64*	*Cum*
		2	*2.68*	*1.54*	*0.90*	*7.44*	*Cum*
	TOTAL					**60.80**	**Cum**
	Floor						
	U/S key	*1*	*1.35*	*2.38*	*0.70*	*2.25*	*Cum*
	Floor	*1*	*2.10*	*2.38*	*0.50*	*2.50*	*Cum*
		1	*1.44*	*1.40*	*0.50*	*1.01*	*Cum*
		1	*0.67*	*1.40*	*0.50*	*0.47*	*Cum*
		1	*1.40*	*0.01*		*0.01*	*Cum*
		1	*3.16*	*1.40*	*0.50*	*2.21*	*Cum*
		1	*0.90*	*1.40*	*0.35*	*0.44*	*Cum*
		1	*0.53*	*1.40*	*0.30*	*0.22*	*Cum*
		1	*1.04*	*1.40*	*0.50*	*0.73*	*Cum*
	D/S key	*1*	*0.73*	*1.40*	*0.50*	*0.51*	*Cum*
	TOTAL					**71.13**	**Cum**
4	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	Over Floor	*1*	*3.55*	*2.38*	*0.20*	*1.69*	*Cum*
		1	*0.67*	*1.40*	*0.20*	*0.19*	*Cum*
		1	*3.00*	*1.40*	*0.20*	*0.84*	*Cum*
		1	*0.95*	*1.40*	*0.20*	*0.27*	*Cum*
		1	*1.15*	*1.40*	*0.20*	*0.32*	*Cum*
	Top Slab	*1*	*5.25*	*2.20*	*0.33*	*3.77*	*Cum*
	75mm Th. Wearing coat on top slab	*1*	*4.25*	*2.20*	*0.08*	*0.70*	*Cum*
	Dirt wall	*2*	*5.65*	*0.82*	*0.50*	*4.63*	*Cum*
		2	*5.65*	*0.40*	*0.43*	*1.93*	*Cum*
	Parapet	*2*	*3.04*	*0.45*	*0.18*	*0.47*	*Cum*
		2	*3.04*	*0.35*	*0.25*	*0.53*	*Cum*
		2	*3.04*	*0.22*	*0.55*	*0.73*	*Cum*
	TOTAL					**16.08**	**Cum**
5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Dia of Bars	**Length**	**Nos.**		**Weight per m**	**Quantity**	**Unit**
	Slab Per Span						
a1	*16*	*2.660*	*29*		*1.578*	*121.738*	*Kg*
a2	*10*	*5.650*	*11*		*0.616*	*38.313*	*Kg*
a3	*10*	*5.150*	*2*		*0.616*	*6.350*	*Kg*
a4	*10*	*2.580*	*18*		*0.616*	*28.628*	*Kg*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
a5	*10*	*5.550*	*8*		*0.616*	*27.371*	*Kg*
	Dirt Wall						
d1	*12*	*4.460*	*26*		*0.888*	*102.938*	*Kg*
d2	*12*	*5.550*	*14*		*0.888*	*68.975*	*Kg*
	Crash Barrier						
x1	*12*	*2.501*	*42*		*0.888*	*93.246*	*Kg*
x2	*16*	*1.265*	*42*		*1.578*	*83.847*	*Kg*
x3	*10*	*2.400*	*24*		*0.616*	*35.508*	*Kg*
	Floor R/F						
	U/S Key						
	12	*6.955*	*6*		*0.888*	*37.044*	*Kg*
	12	*2.100*	*25*		*0.888*	*46.604*	*Kg*
	floor raft						
	12	*3.395*	*6*		*0.888*	*18.083*	*Kg*
	12	*7.332*	*12*		*0.888*	*78.104*	*Kg*
	12	*2.100*	*63*		*0.888*	*117.443*	*Kg*
	0.25 % Skin Reinforcement for Transition walls	*60.80*	*0.25%*	*0.15*	*7850*	*1193.13*	*Kg*
	TOTAL Weight of steel (in kg)					2097.32	Kg
	TOTAL Weight of Steel (in Tonne)					**2.10**	**MT**
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.	1	2.13			**2.13**	**MT**
	*Separate sheet attached						
7	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Abutment						
	Section A-A	*4*	*1.00*		*0.50*	*2.00*	*Sqm*
		4		*0.82*	*0.50*	*1.64*	*Sqm*
		4	*1.00*		*0.70*	*2.80*	*Sqm*
		4		*1.03*	*0.70*	*2.88*	*Sqm*
		4	*1.00*		*1.20*	*4.80*	*Sqm*
		4		*1.24*	*1.20*	*5.95*	*Sqm*
	Section B-B	*4*	*3.60*		*0.85*	*12.24*	*Sqm*
		4		*1.08*	*0.85*	*3.66*	*Sqm*
		4	*3.60*		*0.90*	*12.96*	*Sqm*
		4		*1.33*	*0.90*	*4.79*	*Sqm*
	Section C-C	*4*	*2.05*		*0.55*	*4.51*	*Sqm*
		4		*0.99*	*0.55*	*2.17*	*Sqm*
		4	*2.05*		*1.20*	*9.84*	*Sqm*
		4		*1.15*	*1.20*	*5.52*	*Sqm*
	U/S Transition wall						
	Right Bank (Section D-D)	*2*	*3.23*		*0.50*	*3.23*	*Sqm*
		2		*0.45*	*0.50*	*0.45*	*Sqm*
		2	*3.23*		*0.70*	*4.52*	*Sqm*
		2		*0.66*	*0.70*	*0.92*	*Sqm*
		2	*3.23*		*1.20*	*7.76*	*Sqm*
		2		*0.87*	*1.20*	*2.09*	*Sqm*
	Left Bank						
	Bottom Key	*2*	*3.31*		*0.70*	*4.63*	*Sqm*
		2		*1.35*	*0.70*	*1.89*	*Sqm*
	Section a-a	*2*	*1.10*		*0.50*	*1.10*	*Sqm*
		2		*2.58*	*0.50*	*2.58*	*Sqm*
		2	*1.10*		*0.20*	*0.44*	*Sqm*
		2		*2.43*	*0.20*	*0.97*	*Sqm*
		2	*1.10*		*1.20*	*2.65*	*Sqm*
		2		*1.38*	*1.20*	*3.31*	*Sqm*
	Section b-b	*2*	*1.10*		*0.50*	*1.10*	*Sqm*
		2		*2.58*	*0.50*	*2.58*	*Sqm*
		2	*1.10*		*0.20*	*0.44*	*Sqm*
		2		*2.09*	*0.20*	*0.84*	*Sqm*
		2	*1.10*		*1.20*	*2.65*	*Sqm*
		2		*1.29*	*1.20*	*3.09*	*Sqm*
	Section c-c	*2*	*1.10*		*0.50*	*1.10*	*Sqm*
		2		*2.58*	*0.50*	*2.58*	*Sqm*
		2	*1.10*		*0.20*	*0.44*	*Sqm*
		2		*1.73*	*0.20*	*0.69*	*Sqm*
		2	*1.10*		*1.20*	*2.65*	*Sqm*
		2		*1.10*	*1.20*	*2.65*	*Sqm*
	Section d-d	*2*	*1.10*		*0.50*	*1.10*	*Sqm*
		2		*2.58*	*0.50*	*2.58*	*Sqm*
		2	*1.10*		*0.20*	*0.44*	*Sqm*
		2		*0.48*	*0.20*	*0.19*	*Sqm*
		2	*1.10*		*1.20*	*2.65*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2		0.48	1.20	1.15	Sqm
	D/S Transition wall						
	Sec 4-4	4	0.50		0.50	1.00	Sqm
		4		0.35	0.50	0.70	Sqm
		4	0.50		0.55	1.10	Sqm
		4		0.53	0.55	1.16	Sqm
		4	0.50		0.90	1.80	Sqm
		4		0.70	0.90	2.52	Sqm
	Avg. of Sec 1-1 & 3-3	4	2.68		0.50	5.35	Sqm
		4		0.74	0.50	1.49	Sqm
		4	2.68		0.55	5.89	Sqm
		4		1.24	0.55	2.72	Sqm
		4	2.68		0.90	9.63	Sqm
		4		1.54	0.90	5.56	Sqm
	Floor						
	U/S key	2	1.35		0.70	1.89	Sqm
		2		2.38	0.70	3.33	Sqm
	Floor	2	2.10		0.50	2.10	Sqm
		2		2.38	0.50	2.38	Sqm
		2	1.44		0.50	1.44	Sqm
		2		1.40	0.50	1.40	Sqm
		2	0.67		0.50	0.67	Sqm
		2		1.40	0.50	1.40	Sqm
		2	1.40		0.00	2.80	Sqm
		2		0.01	0.00	0.01	Sqm
		2	3.16		0.50	3.16	Sqm
		2		1.40	0.50	1.40	Sqm
		2	0.90		0.35	0.63	Sqm
		2		1.40	0.35	0.98	Sqm
		2	0.53			1.05	Sqm
		2		1.40		2.80	Sqm
		2	1.04		0.50	1.04	Sqm
		2		1.40	0.50	1.40	Sqm
	D/S key	2	0.73		0.50	0.73	Sqm
		2		1.40	0.50	1.40	Sqm
	Toe Wall Base D/S Portion	2	1.40		0.30	0.84	Sqm
		2		0.85	0.30	0.51	Sqm
	Toe Wall Stem D/S Portion	2	1.40		0.90	2.52	Sqm
		2		0.45	0.90	0.81	Sqm
	Toe Wall Base (For Brick Pitching)	4	3.00		0.30	3.60	Sqm
		4		0.60	0.30	0.72	Sqm
	Toe Wall Stem (For Brick Pitching)	4	3.00		0.90	10.80	Sqm
		4		0.30	0.90	1.08	Sqm
	Top Slab	2	5.25		0.33	3.43	Sqm
		2		2.20	0.33	1.44	Sqm
		1	5.25	2.20		11.55	Sqm
	Dirt wall	4	5.65		0.50	11.30	Sqm
		4		0.82	0.50	1.64	Sqm
		4	5.65		0.43	9.67	Sqm
		4		0.40	0.43	0.68	Sqm
	Parapet	4	3.04		0.18	2.13	Sqm
		4		0.45	0.18	0.31	Sqm
		4	3.04		0.25	3.04	Sqm
		4		0.35	0.25	0.35	Sqm
		4	3.04		0.55	6.69	Sqm
		4		0.22	0.55	0.48	Sqm
	TOTAL					**285.74**	**Sqm**
8	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	2	3.00	2.13		12.78	Sqm
	TOTAL					**12.78**	**Sqm**
9	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.**(WRD M-002)**						
	Boulder Apron in D/S Portion	1	3.00	0.80	0.90	2.16	***Cum***
	TOTAL					**2.16**	**Cum**
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I. (WRD 5.2.2)						
	In D/S Portion below C.C. Blocks	1	2.20	1.40	0.15	0.46	Cum
	In D/S Portion below Stone Chips	1	2.20	1.40	0.15	0.46	Cum

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	TOTAL					**0.92**	**Cum**
11	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	U/S transition	*2*	*1.80*	*0.48*		*1.73*	*Sqm*
	On Abutment Top	*2*	*4.57*	*0.45*		*1.62*	*Sqm*
	TOTAL					**3.35**	**Sqm**
12	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2	1			**2.00**	**No.**
13	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications**. (3.18 PWD NH SOR CHHATISGARH 2025)**	2	5.25	0.40		**4.20**	**Sqm**
14	Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specifications. **(RCD 15.22 - (ii))**	2	5.25			**10.50**	**RM**
15	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compa.cted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Abutment						
	Section A-A	2	*1.00*	*0.90*		*1.794*	*Cum*
	Section B-B	2	*3.60*	*0.93*		*6.696*	*Cum*
	Section C-C	2	*2.05*	*0.78*		*3.198*	*Cum*
	U/S Transition wall						
	Right Bank (Section D-D)	1	*3.23*	*0.90*		*2.899*	*Cum*
	D/S Transition wall						
	Sec 4-4	2	*0.50*	*0.67*		*0.671*	*Cum*
	Avg. of Sec 1-1 & 3-3	2	*2.68*	*0.97*		*5.165*	*Cum*
	TOTAL					**20.42**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF PIPE HR OF NAWAKHAP MR OFFTAKING FROM RD- 23+830 KM (R.),KOTWARA DY						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	U/S Toe Wall Base	*1*	*0.63*	*0.85*	*1.20*	*0.64*	*Cum*
	D/S Toe Wall Base	*1*	*0.88*	*0.85*	*1.20*	*0.90*	*Cum*
	Floor Apron (U/S Portion)	*1*	*1.30*	*0.60*	*1.11*	*0.87*	*Cum*
	U/S Transitions Floor (Left & Right)						
	Section X-X	*2*	*0.85*	*1*	*2.20*	*3.73*	*Cum*
	D/S Transitions Floor (Left & Right)						
	Section Y-Y	*2*	*2.13*	*1*	*2.05*	*8.72*	*Cum*
	PCC Below Hume Pipe	*1*	*7.55*	*1.37*	*1.46*	*15.10*	*Cum*
	TOTAL					**29.97**	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	U/S Toe Wall Base	*1*	*0.63*	*0.85*	*0.30*	*0.16*	*Cum*
	U/S Toe Wall Stem	*1*	*0.63*	*0.45*	*0.90*	*0.26*	*Cum*
	D/S Toe Wall Base	*1*	*0.88*	*0.85*	*0.30*	*0.23*	*Cum*
	D/S Toe Wall Stem	*1*	*0.88*	*0.45*	*0.90*	*0.36*	*Cum*
	Floor Apron (U/S Portion)	*1*	*1.30*	*0.60*	*0.39*	*0.30*	*Cum*
	Floor Apron (D/S Portion)	*1*	*1.55*	*0.72*	*0.39*	*0.43*	*Cum*
	U/S Transitions Floor (Left & Right)						
	Section X-X	*2*	*0.85*	*1.00*	*0.30*	*0.51*	*Cum*
	D/S Transitions Floor (Left & Right)						
	Section Y-Y	*2*	*2.13*	*1.00*	*0.30*	*1.28*	*Cum*
	PCC Below Hume Pipe	*1*	*7.55*	*1.37*	*0.30*	*3.10*	*Cum*
	PCC Below Hume Pipe in (Curve Portion)	*2*	*7.55*	*0.51*	*0.24*	*1.80*	*Cum*
	Collar Joint	*3*	*1.37*	*0.30*	*1.14*	*1.41*	*Cum*
	Deduct Pipe Area	*3*	*0.28*		*0.30*	*-0.25*	*Cum*
	TOTAL					**9.57**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	U/S Transitions Floor (Left & Right)						
	Section X-X	*2*	*0.85*	*0.60*	*0.90*	*0.92*	*Cum*
		2	*0.85*	*0.45*	*0.50*	*0.38*	*Cum*
		2	*0.85*	*0.30*	*0.50*	*0.25*	*Cum*
	D/S Transitions Floor (Left & Right)						
	Section Y-Y	*2*	*2.13*	*0.60*	*0.90*	*2.30*	*Cum*
		2	*2.13*	*0.45*	*0.35*	*0.67*	*Cum*
		2	*2.13*	*0.30*	*0.50*	*0.64*	*Cum*
	Gate Abutment	*2*	*0.70*	*0.60*	*1.10*	*0.92*	*Cum*
	Deduct gate Groove	*2*	*0.20*	*0.10*	*1.10*	*-0.04*	*Cum*
	Parapet wall for earth filling Protection	*2*	*1.14*	*0.25*	*0.30*	*0.17*	*Cum*
	TOTAL					**6.21**	**Cum**
4	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	U/S Toe Wall Base	*2*	*0.63*		*0.30*	*0.38*	*Sqm*
		2		*0.85*	*0.30*	*0.51*	*Sqm*
	U/S Toe Wall Stem	*2*	*0.63*		*0.90*	*1.13*	*Sqm*
		2		*0.45*	*0.90*	*0.81*	*Sqm*
	D/S Toe Wall Base	*2*	*0.88*		*0.30*	*0.53*	*Sqm*
		2		*0.85*	*0.30*	*0.51*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	D/S Toe Wall Stem	*2*	*0.88*		*0.90*	*1.59*	*Sqm*
		2		*0.45*	*0.90*	*0.81*	*Sqm*
	Floor Apron (U/S Portion)	*2*	*1.30*		*0.39*	*1.00*	*Sqm*
		2		*0.60*	*0.39*	*0.46*	*Sqm*
	Floor Apron (D/S Portion)	*2*	*1.55*		*0.39*	*1.19*	*Sqm*
		2		*0.72*	*0.39*	*0.56*	*Sqm*
	U/S Transitions Floor (Left & Right)						
	Section X-X	*4*	*0.85*		*0.90*	*3.05*	*Sqm*
		4		*0.60*	*0.90*	*2.16*	*Sqm*
		4	*0.85*		*0.35*	*1.19*	*Sqm*
		4		*0.45*	*0.35*	*0.63*	*Sqm*
		4	*0.85*		*0.50*	*1.70*	*Sqm*
		4		*0.30*	*0.50*	*0.60*	*Sqm*
	D/S Transitions Floor (Left & Right)						
	Section Y-Y	*4*	*2.13*		*0.90*	*7.66*	*Sqm*
		4		*0.60*	*0.90*	*2.16*	*Sqm*
		4	*2.13*		*0.35*	*2.98*	*Sqm*
		4		*0.45*	*0.35*	*0.63*	*Sqm*
		4	*2.13*		*0.50*	*4.26*	*Sqm*
		4		*0.30*	*0.50*	*0.60*	*Sqm*
	Gate Abutment	*4*	*0.70*		*1.10*	*3.08*	*Sqm*
		4		*0.60*	*1.10*	*2.64*	*Sqm*
	Parapet wall for earth filling Protection	*4*	*1.14*		*0.30*	*1.37*	*Sqm*
		4		*0.25*	*0.30*	*0.30*	*Sqm*
	PCC Below Hume Pipe	*2*	*7.55*		*0.30*	*4.53*	*Sqm*
		2		*1.37*	*0.30*	*0.82*	*Sqm*
	PCC Below Hume Pipe in (Curve Portion)	*4*	*7.55*		*0.24*	*7.10*	*Sqm*
		4		*0.51*	*0.24*	*0.48*	*Sqm*
	Collar Joint	*6*	*1.37*		*1.44*	*11.84*	*Sqm*
		6		*0.30*	*1.44*	*2.59*	*Sqm*
	TOTAL					**71.84**	**Sqm**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
		Quantity	Percent		Density		
	0.25 % Skin Reinforcement for Transition walls	*6.21*	*0.25%*	*0.02*	*7850*	*121.85*	*Kg*
	TOTAL Weight of steel (in kg)					121.85	Kg
	TOTAL Weight of Steel (in Tonne)					**0.12**	**MT**
6	Structural Steel (Average rate of Angle, Joint and Channel) etc.						
	Spindle 25 mm dia	*1*	*0.000491*	*7850.00*	*0.82*	*3.16*	*Kg*
		1	*0.000491*	*7850.00*	*0.23*	*0.87*	*Kg*
	800 X800 MM MS GATE	*1*		*40.19*		*40.19*	*Kg*
	I.M.C. Grove (100 x 50) 9.56 kg/m	*2*	*9.56*		*0.70*	*13.38*	*Kg*
		2	*9.56*		*1.00*	*19.12*	*Kg*
	TOTAL (In Kg)					**76.72**	**Kg**
	TOTAL					**0.08**	**MT**
7	Providing 600 mm NP3 RCC Hume Pipe with collar as per I.S.S. 458-1971 including fixing and fitting NP3 hume pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .	3		2.50		7.5	Rm
	TOTAL					**7.50**	**Rm**
8	Providing compacted 75 mm thick sand filter of required F.M. as per design on slopes and in bed of canal with local sand inclusing cost of water, ramming, levelling and dressing, etc. all complete as per specification and direction of E/I. (5.2.1)						
		1	10.055	1.37	0.075	*1.03*	**Cum**
	TOTAL					**1.03**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
9	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	U/S Toe Wall Base	1	0.63	0.25		0.160	*Cum*
	D/S Toe Wall Base	1	0.88	0.27		0.237	*Cum*
	U/S Transitions Floor (Left & Right)						
	Section X-X	*2*	*0.85*	0.60		1.025	*Cum*
	D/S Transitions Floor (Left & Right)						
	Section Y-Y	*2*	*2.13*	0.55		2.351	
	Above Hume Pipe	*1*	*1.14*	3.81		4.349	*Cum*
	TOTAL					**8.12**	**Cum**

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND								
ABSTRACT OF QUANTITIES OF SHARDA TYPE FALL FOR KOTWARA SUB DISTRIBUTARY								
S. No.	**Item of Works**	**Qty.**	**Unit**	**Rate (As per WRD SOR 2025 & PL MARCH 2025)**	**Amount (Rs)**	**Cement (MT)**	**Coarse Sand (Cum)**	**Coarse Aggregate (Cum)**
SHARDA TYPE FALL OF HEIGHT 0.457 METER AT CH.5.500 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	324.537	Cum	**195.20**	63349.68			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	31.10	Cum	**6381.70**	198454.43	10.08	13.99	27.99
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	140.39	Cum	**6914.20**	970672.36	57.91	60.37	120.73

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	1.68	Cum	**8151.40**	13675.28	0.95	0.65	1.33
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	2.20	MT	**73574.90**	162166.10			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	367.21	Sqm	**578.60**	212466.80			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	48.14	Sqm	**680.10**	32742.73			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	8.40	Cum	**694.61**	5834.72			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	8.40	Cum	**1237.00**	10390.80			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	8.40	Cum	**1377.70**	11572.68			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	8.40	Cum	**516.50**	4338.60			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	17.59	Sqm	**63.20**	1111.89			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	84.84	Cum	**149.30**	12667.13			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	75.015	Cum	**1075.00**	80641.20			
	Coarse Aggregates (100 Km lead)	150.047	Cum	**1398.00**	209765.59			
	Cement (30 km lead)	68.937	MT	**742.00**	51151.21			
	Boulder (60 Km lead)	8.40	Cum	**1159.00**	9735.60			
	Brick (15 km lead)	2888.00	No.	**3.18**	9183.84			
	Steel (30 Km lead)	2.20	MT	**742.00**	1635.44			
TOTAL (In Rs.)					**2072733.50**			
TOTAL (In Rs.)					**2072733.50**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	75.02	Cum	**584.64**	43856.81	4385.68		
	Coarse Aggregate	150.05	Cum	**944.26**	141683.30	14168.33		
	Boulders	8.40	Cum	**694.61**	5834.72	583.47		
	Total					19137.48		
	For 1 nos. fall, Total Seigniorage charges					**19137.48**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 1.520 METER AT CH. 6.750 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	427.163	Cum	**195.20**	83382.30			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	41.74	Cum	**6381.70**	266348.70	13.52	18.78	37.56
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	308.42	Cum	**6914.20**	2132474.44	127.22	132.62	265.24
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	2.15	Cum	**8151.40**	17500.53	1.22	0.84	1.70

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	4.84	MT	**73574.90**	356263.42			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	589.98	Sqm	**578.60**	341360.95			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	48.14	Sqm	**680.10**	32742.73			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	8.40	Cum	**694.61**	5834.72			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	8.40	Cum	**1237.00**	10390.80			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	8.40	Cum	**1377.70**	11572.68			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	8.40	Cum	**516.50**	4338.60			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	21.28	Sqm	**63.20**	1344.81			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	95.12	Cum	**149.30**	14200.78			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	152.239	Cum	**1075.00**	163656.99			
	Coarse Aggregates (100 Km lead)	304.500	Cum	**1398.00**	425690.42			
	Cement (30 km lead)	141.963	MT	**742.00**	105336.50			
	Boulder (60 Km lead)	8.40	Cum	**1159.00**	9735.60			
	Brick (15 km lead)	2888.00	No.	**3.18**	9183.84			
	Steel (30 Km lead)	4.84	MT	**742.00**	3592.90			
TOTAL (In Rs.)					**4006129.10**			
TOTAL (In Rs.)					**4006129.10**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	152.24	Cum	**584.64**	89005.04	8900.50		
	Coarse Aggregate	304.50	Cum	**944.26**	287526.78	28752.68		
	Boulders	8.40	Cum	**694.61**	5834.72	583.47		
	Total					38236.65		
	For 1 nos. fall, Total Seigniorage charges					**38236.65**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 1.830 METER AT CH. 6.940 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	629.230	Cum	**195.20**	122825.68			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	46.90	Cum	**6381.70**	299301.72	15.20	21.10	42.21
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	384.16	Cum	**6914.20**	2656139.66	158.46	165.19	330.38
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	2.36	Cum	**8151.40**	19236.77	1.34	0.92	1.86

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	6.03	MT	**73574.90**	443749.93			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	666.57	Sqm	**578.60**	385678.45			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	48.14	Sqm	**680.10**	32742.73			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	8.40	Cum	**694.61**	5834.72			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	8.40	Cum	**1237.00**	10390.80			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	8.40	Cum	**1377.70**	11572.68			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	8.40	Cum	**516.50**	4338.60			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	23.26	Sqm	**63.20**	1469.95			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	173.06	Cum	**149.30**	25838.22			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	187.213	Cum	**1075.00**	201253.94			
	Coarse Aggregates (100 Km lead)	374.450	Cum	**1398.00**	523480.45			
	Cement (30 km lead)	174.999	MT	**742.00**	129848.91			
	Boulder (60 Km lead)	8.40	Cum	**1159.00**	9735.60			
	Brick (15 km lead)	2888.00	No.	**3.18**	9183.84			
	Steel (30 Km lead)	6.03	MT	**742.00**	4475.20			
TOTAL (In Rs.)					**4908275.25**			
TOTAL (In Rs.)					**4908275.25**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	187.21	Cum	**584.64**	109452.19	10945.22		
	Coarse Aggregate	374.45	Cum	**944.26**	353577.72	35357.77		
	Boulders	8.40	Cum	**694.61**	5834.72	583.47		
	Total					46886.46		
	For 1 nos. fall, Total Seigniorage charges					**46886.46**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 1.524 METER AT CH. 10.300 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	469.219	Cum	**195.20**	91591.59			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	41.74	Cum	**6381.70**	266373.20	13.52	18.78	37.57
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	308.55	Cum	**6914.20**	2133383.38	127.28	132.68	265.35
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	2.15	Cum	**8151.40**	17500.53	1.22	0.84	1.70

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	4.84	MT	**73574.90**	356415.27			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	590.14	Sqm	**578.60**	341457.66			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	48.14	Sqm	**680.10**	32742.73			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	8.40	Cum	**694.61**	5834.72			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	8.40	Cum	**1237.00**	10390.80			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	8.40	Cum	**1377.70**	11572.68			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	8.40	Cum	**516.50**	4338.60			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	21.28	Sqm	**63.20**	1344.81			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	119.40	Cum	**149.30**	17827.06			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	152.297	Cum	**1075.00**	163719.61			
	Coarse Aggregates (100 Km lead)	304.616	Cum	**1398.00**	425853.30			
	Cement (30 km lead)	142.018	MT	**742.00**	105377.66			
	Boulder (60 Km lead)	8.40	Cum	**1159.00**	9735.60			
	Brick (15 km lead)	2888.00	No.	**3.18**	9183.84			
	Steel (30 Km lead)	4.84	MT	**742.00**	3594.43			
TOTAL (In Rs.)					**4019414.89**			
TOTAL (In Rs.)					**4019414.89**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	152.30	Cum	**584.64**	89039.10	8903.91		
	Coarse Aggregate	304.62	Cum	**944.26**	287636.79	28763.68		
	Boulders	8.40	Cum	**694.61**	5834.72	583.47		
	Total					38251.06		
	For 1 nos. fall, Total Seigniorage charges					**38251.06**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 0.762 METER AT CH. 29.875 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	74.905	Cum	**195.20**	14621.54			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	11.00	Cum	**6381.70**	70215.75	3.56	4.95	9.90
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	44.82	Cum	**6914.20**	309885.54	18.49	19.27	38.54
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.70	Cum	**8151.40**	5685.23	0.40	0.27	0.55

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	1.06	MT	**73574.90**	77656.88			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	165.69	Sqm	**578.60**	95869.22			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	11.21	Sqm	**680.10**	7626.64			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.32	Cum	**694.61**	218.80			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.32	Cum	**1237.00**	389.66			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.32	Cum	**1377.70**	433.98			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.32	Cum	**516.50**	162.70			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	11.61	Sqm	**63.20**	733.70			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	22.46	Cum	**149.30**	3353.61			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	24.495	Cum	**1075.00**	26332.40			
	Coarse Aggregates (100 Km lead)	48.997	Cum	**1398.00**	68498.49			
	Cement (30 km lead)	22.448	MT	**742.00**	16656.45			
	Boulder (60 Km lead)	0.32	Cum	**1159.00**	365.09			
	Brick (15 km lead)	672.00	No.	**3.18**	2136.96			
	Steel (30 Km lead)	1.06	MT	**742.00**	783.17			
TOTAL (In Rs.)					**712803.19**			
TOTAL (In Rs.)					**712803.19**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	24.50	Cum	**584.64**	14320.91	1432.09		
	Coarse Aggregate	49.00	Cum	**944.26**	46266.37	4626.64		
	Boulders	0.32	Cum	**694.61**	218.80	21.88		
	Total					6080.61		
	For 1 nos. fall, Total Seigniorage charges					**6080.61**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 0.762 METER AT CH. 30.000 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	75.145	Cum	**195.20**	14668.21			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	9.81	Cum	**6381.70**	62586.25	3.18	4.41	8.83
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	39.82	Cum	**6914.20**	275290.98	16.42	17.12	34.24
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.63	Cum	**8151.40**	5170.23	0.36	0.25	0.50

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	0.94	MT	**73574.90**	68987.54			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	151.80	Sqm	**578.60**	87831.87			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	6.43	Sqm	**680.10**	4370.32			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.14	Cum	**694.61**	93.77			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.14	Cum	**1237.00**	167.00			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.14	Cum	**1377.70**	185.99			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.14	Cum	**516.50**	69.73			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	10.93	Sqm	**63.20**	690.81			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	22.35	Cum	**149.30**	3337.25			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	21.781	Cum	**1075.00**	23414.75			
	Coarse Aggregates (100 Km lead)	43.569	Cum	**1398.00**	60909.00			
	Cement (30 km lead)	19.961	MT	**742.00**	14811.03			
	Boulder (60 Km lead)	0.14	Cum	**1159.00**	156.47			
	Brick (15 km lead)	385.00	No.	**3.18**	1224.30			
	Steel (30 Km lead)	0.94	MT	**742.00**	695.74			
TOTAL (In Rs.)					**635838.63**			
TOTAL (In Rs.)					**635838.63**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	21.78	Cum	**584.64**	12734.14	1273.41		
	Coarse Aggregate	43.57	Cum	**944.26**	41140.15	4114.02		
	Boulders	0.14	Cum	**694.61**	93.77	9.38		
	Total					5396.81		
	For 1 nos. fall, Total Seigniorage charges					**5396.81**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF QUANTITIES OF SHARDA TYPE FALL FOR PAWAI MR.								
SHARDA TYPE FALL OF HEIGHT 1.067 METER AT CH. 0.200 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	114.589	Cum	**195.20**	22367.76			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	9.47	Cum	**6381.70**	60432.50	3.07	4.26	8.52
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	41.42	Cum	**6914.20**	286387.19	17.09	17.81	35.62
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.64	Cum	**8151.40**	5210.21	0.36	0.25	0.50

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	0.98	MT	**73574.90**	71768.23			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	152.51	Sqm	**578.60**	88243.43			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	5.89	Sqm	**680.10**	4003.07			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.41	Cum	**694.61**	281.32			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.41	Cum	**1237.00**	500.99			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.41	Cum	**1377.70**	557.97			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.41	Cum	**516.50**	209.18			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	9.41	Sqm	**63.20**	594.62			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	29.95	Cum	**149.30**	4471.53			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	22.321	Cum	**1075.00**	23995.39			
	Coarse Aggregates (100 Km lead)	44.649	Cum	**1398.00**	62419.26			
	Cement (30 km lead)	20.516	MT	**742.00**	15223.17			
	Boulder (60 Km lead)	0.41	Cum	**1159.00**	469.40			
	Brick (15 km lead)	353.00	No.	**3.18**	1122.54			
	Steel (30 Km lead)	0.98	MT	**742.00**	723.78			
TOTAL (In Rs.)					**660158.94**			
TOTAL (In Rs.)					**660158.94**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	22.32	Cum	**584.64**	13049.92	1304.99		
	Coarse Aggregate	44.65	Cum	**944.26**	42160.24	4216.02		
	Boulders	0.41	Cum	**694.61**	281.32	28.13		
	Total					5549.15		
	For 1 nos. fall, Total Seigniorage charges					**5549.15**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 0.914 METER AT CH. 0.375 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	77.737	Cum	**195.20**	15174.19			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	8.82	Cum	**6381.70**	56272.66	2.86	3.97	7.94
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	35.72	Cum	**6914.20**	247003.79	14.74	15.36	30.72
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.59	Cum	**8151.40**	4806.72	0.33	0.23	0.47

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	0.84	MT	**73574.90**	61898.80			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	139.03	Sqm	**578.60**	80444.76			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	5.89	Sqm	**680.10**	4003.07			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.41	Cum	**694.61**	281.32			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.41	Cum	**1237.00**	500.99			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.41	Cum	**1377.70**	557.97			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.41	Cum	**516.50**	209.18			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	8.64	Sqm	**63.20**	546.28			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	23.85	Cum	**149.30**	3560.97			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	19.559	Cum	**1075.00**	21026.32			
	Coarse Aggregates (100 Km lead)	39.125	Cum	**1398.00**	54696.24			
	Cement (30 km lead)	17.928	MT	**742.00**	13302.22			
	Boulder (60 Km lead)	0.41	Cum	**1159.00**	469.40			
	Brick (15 km lead)	353.00	No.	**3.18**	1122.54			
	Steel (30 Km lead)	0.84	MT	**742.00**	624.25			
TOTAL (In Rs.)					**577679.07**			
TOTAL (In Rs.)					**577679.07**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	19.56	Cum	**584.64**	11435.19	1143.52		
	Coarse Aggregate	39.12	Cum	**944.26**	36943.83	3694.38		
	Boulders	0.41	Cum	**694.61**	281.32	28.13		
	Total					4866.03		
	For 1 nos. fall, Total Seigniorage charges					**4866.03**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
	SHARDA TYPE FALL OF HEIGHT 1.829 METER AT CH. 1.720 KM							
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	61.277	Cum	**195.20**	11961.18			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	9.25	Cum	**6381.70**	58998.92	3.00	4.16	8.32
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	59.94	Cum	**6914.20**	414468.75	24.73	25.78	51.55
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.68	Cum	**8151.40**	5561.99	0.39	0.27	0.54

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	1.41	MT	**73574.90**	103865.29			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	207.64	Sqm	**578.60**	120140.77			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	5.08	Sqm	**680.10**	3452.19			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.07	Cum	**694.61**	46.89			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.07	Cum	**1237.00**	83.50			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.07	Cum	**1377.70**	92.99			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.07	Cum	**516.50**	34.86			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	11.62	Sqm	**63.20**	734.49			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	14.28	Cum	**149.30**	2132.28			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	30.203	Cum	**1075.00**	32467.72			
	Coarse Aggregates (100 Km lead)	60.412	Cum	**1398.00**	84455.82			
	Cement (30 km lead)	28.109	MT	**742.00**	20857.18			
	Boulder (60 Km lead)	0.07	Cum	**1159.00**	78.23			
	Brick (15 km lead)	304.00	No.	**3.18**	966.72			
	Steel (30 Km lead)	1.41	MT	**742.00**	1047.48			
TOTAL (In Rs.)					**872624.65**			
TOTAL (In Rs.)					**872624.65**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	30.20	Cum	**584.64**	17657.61	1765.76		
	Coarse Aggregate	60.41	Cum	**944.26**	57044.53	5704.45		
	Boulders	0.07	Cum	**694.61**	46.89	4.69		
	Total					7474.90		
	For 1 nos. fall, Total Seigniorage charges					**7474.90**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF QUANTITIES OF SHARDA TYPE FALL FOR BHUTAILI MR.								
SHARDA TYPE FALL OF HEIGHT 1.524 METER AT CH.0.580 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	69.812	Cum	**195.20**	13627.22			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	10.65	Cum	**6381.70**	67962.46	3.45	4.79	9.58
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	56.59	Cum	**6914.20**	391302.11	23.35	24.34	48.67
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.84	Cum	**8151.40**	6815.39	0.47	0.33	0.66

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	1.33	MT	**73574.90**	98059.77			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	195.55	Sqm	**578.60**	113145.84			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	5.88	Sqm	**680.10**	4001.03			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.27	Cum	**694.61**	187.54			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.27	Cum	**1237.00**	333.99			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.27	Cum	**1377.70**	371.98			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.27	Cum	**516.50**	139.46			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	13.84	Sqm	**63.20**	874.81			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	43.36	Cum	**149.30**	6474.02			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	29.454	Cum	**1075.00**	31662.84			
	Coarse Aggregates (100 Km lead)	58.916	Cum	**1398.00**	82364.53			
	Cement (30 km lead)	27.270	MT	**742.00**	20234.01			
	Boulder (60 Km lead)	0.27	Cum	**1159.00**	312.93			
	Brick (15 km lead)	352.00	No.	**3.18**	1119.36			
	Steel (30 Km lead)	1.33	MT	**742.00**	988.93			
TOTAL (In Rs.)					**851155.61**			
TOTAL (In Rs.)					**851155.61**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	29.45	Cum	**584.64**	17219.87	1721.99		
	Coarse Aggregate	58.92	Cum	**944.26**	55631.99	5563.20		
	Boulders	0.27	Cum	**694.61**	187.54	18.75		
	Total					7303.94		
	For 1 nos. fall, Total Seigniorage charges					**7303.94**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 0.610 METER AT CH.1.350 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	25.950	Cum	**195.20**	5065.42			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	7.57	Cum	**6381.70**	48302.33	2.45	3.41	6.81
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	27.23	Cum	**6914.20**	188291.98	11.23	11.71	23.42
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.54	Cum	**8151.40**	4431.10	0.31	0.21	0.43

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	0.64	MT	**73574.90**	47185.71			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	117.87	Sqm	**578.60**	68199.88			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	5.61	Sqm	**680.10**	3817.40			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.18	Cum	**694.61**	125.03			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.18	Cum	**1237.00**	222.66			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.18	Cum	**1377.70**	247.99			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.18	Cum	**516.50**	92.97			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	9.07	Sqm	**63.20**	573.35			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	20.87	Cum	**149.30**	3116.09			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	15.328	Cum	**1075.00**	16477.64			
	Coarse Aggregates (100 Km lead)	30.662	Cum	**1398.00**	42864.80			
	Cement (30 km lead)	13.994	MT	**742.00**	10383.55			
	Boulder (60 Km lead)	0.18	Cum	**1159.00**	208.62			
	Brick (15 km lead)	336.00	No.	**3.18**	1068.48			
	Steel (30 Km lead)	0.64	MT	**742.00**	475.87			
TOTAL (In Rs.)					**452328.26**			
TOTAL (In Rs.)					**452328.26**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	15.33	Cum	**584.64**	8961.39	896.14		
	Coarse Aggregate	30.66	Cum	**944.26**	28952.44	2895.24		
	Boulders	0.18	Cum	**694.61**	125.03	12.50		
	Total					3803.89		
	For 1 nos. fall, Total Seigniorage charges					**3803.89**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF QUANTITIES OF SHARDA TYPE FALL FOR SALOPURA MINOR								
SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH.0.487 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	75.744	Cum	**195.20**	14785.23			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	9.80	Cum	**6381.70**	62552.35	3.18	4.41	8.82
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	47.47	Cum	**6914.20**	328188.35	19.58	20.41	40.82
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.64	Cum	**8151.40**	5208.01	0.36	0.25	0.50

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	1.12	MT	**73574.90**	82243.54			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	170.90	Sqm	**578.60**	98881.37			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	7.18	Sqm	**680.10**	4882.10			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.32	Cum	**694.61**	218.80			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.32	Cum	**1237.00**	389.66			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.32	Cum	**1377.70**	433.98			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.32	Cum	**516.50**	162.70			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	10.08	Sqm	**63.20**	636.94			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	22.58	Cum	**149.30**	3371.31			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	25.070	Cum	**1075.00**	26950.59			
	Coarse Aggregates (100 Km lead)	50.147	Cum	**1398.00**	70105.53			
	Cement (30 km lead)	23.118	MT	**742.00**	17153.35			
	Boulder (60 Km lead)	0.32	Cum	**1159.00**	365.09			
	Brick (15 km lead)	430.00	No.	**3.18**	1367.40			
	Steel (30 Km lead)	1.12	MT	**742.00**	829.42			
TOTAL (In Rs.)					**729903.11**			
TOTAL (In Rs.)					**729903.11**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	25.07	Cum	**584.64**	14657.11	1465.71		
	Coarse Aggregate	50.15	Cum	**944.26**	47351.82	4735.18		
	Boulders	0.32	Cum	**694.61**	218.80	21.88		
	Total					6222.77		
	For 1 nos. fall, Total Seigniorage charges					**6222.77**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 2.134 METER AT CH.1.185 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	127.106	Cum	**195.20**	24811.13			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	12.09	Cum	**6381.70**	77127.46	3.92	5.44	10.88
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	89.54	Cum	**6914.20**	619081.86	36.93	38.50	77.00
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.83	Cum	**8151.40**	6780.54	0.47	0.32	0.66

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	2.11	MT	**73574.90**	155141.05			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	268.01	Sqm	**578.60**	155073.26			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	5.72	Sqm	**680.10**	3890.85			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.27	Cum	**694.61**	187.54			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.27	Cum	**1237.00**	333.99			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.27	Cum	**1377.70**	371.98			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.27	Cum	**516.50**	139.46			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	13.22	Sqm	**63.20**	835.28			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	35.59	Cum	**149.30**	5313.64			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	44.264	Cum	**1075.00**	47584.03			
	Coarse Aggregates (100 Km lead)	88.537	Cum	**1398.00**	123774.38			
	Cement (30 km lead)	41.322	MT	**742.00**	30660.73			
	Boulder (60 Km lead)	0.27	Cum	**1159.00**	312.93			
	Brick (15 km lead)	343.00	No.	**3.18**	1090.74			
	Steel (30 Km lead)	2.11	MT	**742.00**	1564.59			
TOTAL (In Rs.)					**1265252.85**			
TOTAL (In Rs.)					**1265252.85**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	44.26	Cum	**584.64**	25878.63	2587.86		
	Coarse Aggregate	88.54	Cum	**944.26**	83601.71	8360.17		
	Boulders	0.27	Cum	**694.61**	187.54	18.75		
	Total					10966.79		
	For 1 nos. fall, Total Seigniorage charges					**10966.79**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH.2.800 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	59.822	Cum	**195.20**	11677.20			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	7.51	Cum	**6381.70**	47924.59	2.43	3.38	6.76
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	31.30	Cum	**6914.20**	216383.69	12.91	13.46	26.91
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.55	Cum	**8151.40**	4463.01	0.31	0.21	0.43

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	0.74	MT	**73574.90**	54225.45			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	131.39	Sqm	**578.60**	76020.40			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	5.07	Sqm	**680.10**	3450.15			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.07	Cum	**694.61**	46.89			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.07	Cum	**1237.00**	83.50			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.07	Cum	**1377.70**	92.99			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.07	Cum	**516.50**	34.86			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	9.38	Sqm	**63.20**	592.52			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	21.31	Cum	**149.30**	3181.85			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	17.050	Cum	**1075.00**	18328.73			
	Coarse Aggregates (100 Km lead)	34.105	Cum	**1398.00**	47679.39			
	Cement (30 km lead)	15.653	MT	**742.00**	11614.52			
	Boulder (60 Km lead)	0.07	Cum	**1159.00**	78.23			
	Brick (15 km lead)	304.00	No.	**3.18**	966.72			
	Steel (30 Km lead)	0.74	MT	**742.00**	546.86			
TOTAL (In Rs.)					**508568.96**			
TOTAL (In Rs.)					**508568.96**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	17.05	Cum	**584.64**	9968.10	996.81		
	Coarse Aggregate	34.11	Cum	**944.26**	32204.39	3220.44		
	Boulders	0.07	Cum	**694.61**	46.89	4.69		
	Total					4221.94		
	For 1 nos. fall, Total Seigniorage charges					**4221.94**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF QUANTITIES OF SHARDA TYPE FALL FOR SINGHI SUB DISTRIBUTARY								
SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH.0.650 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	277.937	Cum	**195.20**	54253.21			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	27.03	Cum	**6381.70**	172470.04	8.76	12.16	24.32
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	165.12	Cum	**6914.20**	1141668.32	68.11	71.00	142.00
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	1.45	Cum	**8151.40**	11840.72	0.82	0.57	1.15

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	2.59	MT	**73574.90**	190733.66			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	396.68	Sqm	**578.60**	229517.05			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	37.32	Sqm	**680.10**	25384.05			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	3.52	Cum	**694.61**	2443.29			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	3.52	Cum	**1237.00**	4351.15			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	3.52	Cum	**1377.70**	4846.06			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	3.52	Cum	**516.50**	1816.79			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	18.39	Sqm	**63.20**	1162.06			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	75.53	Cum	**149.30**	11276.71			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	83.729	Cum	**1075.00**	90009.12			
	Coarse Aggregates (100 Km lead)	167.473	Cum	**1398.00**	234127.75			
	Cement (30 km lead)	77.692	MT	**742.00**	57647.24			
	Boulder (60 Km lead)	3.52	Cum	**1159.00**	4076.78			
	Brick (15 km lead)	2239.00	No.	**3.18**	7120.02			
	Steel (30 Km lead)	2.59	MT	**742.00**	1923.54			
TOTAL (In Rs.)					**2257844.98**			
TOTAL (In Rs.)					**2257844.98**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	83.73	Cum	**584.64**	48951.57	4895.16		
	Coarse Aggregate	167.47	Cum	**944.26**	158138.39	15813.84		
	Boulders	3.52	Cum	**694.61**	2443.29	244.33		
	Total					20953.32		
	For 1 nos. fall, Total Seigniorage charges					**20953.32**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH.1.350 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	206.172	Cum	**195.20**	40244.83			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	27.03	Cum	**6381.70**	172470.04	8.76	12.16	24.32
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	165.12	Cum	**6914.20**	1141668.32	68.11	71.00	142.00
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	1.45	Cum	**8151.40**	11840.72	0.82	0.57	1.15

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	2.59	MT	**73574.90**	190733.66			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	396.68	Sqm	**578.60**	229517.05			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	37.32	Sqm	**680.10**	25384.05			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	3.52	Cum	**694.61**	2443.29			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	3.52	Cum	**1237.00**	4351.15			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	3.52	Cum	**1377.70**	4846.06			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	3.52	Cum	**516.50**	1816.79			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	18.39	Sqm	**63.20**	1162.06			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	41.97	Cum	**149.30**	6266.77			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	83.729	Cum	**1075.00**	90009.12			
	Coarse Aggregates (100 Km lead)	167.473	Cum	**1398.00**	234127.75			
	Cement (30 km lead)	77.692	MT	**742.00**	57647.24			
	Boulder (60 Km lead)	3.52	Cum	**1159.00**	4076.78			
	Brick (15 km lead)	2239.00	No.	**3.18**	7120.02			
	Steel (30 Km lead)	2.59	MT	**742.00**	1923.54			
TOTAL (In Rs.)					**2238826.66**			
TOTAL (In Rs.)					**2238826.66**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	83.73	Cum	**584.64**	48951.57	4895.16		
	Coarse Aggregate	167.47	Cum	**944.26**	158138.39	15813.84		
	Boulders	3.52	Cum	**694.61**	2443.29	244.33		
	Total					20953.32		
	For 1 nos. fall, Total Seigniorage charges					**20953.32**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 0.305 METER AT CH.2.740 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	169.720	Cum	**195.20**	33129.30			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	22.60	Cum	**6381.70**	144211.74	7.32	10.17	20.34
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	102.30	Cum	**6914.20**	707325.33	42.20	43.99	87.98
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	1.16	Cum	**8151.40**	9440.67	0.66	0.45	0.91

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	1.61	MT	**73574.90**	118169.83			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	293.74	Sqm	**578.60**	169958.62			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	37.32	Sqm	**680.10**	25384.05			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	3.52	Cum	**694.61**	2443.29			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	3.52	Cum	**1237.00**	4351.15			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	3.52	Cum	**1377.70**	4846.06			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	3.52	Cum	**516.50**	1816.79			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	16.05	Sqm	**63.20**	1014.57			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	45.64	Cum	**149.30**	6814.16			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	54.610	Cum	**1075.00**	58705.55			
	Coarse Aggregates (100 Km lead)	109.231	Cum	**1398.00**	152705.23			
	Cement (30 km lead)	50.177	MT	**742.00**	37231.51			
	Boulder (60 Km lead)	3.52	Cum	**1159.00**	4076.78			
	Brick (15 km lead)	2239.00	No.	**3.18**	7120.02			
	Steel (30 Km lead)	1.61	MT	**742.00**	1191.74			
TOTAL (In Rs.)					**1501113.80**			
TOTAL (In Rs.)					**1501113.80**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	54.61	Cum	**584.64**	31927.08	3192.71		
	Coarse Aggregate	109.23	Cum	**944.26**	103142.66	10314.27		
	Boulders	3.52	Cum	**694.61**	2443.29	244.33		
	Total					13751.30		
	For 1 nos. fall, Total Seigniorage charges					**13751.30**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 0.762 METER AT CH.3.850 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	175.168	Cum	**195.20**	34192.83			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	22.75	Cum	**6381.70**	145206.72	7.37	10.24	20.48
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	115.51	Cum	**6914.20**	798692.22	47.65	49.67	99.34
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	1.19	Cum	**8151.40**	9721.52	0.68	0.47	0.94

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	1.81	MT	**73574.90**	133434.11			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	320.21	Sqm	**578.60**	185274.15			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	37.32	Sqm	**680.10**	25384.05			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	3.05	Cum	**694.61**	2115.09			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	3.05	Cum	**1237.00**	3766.67			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	3.05	Cum	**1377.70**	4195.10			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	3.05	Cum	**516.50**	1572.74			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	16.50	Sqm	**63.20**	1042.95			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	50.19	Cum	**149.30**	7492.93			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	60.376	Cum	**1075.00**	64903.77			
	Coarse Aggregates (100 Km lead)	120.763	Cum	**1398.00**	168826.84			
	Cement (30 km lead)	55.698	MT	**742.00**	41328.09			
	Boulder (60 Km lead)	3.05	Cum	**1159.00**	3529.16			
	Brick (15 km lead)	2239.00	No.	**3.18**	7120.02			
	Steel (30 Km lead)	1.81	MT	**742.00**	1345.68			
TOTAL (In Rs.)					**1650322.03**			
TOTAL (In Rs.)					**1650322.03**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	60.38	Cum	**584.64**	35297.99	3529.80		
	Coarse Aggregate	120.76	Cum	**944.26**	114031.79	11403.18		
	Boulders	3.05	Cum	**694.61**	2115.09	211.51		
	Total					15144.49		
	For 1 nos. fall, Total Seigniorage charges					**15144.49**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 1.524 METER AT CH.4.455 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	310.853	Cum	**195.20**	60678.43			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	28.23	Cum	**6381.70**	180146.97	9.15	12.70	25.41
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	207.38	Cum	**6914.20**	1433866.86	85.54	89.17	178.35
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	1.49	Cum	**8151.40**	12165.48	0.85	0.58	1.18

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	3.26	MT	**73574.90**	239550.03			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	456.84	Sqm	**578.60**	264325.80			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	37.32	Sqm	**680.10**	25384.05			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	3.05	Cum	**694.61**	2115.09			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	3.05	Cum	**1237.00**	3766.67			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	3.05	Cum	**1377.70**	4195.10			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	3.05	Cum	**516.50**	1572.74			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	19.87	Sqm	**63.20**	1256.02			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	82.61	Cum	**149.30**	12334.12			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	102.458	Cum	**1075.00**	110142.74			
	Coarse Aggregates (100 Km lead)	204.932	Cum	**1398.00**	286494.44			
	Cement (30 km lead)	95.537	MT	**742.00**	70888.13			
	Boulder (60 Km lead)	3.05	Cum	**1159.00**	3529.16			
	Brick (15 km lead)	2239.00	No.	**3.18**	7120.02			
	Steel (30 Km lead)	3.26	MT	**742.00**	2415.85			
TOTAL (In Rs.)					**2733125.09**			
TOTAL (In Rs.)					**2733125.09**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	102.46	Cum	**584.64**	59901.26	5990.13		
	Coarse Aggregate	204.93	Cum	**944.26**	193508.76	19350.88		
	Boulders	3.05	Cum	**694.61**	2115.09	211.51		
	Total					25552.51		
	For 1 nos. fall, Total Seigniorage charges					**25552.51**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF QUANTITIES OF SHARDA TYPE FALL FOR SAHOKARMA MINOR								
SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH.0.450 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	67.900	Cum	**195.20**	13253.99			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	9.28	Cum	**6381.70**	59234.10	3.01	4.18	8.35
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	46.79	Cum	**6914.20**	323528.82	19.30	20.12	40.24
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.61	Cum	**8151.40**	4978.39	0.35	0.24	0.48

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	1.10	MT	**73574.90**	81075.87			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	169.85	Sqm	**578.60**	98274.85			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	7.18	Sqm	**680.10**	4882.10			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.24	Cum	**694.61**	164.10			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.24	Cum	**1237.00**	292.24			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.24	Cum	**1377.70**	325.48			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.24	Cum	**516.50**	122.02			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	9.85	Sqm	**63.20**	622.67			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	19.44	Cum	**149.30**	2902.05			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	24.536	Cum	**1075.00**	26375.73			
	Coarse Aggregates (100 Km lead)	49.077	Cum	**1398.00**	68609.97			
	Cement (30 km lead)	22.655	MT	**742.00**	16810.23			
	Boulder (60 Km lead)	0.24	Cum	**1159.00**	273.81			
	Brick (15 km lead)	430.00	No.	**3.18**	1367.40			
	Steel (30 Km lead)	1.10	MT	**742.00**	817.65			
TOTAL (In Rs.)					**715088.87**			
TOTAL (In Rs.)					**715088.87**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	24.54	Cum	**584.64**	14344.47	1434.45		
	Coarse Aggregate	49.08	Cum	**944.26**	46341.67	4634.17		
	Boulders	0.24	Cum	**694.61**	164.10	16.41		
	Total					6085.02		
	For 1 nos. fall, Total Seigniorage charges					**6085.02**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 1.524 METER AT CH.0.620 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	92.955	Cum	**195.20**	18144.89			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	10.79	Cum	**6381.70**	68884.23	3.50	4.86	9.71
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	79.47	Cum	**6914.20**	549451.00	32.78	34.17	68.34
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.98	Cum	**8151.40**	7962.78	0.55	0.38	0.77

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	1.87	MT	**73574.90**	137691.66			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	258.87	Sqm	**578.60**	149781.91			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	7.18	Sqm	**680.10**	4882.10			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.24	Cum	**694.61**	164.10			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.24	Cum	**1237.00**	292.24			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.24	Cum	**1377.70**	325.48			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.24	Cum	**516.50**	122.02			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	16.86	Sqm	**63.20**	1065.53			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	4.00	No.	**5588.70**	22354.80			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	20.60	Cum	**149.30**	3075.75			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	39.409	Cum	**1075.00**	42364.80			
	Coarse Aggregates (100 Km lead)	78.828	Cum	**1398.00**	110201.54			
	Cement (30 km lead)	36.831	MT	**742.00**	27328.82			
	Boulder (60 Km lead)	0.24	Cum	**1159.00**	273.81			
	Brick (15 km lead)	430.00	No.	**3.18**	1367.40			
	Steel (30 Km lead)	1.87	MT	**742.00**	1388.61			
TOTAL (In Rs.)					**1147123.48**			
TOTAL (In Rs.)					**1147123.48**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	39.41	Cum	**584.64**	23040.14	2304.01		
	Coarse Aggregate	78.83	Cum	**944.26**	74434.12	7443.41		
	Boulders	0.24	Cum	**694.61**	164.10	16.41		
	Total					9763.84		
	For 1 nos. fall, Total Seigniorage charges					**9763.84**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF QUANTITIES OF SHARDA TYPE FALL FOR DHAMNI MINOR								
SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH.3.300 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	62.926	Cum	**195.20**	12283.16			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	8.69	Cum	**6381.70**	55462.81	2.82	3.91	7.82
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	44.52	Cum	**6914.20**	307827.78	18.36	19.14	38.29
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.68	Cum	**8151.40**	5570.06	0.39	0.27	0.54

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	1.05	MT	**73574.90**	77141.21			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	163.05	Sqm	**578.60**	94339.54			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	5.61	Sqm	**680.10**	3817.40			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.16	Cum	**694.61**	109.40			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.16	Cum	**1237.00**	194.83			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.16	Cum	**1377.70**	216.99			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.16	Cum	**516.50**	81.35			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	11.53	Sqm	**63.20**	728.63			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	17.72	Cum	**149.30**	2646.02			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	23.321	Cum	**1075.00**	25070.59			
	Coarse Aggregates (100 Km lead)	46.650	Cum	**1398.00**	65216.41			
	Cement (30 km lead)	21.568	MT	**742.00**	16003.64			
	Boulder (60 Km lead)	0.16	Cum	**1159.00**	182.54			
	Brick (15 km lead)	336.00	No.	**3.18**	1068.48			
	Steel (30 Km lead)	1.05	MT	**742.00**	777.97			
TOTAL (In Rs.)					**679916.21**			
TOTAL (In Rs.)					**679916.21**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	23.32	Cum	**584.64**	13634.67	1363.47		
	Coarse Aggregate	46.65	Cum	**944.26**	44049.53	4404.95		
	Boulders	0.16	Cum	**694.61**	109.40	10.94		
	Total					5779.36		
	For 1 nos. fall, Total Seigniorage charges					**5779.36**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
SHARDA TYPE FALL OF HEIGHT 0.762 METER AT CH.4.800 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	29.484	Cum	**195.20**	5755.37			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	3.18	Cum	**6381.70**	20278.17	1.03	1.43	2.86
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	18.44	Cum	**6914.20**	127521.86	7.61	7.93	15.86
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.37	Cum	**8151.40**	3055.92	0.21	0.15	0.30

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	0.43	MT	**73574.90**	31956.80			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	82.04	Sqm	**578.60**	47471.15			
7	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	6.06	Sqm	**63.20**	382.86			
8	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			
9	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	8.22	Cum	**149.30**	1226.71			
10	**Carriage of materials**							
	Coarse Sand (60 Km lead)	9.507	Cum	**1075.00**	10219.81			
	Coarse Aggregates (100 Km lead)	19.017	Cum	**1398.00**	26586.25			
	Cement (30 km lead)	8.850	MT	**742.00**	6566.72			
	Boulder (60 Km lead)	0.00	Cum	**1159.00**	0.00			
	Brick (15 km lead)	0.00	No.	**3.18**	0.00			
	Steel (30 Km lead)	0.43	MT	**742.00**	322.28			
TOTAL (In Rs.)					**292521.30**			
TOTAL (In Rs.)					**292521.30**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	9.51	Cum	**584.64**	5558.06	555.81		
	Coarse Aggregate	19.02	Cum	**944.26**	17957.32	1795.73		
	Boulders	0.00	Cum	**694.61**	0.00	0.00		
	Total					2351.54		
	For 1 nos. fall, Total Seigniorage charges					**2351.54**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF QUANTITIES OF SHARDA TYPE FALL FOR BHADWA MR.								
SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH. 0.450 KM								
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	56.176	Cum	**195.20**	10965.52			
2	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	8.24	Cum	**6381.70**	52558.90	2.67	3.71	7.41
3	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	38.92	Cum	**6914.20**	269095.55	16.05	16.74	33.47
4	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.57	Cum	**8151.40**	4609.37	0.32	0.22	0.45

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	0.92	MT	**73574.90**	67434.97			
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	149.28	Sqm	**578.60**	86372.29			
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	5.62	Sqm	**680.10**	3819.44			
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	0.14	Cum	**694.61**	93.77			
9	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	0.14	Cum	**1237.00**	167.00			
10	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	0.14	Cum	**1377.70**	185.99			
11	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	0.14	Cum	**516.50**	69.73			
12	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	9.28	Sqm	**63.20**	586.77			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	2.00	No.	**5588.70**	11177.40			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	15.33	Cum	**149.30**	2288.15			
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	20.662	Cum	**1075.00**	22211.61			
	Coarse Aggregates (100 Km lead)	41.330	Cum	**1398.00**	57778.75			
	Cement (30 km lead)	19.043	MT	**742.00**	14130.08			
	Boulder (60 Km lead)	0.14	Cum	**1159.00**	156.47			
	Brick (15 km lead)	336.00	No.	**3.18**	1068.48			
	Steel (30 Km lead)	0.92	MT	**742.00**	680.08			
TOTAL (In Rs.)					**605450.31**			
TOTAL (In Rs.)					**605450.31**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	20.66	Cum	**584.64**	12079.81	1207.98		
	Coarse Aggregate	41.33	Cum	**944.26**	39025.86	3902.59		
	Boulders	0.14	Cum	**694.61**	93.77	9.38		
	Total					5119.94		
	For 1 nos. fall, Total Seigniorage charges					**5119.94**		

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND							
DETAILS OF QUANTITIES OF SHARDA TYPE FALL FOR KOTWARA SUB DISTRIBUTARY							
S.No.	**Items**	**No.**	**Length**	**Width**	**Height**	**Quantity**	**Unit**
	SHARDA TYPE FALL OF HEIGHT 0.457 METER AT CH.5.500 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.10*	*1.912*	*3.811*	*16.060*	*Cum*
	Section 2-2	*2*	*3.00*	*1.638*	*3.811*	*37.455*	*Cum*
	Section 3-3	*2*	*2.20*	*1.518*	*3.611*	*24.119*	*Cum*
	Section 5-5	*2*	*7.64*	*2.062*	*3.811*	*120.090*	*Cum*
	Section 6-6	*2*	*4.26*	*1.518*	*3.611*	*46.724*	*Cum*
	U/S Key Floor	*1*	*0.61*	*7.600*	*0.800*	*3.724*	*Cum*
	U/S Floor	*1*	*2.00*	*7.600*	*1.357*	*20.626*	*Cum*
	D/S Floor	*1*	*3.00*	*7.600*	*0.900*	*20.520*	*Cum*
		1	*2.50*	*7.600*	*0.700*	*13.300*	*Cum*
	D/S Key Floor	*1*	*0.68*	*7.600*	*1.050*	*5.387*	*Cum*
	Toe Wall D/S Portion	*1*	*19.16*	*0.750*	*0.900*	*12.933*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*4.00*	*0.600*	*0.750*	*3.600*	*Cum*
						324.54	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*7.600*	*0.150*	*0.62*	*Cum*
		1	*0.73*	*7.600*	*0.150*	*0.83*	*Cum*
		1	*4.35*	*7.600*	*0.150*	*4.96*	*Cum*
		1	*0.35*	*7.600*	*0.150*	*0.40*	*Cum*
		1	*1.04*	*7.600*	*0.150*	*1.18*	*Cum*
		1	*1.01*	*7.600*	*0.150*	*1.15*	*Cum*
		1	*0.54*	*7.600*	*0.150*	*0.62*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.10*	*1.912*	*0.150*	*0.63*	*Cum*
	Section 2-2	*2*	*3.00*	*1.638*	*0.150*	*1.47*	*Cum*
	Section 3-3	*2*	*2.20*	*1.518*	*0.150*	*1.00*	*Cum*
	Section 5-5	*2*	*7.64*	*2.062*	*0.150*	*4.73*	*Cum*
	Section 6-6	*2*	*4.26*	*1.518*	*0.150*	*1.94*	*Cum*
	Toe Wall D/S Portion	*1*	*19.16*	*0.750*	*0.300*	*4.31*	*Cum*
	Toe Wall D/S Portion	*1*	*18.86*	*0.450*	*0.600*	*5.09*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*4.00*	*0.600*	*0.150*	*0.72*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*4.00*	*0.300*	*0.600*	*1.44*	*Cum*
	TOTAL					**31.10**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*0.88*	*0.450*	*0.450*	*0.36*	*Cum*
		2	*0.88*	*1.031*	*1.937*	*3.50*	*Cum*
		2	*0.88*	*1.762*	*0.550*	*1.70*	*Cum*
	Section 2-2	*2*	*3.00*	*0.450*	*0.450*	*1.22*	*Cum*
		2	*3.00*	*0.894*	*1.480*	*7.94*	*Cum*
		2	*3.00*	*1.488*	*0.550*	*4.91*	*Cum*
	Section 3-3	*2*	*1.67*	*0.450*	*0.450*	*0.67*	*Cum*
		2	*1.67*	*0.834*	*1.280*	*3.56*	*Cum*
		2	*1.67*	*1.368*	*0.500*	*2.28*	*Cum*
	Section 5-5	*2*	*7.60*	*0.450*	*0.450*	*3.08*	*Cum*
		2	*7.60*	*1.031*	*1.937*	*30.34*	*Cum*
		2	*7.60*	*1.762*	*0.550*	*14.72*	*Cum*
	Section 6-6	*2*	*4.95*	*0.450*	*0.450*	*2.00*	*Cum*
		2	*4.95*	*0.834*	*1.280*	*10.56*	*Cum*
		2	*4.95*	*1.368*	*0.500*	*6.77*	*Cum*
	Floor	*1*	*0.61*	*7.600*	*0.650*	*3.03*	*Cum*
		1	*5.00*	*7.600*	*0.550*	*20.90*	*Cum*
		1	*0.28*	*7.600*	*0.250*	*0.54*	*Cum*
		1	*0.20*	*7.600*	*0.400*	*0.61*	*Cum*
		1	*2.30*	*7.600*	*0.500*	*8.74*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		1	*0.68*	*7.600*	*0.900*	*4.62*	*Cum*
	Crest	*1*	*0.90*	*7.600*	*1.227*	*8.36*	*Cum*
	TOTAL					**140.39**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.70*	*7.600*	*0.150*	*0.80*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*19.55*	*0.450*	*0.050*	*0.44*	*Cum*
	On Abutment Top (Right Side)	*1*	*19.55*	*0.450*	*0.050*	*0.44*	*Cum*
	TOTAL					**1.68**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.2% of M-20	**140.39**	**0.002**	**0.281**	**7850.0**	**2204.10**	**Kg**
	Total Weight in Metric Tonne					**2.20**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*0.88*		*0.450*	*1.58*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*0.88*		*1.937*	*6.79*	*Sqm*
		4		*1.031*	*1.937*	*7.99*	*Sqm*
		4	*0.88*		*0.550*	*1.93*	*Sqm*
		4		*1.762*	*0.550*	*3.88*	*Sqm*
	Section 2-2	*4*	*3.00*		*0.450*	*5.40*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.00*		*1.480*	*17.76*	*Sqm*
		4		*0.894*	*1.480*	*5.29*	*Sqm*
		4	*3.00*		*0.550*	*6.60*	*Sqm*
		4		*1.488*	*0.550*	*3.27*	*Sqm*
	Section 3-3	*4*	*1.67*		*0.450*	*3.00*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.67*		*1.280*	*8.53*	*Sqm*
		4		*0.834*	*1.280*	*4.27*	*Sqm*
		4	*1.67*		*0.500*	*3.33*	*Sqm*
		4		*1.368*	*0.500*	*2.74*	*Sqm*
	Section 5-5	*4*	*7.60*		*0.450*	*13.67*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*7.60*		*1.937*	*58.86*	*Sqm*
		4		*1.031*	*1.937*	*7.99*	*Sqm*
		4	*7.60*		*0.550*	*16.71*	*Sqm*
		4		*1.762*	*0.550*	*3.88*	*Sqm*
	Section 6-6	*4*	*4.95*		*0.450*	*8.90*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.95*		*1.280*	*25.32*	*Sqm*
		4		*0.834*	*1.280*	*4.27*	*Sqm*
		4	*4.95*		*0.500*	*9.89*	*Sqm*
		4		*1.368*	*0.500*	*2.74*	*Sqm*
	Floor	*2*	*0.61*		*0.650*	*0.80*	*Sqm*
		2		*7.600*	*0.650*	*9.88*	*Sqm*
		2	*5.00*		*0.550*	*5.50*	*Sqm*
		2		*7.600*	*0.550*	*8.36*	*Sqm*
		2	*0.28*		*0.250*	*0.14*	*Sqm*
		2		*7.600*	*0.250*	*3.80*	*Sqm*
		2	*0.20*		*0.400*	*0.16*	*Sqm*
		2		*7.600*	*0.400*	*6.08*	*Sqm*
		2	*2.30*		*0.500*	*2.30*	*Sqm*
		2		*7.600*	*0.500*	*7.60*	*Sqm*
		2	*0.68*		*0.900*	*1.22*	*Sqm*
		2		*7.600*	*0.900*	*13.68*	*Sqm*
	Crest	*2*	*0.90*		*1.227*	*2.20*	*Sqm*
		2		*7.600*	*1.227*	*18.65*	*Sqm*
	Toe Wall D/S Portion	*2*	*19.16*		*0.300*	*11.50*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*18.86*		*0.600*	*22.63*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Toe Wall for resting Brick Edging	*4*	*4.00*		*0.150*	*2.40*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*4.00*		*0.600*	*9.60*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**367.21**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*4.00*	*6.018*		*48.14*	*Sqm*
	TOTAL					**48.14**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*4.00*	*7.000*	*0.300*	**8.40**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*4.00*	*7.000*	*0.150*	**8.40**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*19.55*	*0.450*		*8.80*	*Sqm*
	On Abutment Top (Right Side)	*1*	*19.55*	*0.450*		*8.80*	*Sqm*
	TOTAL					**17.59**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1		*4.254*		*4.25*	*Cum*
	Abutment						
	Section 1-1	2	*1.10*	*2.520*		*5.554*	*Cum*
	Section 2-2	2	*3.00*	*1.800*		*10.800*	*Cum*
	Section 3-3	2	*2.20*	*1.490*		*6.556*	*Cum*
	Section 5-5	2	*7.64*	*2.520*		*38.511*	*Cum*
	Section 6-6	2	*4.26*	*1.490*		*12.701*	*Cum*
	D/S protection	2					
	Toe wall	2	*19.16*	*0.150*	*0.600*	*5.748*	*Cum*
		2	*4.00*	0.150	*0.600*	*0.720*	*Cum*
	TOTAL					**84.84**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 1.520 METER AT CH. 6.750 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.55*	*2.610*	*2.766*	*22.416*	*Cum*
	Section 2-2	*2*	*5.50*	*1.698*	*2.766*	*51.663*	*Cum*
	Section 3-3	*2*	*3.20*	*1.518*	*2.566*	*24.929*	*Cum*
	Section 5-5	*2*	*7.50*	*2.760*	*2.766*	*114.459*	*Cum*
	Section 6-6	*2*	*4.26*	*1.518*	*2.566*	*33.203*	*Cum*
	U/S Key Floor	*1*	*0.64*	*7.600*	*0.900*	*4.361*	*Cum*
	U/S Floor	*1*	*3.50*	*7.600*	*3.020*	*80.332*	*Cum*
	D/S Floor	*1*	*5.50*	*7.600*	*1.150*	*48.070*	*Cum*
		1	*1.00*	*7.600*	*0.900*	*6.840*	*Cum*
		1	*2.50*	*7.600*	*0.850*	*16.150*	*Cum*
	D/S Key Floor	*1*	*0.90*	*7.600*	*1.200*	*8.208*	*Cum*
	Toe Wall D/S Portion	*1*	*19.16*	*0.750*	*0.900*	*12.933*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*4.00*	*0.600*	*0.750*	*3.600*	*Cum*
						427.16	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*7.600*	*0.150*	*0.62*	*Cum*
		1	*0.89*	*7.600*	*0.150*	*1.02*	*Cum*
		1	*0.46*	*7.600*	*0.150*	*0.52*	*Cum*
		1	*0.50*	*7.600*	*0.150*	*0.56*	*Cum*
		1	*7.32*	*7.600*	*0.150*	*8.35*	*Cum*
		1	*1.31*	*7.600*	*0.150*	*1.49*	*Cum*
		1	*0.95*	*7.600*	*0.150*	*1.08*	*Cum*
		1	*2.01*	*7.600*	*0.150*	*2.29*	*Cum*
		1	*0.54*	*7.600*	*0.150*	*0.62*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.55*	*2.610*	*0.150*	*1.22*	*Cum*
	Section 2-2	*2*	*5.50*	*1.698*	*0.150*	*2.80*	*Cum*
	Section 3-3	*2*	*3.20*	*1.518*	*0.150*	*1.46*	*Cum*
	Section 5-5	*2*	*7.50*	*2.760*	*0.150*	*6.21*	*Cum*
	Section 6-6	*2*	*4.26*	*1.518*	*0.150*	*1.94*	*Cum*
	Toe Wall D/S Portion	*1*	*19.16*	*0.750*	*0.300*	*4.31*	*Cum*
	Toe Wall D/S Portion	*1*	*18.86*	*0.450*	*0.600*	*5.09*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*4.00*	*0.600*	*0.150*	*0.72*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*4.00*	*0.300*	*0.600*	*1.44*	*Cum*
	TOTAL					**41.74**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.33*	*0.450*	*0.450*	*0.54*	*Cum*
		2	*1.33*	*1.380*	*3.100*	*11.36*	*Cum*
		2	*1.33*	*2.460*	*1.050*	*6.86*	*Cum*
	Section 2-2	*2*	*5.50*	*0.450*	*0.450*	*2.23*	*Cum*
		2	*5.50*	*0.924*	*1.580*	*16.06*	*Cum*
		2	*5.50*	*1.548*	*1.050*	*17.88*	*Cum*
	Section 3-3	*2*	*2.67*	*0.450*	*0.450*	*1.08*	*Cum*
		2	*2.67*	*0.834*	*1.280*	*5.69*	*Cum*
		2	*2.67*	*1.368*	*0.700*	*5.11*	*Cum*
	Section 5-5	*2*	*7.45*	*0.450*	*0.450*	*3.02*	*Cum*
		2	*7.45*	*1.380*	*3.100*	*63.76*	*Cum*
		2	*7.45*	*2.460*	*0.700*	*25.67*	*Cum*
	Section 6-6	*2*	*4.95*	*0.450*	*0.450*	*2.00*	*Cum*
		2	*4.95*	*0.834*	*1.280*	*10.56*	*Cum*
		2	*4.95*	*1.368*	*0.700*	*9.47*	*Cum*
	Floor	*1*	*0.64*	*7.600*	*0.750*	*3.63*	*Cum*
		1	*9.00*	*7.600*	*0.700*	*47.88*	*Cum*
		1	*7.36*	*7.600*	*0.350*	*19.58*	*Cum*
		1	*0.31*	*7.600*	*0.600*	*1.41*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		1	*0.30*	*7.600*	*0.600*	*1.37*	*Cum*
		1	*0.70*	*7.600*	*0.750*	*3.99*	*Cum*
		1	*0.05*	*7.600*	*0.725*	*0.28*	*Cum*
		1	*2.45*	*7.600*	*0.700*	*13.03*	*Cum*
		1	*0.90*	*7.600*	*1.800*	*12.31*	*Cum*
	Crest	*1*	*1.32*	*7.600*	*2.360*	*23.65*	*Cum*
	TOTAL					**308.42**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.95*	*7.600*	*0.150*	*1.08*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*23.64*	*0.450*	*0.050*	*0.53*	*Cum*
	On Abutment Top (Right Side)	*1*	*23.64*	*0.450*	*0.050*	*0.53*	*Cum*
	TOTAL					**2.15**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.2% of M-20	**308.42**	**0.002**	**0.617**	**7850.0**	**4842.19**	**Kg**
	Total Weight in Metric Tonne					**4.84**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.33*		*0.450*	*2.39*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.33*		*3.100*	*16.46*	*Sqm*
		4		*1.380*	*3.100*	*17.11*	*Sqm*
		4	*1.33*		*1.050*	*5.58*	*Sqm*
		4		*2.460*	*1.050*	*10.33*	*Sqm*
	Section 2-2	*4*	*5.50*		*0.450*	*9.90*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*5.50*		*1.580*	*34.76*	*Sqm*
		4		*0.924*	*1.580*	*5.84*	*Sqm*
		4	*5.50*		*1.050*	*23.10*	*Sqm*
		4		*1.548*	*1.050*	*6.50*	*Sqm*
	Section 3-3	*4*	*2.67*		*0.450*	*4.80*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.67*		*1.280*	*13.65*	*Sqm*
		4		*0.834*	*1.280*	*4.27*	*Sqm*
		4	*2.67*		*0.700*	*7.46*	*Sqm*
		4		*1.368*	*0.700*	*3.83*	*Sqm*
	Section 5-5	*4*	*7.45*		*0.450*	*13.41*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*7.45*		*3.100*	*92.41*	*Sqm*
		4		*1.380*	*3.100*	*17.11*	*Sqm*
		4	*7.45*		*0.700*	*20.87*	*Sqm*
		4		*2.460*	*0.700*	*6.89*	*Sqm*
	Section 6-6	*4*	*4.95*		*0.450*	*8.90*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.95*		*1.280*	*25.32*	*Sqm*
		4		*0.834*	*1.280*	*4.27*	*Sqm*
		4	*4.95*		*0.700*	*13.85*	*Sqm*
		4		*1.368*	*0.700*	*3.83*	*Sqm*
	Floor	*2*	*0.64*		*0.750*	*0.96*	*Sqm*
		2		*7.600*	*0.750*	*11.40*	*Sqm*
		2	*9.00*		*0.700*	*12.60*	*Sqm*
		2		*7.600*	*0.700*	*10.64*	*Sqm*
		2	*0.31*		*0.600*	*0.37*	*Sqm*
		2		*7.600*	*0.600*	*9.12*	*Sqm*
		2	*0.30*		*0.600*	*0.36*	*Sqm*
		2		*7.600*	*0.600*	*9.12*	*Sqm*
		2	*0.70*		*0.750*	*1.05*	*Sqm*
		2		*7.600*	*0.750*	*11.40*	*Sqm*
		2	*0.050*		*0.725*	*0.07*	*Sqm*
		2		*7.600*	*0.725*	*11.02*	*Sqm*
		2	*2.450*		*0.700*	*3.43*	*Sqm*
		2		*7.600*	*0.700*	*10.64*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	*0.90*		*1.800*	*3.24*	*Sqm*
		2		*7.600*	*1.800*	*27.36*	*Sqm*
	Crest	*2*	*1.32*		*2.360*	*6.22*	*Sqm*
		2		*7.600*	*2.360*	*35.87*	*Sqm*
	Toe Wall D/S Portion	*2*	*19.16*		*0.300*	*11.50*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*18.86*		*0.600*	*22.63*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*4.00*		*0.150*	*2.40*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*4.00*		*0.600*	*9.60*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**589.98**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*4.00*	*6.018*		*48.14*	*Sqm*
	TOTAL					**48.14**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*4.00*	*7.000*	*0.300*	**8.40**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*4.00*	*7.000*	*0.150*	**8.40**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*23.64*	*0.450*		*10.64*	*Sqm*
	On Abutment Top (Right Side)	*1*	*23.64*	*0.450*		*10.64*	*Sqm*
	TOTAL					**21.28**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1		*34.367*		*34.37*	*Cum*
	Abutment						
	Section 1-1	2	*1.55*	*1.370*		*4.254*	*Cum*
	Section 2-2	2	*5.50*	*1.370*		*15.070*	*Cum*
	Section 3-3	2	*3.20*	*0.966*		*6.182*	*Cum*
	Section 5-5	2	*7.50*	*1.370*		*20.540*	*Cum*
	Section 6-6	2	*4.26*	*0.966*		*8.234*	*Cum*
	D/S protection	2					
	Toe wall	2	*19.16*	*0.150*	*0.600*	*5.748*	*Cum*
		2	*4.00*	0.150	*0.600*	*0.720*	*Cum*
	TOTAL					**95.12**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 1.830 METER AT CH. 6.940 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.71*	*2.796*	*3.908*	*37.457*	*Cum*
	Section 2-2	*2*	*6.00*	*1.698*	*3.908*	*79.629*	*Cum*
	Section 3-3	*2*	*4.70*	*1.518*	*3.708*	*52.910*	*Cum*
	Section 5-5	*2*	*7.46*	*2.946*	*3.908*	*171.727*	*Cum*
	Section 6-6	*2*	*4.26*	*1.518*	*3.708*	*47.979*	*Cum*
	U/S Key Floor	*1*	*0.64*	*7.600*	*0.900*	*4.361*	*Cum*
	U/S Floor	*1*	*4.50*	*7.600*	*3.480*	*119.016*	*Cum*
	D/S Floor	*1*	*6.00*	*7.600*	*1.200*	*54.720*	*Cum*
		1	*2.50*	*7.600*	*0.950*	*18.050*	*Cum*
		1	*2.50*	*7.600*	*0.900*	*17.100*	*Cum*
	D/S Key Floor	*1*	*0.95*	*7.600*	*1.350*	*9.747*	*Cum*
	Toe Wall D/S Portion	*1*	*19.16*	*0.750*	*0.900*	*12.933*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*4.00*	*0.600*	*0.750*	*3.600*	*Cum*
						629.23	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*7.600*	*0.150*	*0.62*	*Cum*
		1	*0.84*	*7.600*	*0.150*	*0.96*	*Cum*
		1	*1.18*	*7.600*	*0.150*	*1.35*	*Cum*
		1	*0.64*	*7.600*	*0.150*	*0.73*	*Cum*
		1	*8.08*	*7.600*	*0.150*	*9.22*	*Cum*
		1	*0.85*	*7.600*	*0.150*	*0.97*	*Cum*
		1	*1.83*	*7.600*	*0.150*	*2.08*	*Cum*
		1	*0.21*	*7.600*	*0.150*	*0.24*	*Cum*
		1	*0.75*	*7.600*	*0.150*	*0.85*	*Cum*
		1	*2.24*	*7.600*	*0.150*	*2.55*	*Cum*
		1	*0.54*	*7.600*	*0.150*	*0.62*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.71*	*2.796*	*0.150*	*1.44*	*Cum*
	Section 2-2	*2*	*6.00*	*1.698*	*0.150*	*3.06*	*Cum*
	Section 3-3	*2*	*4.70*	*1.518*	*0.150*	*2.14*	*Cum*
	Section 5-5	*2*	*7.46*	*2.946*	*0.150*	*6.59*	*Cum*
	Section 6-6	*2*	*4.26*	*1.518*	*0.150*	*1.94*	*Cum*
	Toe Wall D/S Portion	*1*	*19.16*	*0.750*	*0.300*	*4.31*	*Cum*
	Toe Wall D/S Portion	*1*	*18.86*	*0.450*	*0.600*	*5.09*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*4.00*	*0.600*	*0.150*	*0.72*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*4.00*	*0.300*	*0.600*	*1.44*	*Cum*
	TOTAL					**46.90**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.49*	*0.450*	*0.450*	*0.60*	*Cum*
		2	*1.49*	*1.473*	*3.410*	*14.96*	*Cum*
		2	*1.49*	*2.646*	*1.200*	*9.46*	*Cum*
	Section 2-2	*2*	*6.00*	*0.450*	*0.450*	*2.43*	*Cum*
		2	*6.00*	*0.924*	*1.580*	*17.52*	*Cum*
		2	*6.00*	*1.548*	*1.200*	*22.29*	*Cum*
	Section 3-3	*2*	*4.17*	*0.450*	*0.450*	*1.69*	*Cum*
		2	*4.17*	*0.834*	*1.280*	*8.89*	*Cum*
		2	*4.17*	*1.368*	*0.750*	*8.55*	*Cum*
	Section 5-5	*2*	*7.41*	*0.450*	*0.450*	*3.00*	*Cum*
		2	*7.41*	*1.473*	*3.410*	*74.48*	*Cum*
		2	*7.41*	*2.646*	*0.750*	*29.43*	*Cum*
	Section 6-6	*2*	*4.95*	*0.450*	*0.450*	*2.00*	*Cum*
		2	*4.95*	*0.834*	*1.280*	*10.56*	*Cum*
		2	*4.95*	*1.368*	*0.750*	*10.15*	*Cum*
	Floor	*1*	*0.64*	*7.600*	*0.750*	*3.63*	*Cum*
		1	*10.50*	*7.600*	*0.750*	*59.85*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		1	*8.11*	*7.600*	*0.450*	*27.74*	*Cum*
		1	*0.37*	*7.600*	*0.600*	*1.70*	*Cum*
		1	*0.30*	*7.600*	*0.750*	*1.71*	*Cum*
		1	*2.20*	*7.600*	*0.900*	*15.05*	*Cum*
		1	*0.15*	*7.600*	*0.825*	*0.94*	*Cum*
		1	*2.35*	*7.600*	*0.750*	*13.40*	*Cum*
		1	*0.95*	*7.600*	*2.000*	*14.44*	*Cum*
	Crest	*1*	*1.47*	*7.600*	*2.660*	*29.69*	*Cum*
	TOTAL					**384.16**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*1.05*	*7.600*	*0.150*	*1.20*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*25.84*	*0.450*	*0.050*	*0.58*	*Cum*
	On Abutment Top (Right Side)	*1*	*25.84*	*0.450*	*0.050*	*0.58*	*Cum*
	TOTAL					**2.36**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.2% of M-20	**384.16**	**0.002**	**0.768**	**7850.0**	**6031.27**	**Kg**
	Total Weight in Metric Tonne					**6.03**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.49*		*0.450*	*2.68*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.49*		*3.410*	*20.31*	*Sqm*
		4		*1.473*	*3.410*	*20.09*	*Sqm*
		4	*1.49*		*1.200*	*7.15*	*Sqm*
		4		*2.646*	*1.200*	*12.70*	*Sqm*
	Section 2-2	*4*	*6.00*		*0.450*	*10.80*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*6.00*		*1.580*	*37.92*	*Sqm*
		4		*0.924*	*1.580*	*5.84*	*Sqm*
		4	*6.00*		*1.200*	*28.80*	*Sqm*
		4		*1.548*	*1.200*	*7.43*	*Sqm*
	Section 3-3	*4*	*4.17*		*0.450*	*7.50*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.17*		*1.280*	*21.33*	*Sqm*
		4		*0.834*	*1.280*	*4.27*	*Sqm*
		4	*4.17*		*0.750*	*12.50*	*Sqm*
		4		*1.368*	*0.750*	*4.10*	*Sqm*
	Section 5-5	*4*	*7.41*		*0.450*	*13.35*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*7.41*		*3.410*	*101.13*	*Sqm*
		4		*1.473*	*3.410*	*20.09*	*Sqm*
		4	*7.41*		*0.750*	*22.24*	*Sqm*
		4		*2.646*	*0.750*	*7.94*	*Sqm*
	Section 6-6	*4*	*4.95*		*0.450*	*8.90*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.95*		*1.280*	*25.32*	*Sqm*
		4		*0.834*	*1.280*	*4.27*	*Sqm*
		4	*4.95*		*0.750*	*14.84*	*Sqm*
		4		*1.368*	*0.750*	*4.10*	*Sqm*
	Floor	*2*	*0.64*		*0.750*	*0.96*	*Sqm*
		2		*7.600*	*0.750*	*11.40*	*Sqm*
		2	*10.50*		*0.750*	*15.75*	*Sqm*
		2		*7.600*	*0.750*	*11.40*	*Sqm*
		2	*0.37*		*0.600*	*0.45*	*Sqm*
		2		*7.600*	*0.600*	*9.12*	*Sqm*
		2	*0.30*		*0.750*	*0.45*	*Sqm*
		2		*7.600*	*0.750*	*11.40*	*Sqm*
		2	*2.20*		*0.900*	*3.96*	*Sqm*
		2		*7.600*	*0.900*	*13.68*	*Sqm*
		2	*0.150*		*0.825*	*0.25*	*Sqm*
		2		*7.600*	*0.825*	*12.54*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	*2.350*		*0.750*	*3.53*	*Sqm*
		2		*7.600*	*0.750*	*11.40*	*Sqm*
		2	*0.95*		*2.000*	*3.80*	*Sqm*
		2		*7.600*	*2.000*	*30.40*	*Sqm*
	Crest	*2*	*1.47*		*2.660*	*7.81*	*Sqm*
		2		*7.600*	*2.660*	*40.43*	*Sqm*
	Toe Wall D/S Portion	*2*	*19.16*		*0.300*	*11.50*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*18.86*		*0.600*	*22.63*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*4.00*		*0.150*	*2.40*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*4.00*		*0.600*	*9.60*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**666.57**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*4.00*	*6.018*		*48.14*	*Sqm*
	TOTAL					**48.14**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*4.00*	*7.000*	*0.300*	**8.40**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*4.00*	*7.000*	*0.150*	**8.40**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*25.84*	*0.450*		*11.63*	*Sqm*
	On Abutment Top (Right Side)	*1*	*25.84*	*0.450*		*11.63*	*Sqm*
	TOTAL					**23.26**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	*1*		*62.442*		*62.44*	*Cum*
	Abutment						
	Section 1-1	*2*	*1.71*	*2.918*		*10.001*	*Cum*
	Section 2-2	*2*	*6.00*	*2.030*		*24.360*	*Cum*
	Section 3-3	*2*	*4.70*	*1.522*		*14.307*	*Cum*
	Section 5-5	*2*	*7.46*	*2.850*		*42.511*	*Cum*
	Section 6-6	*2*	*4.26*	*1.522*		*12.974*	*Cum*
	D/S protection	*2*					
	Toe wall	*2*	*19.16*	*0.150*	*0.600*	*5.748*	*Cum*
		2	*4.00*	*0.150*	*0.600*	*0.720*	*Cum*
	TOTAL					**173.06**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 1.524 METER AT CH. 10.300 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.55*	*2.612*	*3.227*	*26.147*	*Cum*
	Section 2-2	*2*	*5.50*	*1.698*	*3.227*	*60.274*	*Cum*
	Section 3-3	*2*	*3.20*	*1.518*	*3.027*	*29.408*	*Cum*
	Section 5-5	*2*	*7.50*	*2.762*	*3.227*	*133.623*	*Cum*
	Section 6-6	*2*	*4.26*	*1.518*	*3.027*	*39.168*	*Cum*
	U/S Key Floor	*1*	*0.64*	*7.600*	*0.900*	*4.361*	*Cum*
	U/S Floor	*1*	*3.50*	*7.600*	*3.024*	*80.438*	*Cum*
	D/S Floor	*1*	*5.50*	*7.600*	*1.150*	*48.070*	*Cum*
		1	*1.00*	*7.600*	*0.900*	*6.840*	*Cum*
		1	*2.50*	*7.600*	*0.850*	*16.150*	*Cum*
	D/S Key Floor	*1*	*0.90*	*7.600*	*1.200*	*8.208*	*Cum*
	Toe Wall D/S Portion	*1*	*19.16*	*0.750*	*0.900*	*12.933*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*4.00*	*0.600*	*0.750*	*3.600*	*Cum*
						469.22	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*7.600*	*0.150*	*0.62*	*Cum*
		1	*0.89*	*7.600*	*0.150*	*1.02*	*Cum*
		1	*0.46*	*7.600*	*0.150*	*0.52*	*Cum*
		1	*0.50*	*7.600*	*0.150*	*0.56*	*Cum*
		1	*7.32*	*7.600*	*0.150*	*8.35*	*Cum*
		1	*1.31*	*7.600*	*0.150*	*1.49*	*Cum*
		1	*0.95*	*7.600*	*0.150*	*1.08*	*Cum*
		1	*2.01*	*7.600*	*0.150*	*2.29*	*Cum*
		1	*0.54*	*7.600*	*0.150*	*0.62*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.55*	*2.612*	*0.150*	*1.22*	*Cum*
	Section 2-2	*2*	*5.50*	*1.698*	*0.150*	*2.80*	*Cum*
	Section 3-3	*2*	*3.20*	*1.518*	*0.150*	*1.46*	*Cum*
	Section 5-5	*2*	*7.50*	*2.762*	*0.150*	*6.21*	*Cum*
	Section 6-6	*2*	*4.26*	*1.518*	*0.150*	*1.94*	*Cum*
	Toe Wall D/S Portion	*1*	*19.16*	*0.750*	*0.300*	*4.31*	*Cum*
	Toe Wall D/S Portion	*1*	*18.86*	*0.450*	*0.600*	*5.09*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*4.00*	*0.600*	*0.150*	*0.72*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*4.00*	*0.300*	*0.600*	*1.44*	*Cum*
	TOTAL					**41.74**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.33*	*0.450*	*0.450*	*0.54*	*Cum*
		2	*1.33*	*1.381*	*3.104*	*11.37*	*Cum*
		2	*1.33*	*2.462*	*1.050*	*6.86*	*Cum*
	Section 2-2	*2*	*5.50*	*0.450*	*0.450*	*2.23*	*Cum*
		2	*5.50*	*0.924*	*1.580*	*16.06*	*Cum*
		2	*5.50*	*1.548*	*1.050*	*17.88*	*Cum*
	Section 3-3	*2*	*2.67*	*0.450*	*0.450*	*1.08*	*Cum*
		2	*2.67*	*0.834*	*1.280*	*5.69*	*Cum*
		2	*2.67*	*1.368*	*0.700*	*5.11*	*Cum*
	Section 5-5	*2*	*7.45*	*0.450*	*0.450*	*3.02*	*Cum*
		2	*7.45*	*1.381*	*3.104*	*63.89*	*Cum*
		2	*7.45*	*2.462*	*0.700*	*25.69*	*Cum*
	Section 6-6	*2*	*4.95*	*0.450*	*0.450*	*2.00*	*Cum*
		2	*4.95*	*0.834*	*1.280*	*10.56*	*Cum*
		2	*4.95*	*1.368*	*0.700*	*9.47*	*Cum*
	Floor	*1*	*0.64*	*7.600*	*0.750*	*3.63*	*Cum*
		1	*9.00*	*7.600*	*0.700*	*47.88*	*Cum*
		1	*7.36*	*7.600*	*0.350*	*19.58*	*Cum*
		1	*0.31*	*7.600*	*0.600*	*1.41*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		1	*0.30*	*7.600*	*0.600*	*1.37*	*Cum*
		1	*0.70*	*7.600*	*0.750*	*3.99*	*Cum*
		1	*0.05*	*7.600*	*0.725*	*0.28*	*Cum*
		1	*2.45*	*7.600*	*0.700*	*13.03*	*Cum*
		1	*0.90*	*7.600*	*1.800*	*12.31*	*Cum*
	Crest	*1*	*1.32*	*7.600*	*2.359*	*23.63*	*Cum*
	TOTAL					**308.55**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.95*	*7.600*	*0.150*	*1.08*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*23.64*	*0.450*	*0.050*	*0.53*	*Cum*
	On Abutment Top (Right Side)	*1*	*23.64*	*0.450*	*0.050*	*0.53*	*Cum*
	TOTAL					**2.15**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.2% of M-20	**308.55**	**0.002**	**0.617**	**7850.0**	**4844.25**	**Kg**
	Total Weight in Metric Tonne					**4.84**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.33*		*0.450*	*2.39*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.33*		*3.104*	*16.46*	*Sqm*
		4		*1.381*	*3.104*	*17.15*	*Sqm*
		4	*1.33*		*1.050*	*5.57*	*Sqm*
		4		*2.462*	*1.050*	*10.34*	*Sqm*
	Section 2-2	*4*	*5.50*		*0.450*	*9.90*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*5.50*		*1.580*	*34.76*	*Sqm*
		4		*0.924*	*1.580*	*5.84*	*Sqm*
		4	*5.50*		*1.050*	*23.10*	*Sqm*
		4		*1.548*	*1.050*	*6.50*	*Sqm*
	Section 3-3	*4*	*2.67*		*0.450*	*4.80*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.67*		*1.280*	*13.65*	*Sqm*
		4		*0.834*	*1.280*	*4.27*	*Sqm*
		4	*2.67*		*0.700*	*7.46*	*Sqm*
		4		*1.368*	*0.700*	*3.83*	*Sqm*
	Section 5-5	*4*	*7.45*		*0.450*	*13.41*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*7.45*		*3.104*	*92.52*	*Sqm*
		4		*1.381*	*3.104*	*17.15*	*Sqm*
		4	*7.45*		*0.700*	*20.87*	*Sqm*
		4		*2.462*	*0.700*	*6.89*	*Sqm*
	Section 6-6	*4*	*4.95*		*0.450*	*8.90*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.95*		*1.280*	*25.32*	*Sqm*
		4		*0.834*	*1.280*	*4.27*	*Sqm*
		4	*4.95*		*0.700*	*13.85*	*Sqm*
		4		*1.368*	*0.700*	*3.83*	*Sqm*
	Floor	*2*	*0.64*		*0.750*	*0.96*	*Sqm*
		2		*7.600*	*0.750*	*11.40*	*Sqm*
		2	*9.00*		*0.700*	*12.60*	*Sqm*
		2		*7.600*	*0.700*	*10.64*	*Sqm*
		2	*0.31*		*0.600*	*0.37*	*Sqm*
		2		*7.600*	*0.600*	*9.12*	*Sqm*
		2	*0.30*		*0.600*	*0.36*	*Sqm*
		2		*7.600*	*0.600*	*9.12*	*Sqm*
		2	*0.70*		*0.750*	*1.05*	*Sqm*
		2		*7.600*	*0.750*	*11.40*	*Sqm*
		2	*0.050*		*0.725*	*0.07*	*Sqm*
		2		*7.600*	*0.725*	*11.02*	*Sqm*
		2	*2.450*		*0.700*	*3.43*	*Sqm*
		2		*7.600*	*0.700*	*10.64*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	*0.90*		*1.800*	*3.24*	*Sqm*
		2		*7.600*	*1.800*	*27.36*	*Sqm*
	Crest	*2*	*1.32*		*2.359*	*6.22*	*Sqm*
		2		*7.600*	*2.359*	*35.86*	*Sqm*
	Toe Wall D/S Portion	*2*	*19.16*		*0.300*	*11.50*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*18.86*		*0.600*	*22.63*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*4.00*		*0.150*	*2.40*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*4.00*		*0.600*	*9.60*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**590.14**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*4.00*	*6.018*		*48.14*	*Sqm*
	TOTAL					**48.14**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*4.00*	*7.000*	*0.300*	**8.40**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*4.00*	*7.000*	*0.150*	**8.40**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*23.64*	*0.450*		*10.64*	*Sqm*
	On Abutment Top (Right Side)	*1*	*23.64*	*0.450*		*10.64*	*Sqm*
	TOTAL					**21.28**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	*1*		*34.452*		*34.45*	*Cum*
	Abutment						
	Section 1-1	*2*	*1.55*	*1.998*		*6.196*	*Cum*
	Section 2-2	*2*	*5.50*	*1.940*		*21.340*	*Cum*
	Section 3-3	*2*	*3.20*	*1.460*		*9.344*	*Cum*
	Section 5-5	*2*	*7.50*	*1.945*		*29.159*	*Cum*
	Section 6-6	*2*	*4.26*	*1.460*		*12.445*	*Cum*
	D/S protection	*2*					
	Toe wall	*2*	*19.16*	*0.150*	*0.600*	*5.748*	*Cum*
		2	*4.00*	*0.150*	*0.600*	*0.720*	*Cum*
	TOTAL					**119.40**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 0.762 METER AT CH. 29.875 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*0.94*	*1.651*	*1.819*	*5.655*	*Cum*
	Section 2-2	*2*	*3.21*	*1.194*	*1.819*	*13.930*	*Cum*
	Section 3-3	*2*	*1.49*	*1.074*	*1.619*	*5.192*	*Cum*
	Section 5-5	*2*	*4.03*	*1.801*	*1.819*	*26.421*	*Cum*
	Section 6-6	*2*	*2.12*	*1.074*	*1.619*	*7.359*	*Cum*
	U/S Key Floor	*1*	*0.52*	*1.200*	*0.850*	*0.530*	*Cum*
	U/S Floor	*1*	*2.00*	*1.200*	*1.612*	*3.869*	*Cum*
	D/S Floor	*1*	*3.00*	*1.200*	*0.850*	*3.060*	*Cum*
		1	*2.00*	*1.200*	*0.650*	*1.560*	*Cum*
	D/S Key Floor	*1*	*0.63*	*1.200*	*0.850*	*0.638*	*Cum*
	Toe Wall D/S Portion	*1*	*7.58*	*0.750*	*0.900*	*5.117*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*1.75*	*0.600*	*0.750*	*1.575*	*Cum*
						74.91	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*1.200*	*0.150*	*0.10*	*Cum*
		1	*0.78*	*1.200*	*0.150*	*0.14*	*Cum*
		1	*4.38*	*1.200*	*0.150*	*0.79*	*Cum*
		1	*0.28*	*1.200*	*0.150*	*0.05*	*Cum*
		1	*0.64*	*1.200*	*0.150*	*0.11*	*Cum*
		1	*0.78*	*1.200*	*0.150*	*0.14*	*Cum*
		1	*0.54*	*1.200*	*0.150*	*0.10*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*0.94*	*1.651*	*0.150*	*0.47*	*Cum*
	Section 2-2	*2*	*3.21*	*1.194*	*0.150*	*1.15*	*Cum*
	Section 3-3	*2*	*1.49*	*1.074*	*0.150*	*0.48*	*Cum*
	Section 5-5	*2*	*4.03*	*1.801*	*0.150*	*2.18*	*Cum*
	Section 6-6	*2*	*2.12*	*1.074*	*0.150*	*0.68*	*Cum*
	Toe Wall D/S Portion	*1*	*7.58*	*0.750*	*0.300*	*1.71*	*Cum*
	Toe Wall D/S Portion	*1*	*7.28*	*0.450*	*0.600*	*1.97*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.75*	*0.600*	*0.150*	*0.32*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.75*	*0.300*	*0.600*	*0.63*	*Cum*
	TOTAL					**11.00**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.04*	*0.450*	*0.450*	*0.42*	*Cum*
		2	*1.04*	*0.901*	*1.502*	*2.81*	*Cum*
		2	*1.04*	*1.501*	*0.500*	*1.56*	*Cum*
	Section 2-2	*2*	*3.21*	*0.450*	*0.450*	*1.30*	*Cum*
		2	*3.21*	*0.672*	*0.740*	*3.19*	*Cum*
		2	*3.21*	*1.044*	*0.500*	*3.35*	*Cum*
	Section 3-3	*2*	*1.18*	*0.450*	*0.450*	*0.48*	*Cum*
		2	*1.18*	*0.612*	*0.540*	*0.78*	*Cum*
		2	*1.18*	*0.924*	*0.500*	*1.09*	*Cum*
	Section 5-5	*2*	*3.99*	*0.450*	*0.450*	*1.62*	*Cum*
		2	*3.99*	*0.901*	*1.502*	*10.79*	*Cum*
		2	*3.99*	*1.501*	*0.500*	*5.99*	*Cum*
	Section 6-6	*2*	*2.58*	*0.450*	*0.450*	*1.04*	*Cum*
		2	*2.58*	*0.612*	*0.540*	*1.70*	*Cum*
		2	*2.58*	*0.924*	*0.500*	*2.38*	*Cum*
	Floor	*1*	*0.52*	*1.200*	*0.700*	*0.44*	*Cum*
		1	*5.00*	*1.200*	*0.500*	*3.00*	*Cum*
		1	*0.31*	*1.200*	*0.200*	*0.07*	*Cum*
		1	*0.20*	*1.200*	*0.400*	*0.10*	*Cum*
		1	*1.80*	*1.200*	*0.500*	*1.08*	*Cum*
		1	*0.63*	*1.200*	*0.700*	*0.53*	*Cum*
	Crest	*1*	*0.83*	*1.200*	*1.112*	*1.10*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	TOTAL					**44.82**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.65*	*1.200*	*0.150*	*0.12*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*12.90*	*0.450*	*0.050*	*0.29*	*Cum*
	On Abutment Top (Right Side)	*1*	*12.90*	*0.450*	*0.050*	*0.29*	*Cum*
	TOTAL					**0.70**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**44.82**	**0.003**	**0.134**	**7850.0**	**1055.48**	**Kg**
	Total Weight in Metric Tonne					**1.06**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.04*		*0.450*	*1.87*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.04*		*1.502*	*6.25*	*Sqm*
		4		*0.901*	*1.502*	*5.41*	*Sqm*
		4	*1.04*		*0.500*	*2.08*	*Sqm*
		4		*1.501*	*0.500*	*3.00*	*Sqm*
	Section 2-2	*4*	*3.21*		*0.450*	*5.77*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.21*		*0.740*	*9.49*	*Sqm*
		4		*0.672*	*0.740*	*1.99*	*Sqm*
		4	*3.21*		*0.500*	*6.41*	*Sqm*
		4		*1.044*	*0.500*	*2.09*	*Sqm*
	Section 3-3	*4*	*1.18*		*0.450*	*2.13*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.18*		*0.540*	*2.55*	*Sqm*
		4		*0.612*	*0.540*	*1.32*	*Sqm*
		4	*1.18*		*0.500*	*2.36*	*Sqm*
		4		*0.924*	*0.500*	*1.85*	*Sqm*
	Section 5-5	*4*	*3.99*		*0.450*	*7.18*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.99*		*1.502*	*23.96*	*Sqm*
		4		*0.901*	*1.502*	*5.41*	*Sqm*
		4	*3.99*		*0.500*	*7.98*	*Sqm*
		4		*1.501*	*0.500*	*3.00*	*Sqm*
	Section 6-6	*4*	*2.58*		*0.450*	*4.64*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.58*		*0.540*	*5.57*	*Sqm*
		4		*0.612*	*0.540*	*1.32*	*Sqm*
		4	*2.58*		*0.500*	*5.16*	*Sqm*
		4		*0.924*	*0.500*	*1.85*	*Sqm*
	Floor	*2*	*0.52*		*0.700*	*0.73*	*Sqm*
		2		*1.200*	*0.700*	*1.68*	*Sqm*
		2	*5.00*		*0.500*	*5.00*	*Sqm*
		2		*1.200*	*0.500*	*1.20*	*Sqm*
		2	*0.31*		*0.200*	*0.12*	*Sqm*
		2		*1.200*	*0.200*	*0.48*	*Sqm*
		2	*0.20*		*0.400*	*0.16*	*Sqm*
		2		*1.200*	*0.400*	*0.96*	*Sqm*
		2	*1.80*		*0.500*	*1.80*	*Sqm*
		2		*1.200*	*0.500*	*1.20*	*Sqm*
		2	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*1.200*	*0.700*	*1.68*	*Sqm*
	Crest	*2*	*0.83*		*1.112*	*1.84*	*Sqm*
		2		*1.200*	*1.112*	*2.67*	*Sqm*
	Toe Wall D/S Portion	*2*	*7.58*		*0.300*	*4.55*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*7.28*		*0.600*	*8.74*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.150*	*1.05*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.600*	*4.20*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**165.69**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.75*	*3.204*		*11.21*	*Sqm*
	TOTAL					**11.21**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.75*	*0.600*	*0.300*	**0.32**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.75*	*0.600*	*0.150*	**0.32**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*12.90*	*0.450*		*5.80*	*Sqm*
	On Abutment Top (Right Side)	*1*	*12.90*	*0.450*		*5.80*	*Sqm*
	TOTAL					**11.61**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	*1*		*1.881*		*1.88*	*Cum*
	Abutment						
	Section 1-1	*2*	*0.94*	*0.840*		*1.582*	*Cum*
	Section 2-2	*2*	*3.21*	*0.835*		*5.356*	*Cum*
	Section 3-3	*2*	*1.49*	*0.593*		*1.771*	*Cum*
	Section 5-5	*2*	*4.03*	*0.840*		*6.775*	*Cum*
	Section 6-6	*2*	*2.12*	*0.593*		*2.510*	*Cum*
	D/S protection	*2*					
	Toe wall	*2*	*7.58*	*0.150*	*0.600*	*2.274*	*Cum*
		2	*1.75*	*0.150*	*0.600*	*0.315*	*Cum*
	TOTAL					**22.46**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 0.762 METER AT CH. 30.000 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.07*	*1.651*	*1.976*	*6.998*	*Cum*
	Section 2-2	*2*	*3.00*	*1.140*	*1.976*	*13.516*	*Cum*
	Section 3-3	*2*	*1.45*	*1.020*	*1.776*	*5.253*	*Cum*
	Section 5-5	*2*	*4.03*	*1.801*	*1.976*	*28.698*	*Cum*
	Section 6-6	*2*	*1.86*	*1.020*	*1.776*	*6.721*	*Cum*
	U/S Key Floor	*1*	*0.52*	*0.900*	*0.850*	*0.398*	*Cum*
	U/S Floor	*1*	*2.00*	*0.900*	*1.612*	*2.902*	*Cum*
	D/S Floor	*1*	*3.00*	*0.900*	*0.850*	*2.295*	*Cum*
		2	*1.75*	*0.900*	*0.650*	*2.048*	*Cum*
	D/S Key Floor	*1*	*0.63*	*0.900*	*0.850*	*0.478*	*Cum*
	Toe Wall D/S Portion	*1*	*6.65*	*0.750*	*0.900*	*4.489*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*1.50*	*0.600*	*0.750*	*1.350*	*Cum*
						75.14	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*0.900*	*0.150*	*0.07*	*Cum*
		1	*0.78*	*0.900*	*0.150*	*0.11*	*Cum*
		1	*4.38*	*0.900*	*0.150*	*0.59*	*Cum*
		1	*0.28*	*0.900*	*0.150*	*0.04*	*Cum*
		1	*0.39*	*0.900*	*0.150*	*0.05*	*Cum*
		1	*0.78*	*0.900*	*0.150*	*0.11*	*Cum*
		1	*0.54*	*0.900*	*0.150*	*0.07*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.07*	*1.651*	*0.150*	*0.53*	*Cum*
	Section 2-2	*2*	*3.00*	*1.140*	*0.150*	*1.03*	*Cum*
	Section 3-3	*2*	*1.45*	*1.020*	*0.150*	*0.44*	*Cum*
	Section 5-5	*2*	*4.03*	*1.801*	*0.150*	*2.18*	*Cum*
	Section 6-6	*2*	*1.86*	*1.020*	*0.150*	*0.57*	*Cum*
	Toe Wall D/S Portion	*1*	*6.65*	*0.750*	*0.300*	*1.50*	*Cum*
	Toe Wall D/S Portion	*1*	*6.35*	*0.450*	*0.600*	*1.71*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.600*	*0.150*	*0.27*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.300*	*0.600*	*0.54*	*Cum*
	TOTAL					**9.81**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*0.85*	*0.450*	*0.450*	*0.34*	*Cum*
		2	*0.85*	*0.901*	*1.502*	*2.29*	*Cum*
		2	*0.85*	*1.501*	*0.500*	*1.27*	*Cum*
	Section 2-2	*2*	*3.00*	*0.450*	*0.450*	*1.22*	*Cum*
		2	*3.00*	*0.645*	*0.650*	*2.52*	*Cum*
		2	*3.00*	*0.990*	*0.500*	*2.97*	*Cum*
	Section 3-3	*2*	*1.17*	*0.450*	*0.450*	*0.47*	*Cum*
		2	*1.17*	*0.585*	*0.450*	*0.61*	*Cum*
		2	*1.17*	*0.870*	*0.500*	*1.01*	*Cum*
	Section 5-5	*2*	*3.99*	*0.450*	*0.450*	*1.62*	*Cum*
		2	*3.99*	*0.901*	*1.502*	*10.79*	*Cum*
		2	*3.99*	*1.501*	*0.500*	*5.99*	*Cum*
	Section 6-6	*2*	*2.29*	*0.450*	*0.450*	*0.93*	*Cum*
		2	*2.29*	*0.585*	*0.450*	*1.21*	*Cum*
		2	*2.29*	*0.870*	*0.500*	*1.99*	*Cum*
	Floor	*1*	*0.52*	*0.900*	*0.700*	*0.33*	*Cum*
		1	*5.00*	*0.900*	*0.500*	*2.25*	*Cum*
		1	*0.31*	*0.900*	*0.200*	*0.06*	*Cum*
		1	*0.20*	*0.900*	*0.400*	*0.07*	*Cum*
		1	*1.55*	*0.900*	*0.500*	*0.70*	*Cum*
		1	*0.63*	*0.900*	*0.700*	*0.39*	*Cum*
	Crest	*1*	*0.83*	*0.900*	*1.067*	*0.80*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	TOTAL					**39.82**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.65*	*0.900*	*0.150*	*0.09*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*12.15*	*0.450*	*0.050*	*0.27*	*Cum*
	On Abutment Top (Right Side)	*1*	*12.15*	*0.450*	*0.050*	*0.27*	*Cum*
	TOTAL					**0.63**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**39.82**	**0.00**	**0.119**	**7850.0**	**937.65**	**Kg**
	Total Weight in Metric Tonne					**0.94**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*0.85*		*0.450*	*1.53*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*0.85*		*1.502*	*5.09*	*Sqm*
		4		*0.901*	*1.502*	*5.41*	*Sqm*
		4	*0.85*		*0.500*	*1.70*	*Sqm*
		4		*1.501*	*0.500*	*3.00*	*Sqm*
	Section 2-2	*4*	*3.00*		*0.450*	*5.40*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.00*		*0.650*	*7.80*	*Sqm*
		4		*0.645*	*0.650*	*1.68*	*Sqm*
		4	*3.00*		*0.500*	*6.00*	*Sqm*
		4		*0.990*	*0.500*	*1.98*	*Sqm*
	Section 3-3	*4*	*1.17*		*0.450*	*2.10*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.17*		*0.450*	*2.10*	*Sqm*
		4		*0.585*	*0.450*	*1.05*	*Sqm*
		4	*1.17*		*0.500*	*2.33*	*Sqm*
		4		*0.870*	*0.500*	*1.74*	*Sqm*
	Section 5-5	*4*	*3.99*		*0.450*	*7.18*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.99*		*1.502*	*23.96*	*Sqm*
		4		*0.901*	*1.502*	*5.41*	*Sqm*
		4	*3.99*		*0.500*	*7.98*	*Sqm*
		4		*1.501*	*0.500*	*3.00*	*Sqm*
	Section 6-6	*4*	*2.29*		*0.450*	*4.12*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.29*		*0.450*	*4.12*	*Sqm*
		4		*0.585*	*0.450*	*1.05*	*Sqm*
		4	*2.29*		*0.500*	*4.58*	*Sqm*
		4		*0.870*	*0.500*	*1.74*	*Sqm*
	Floor	*2*	*0.52*		*0.700*	*0.73*	*Sqm*
		2		*0.900*	*0.700*	*1.26*	*Sqm*
		2	*5.00*		*0.500*	*5.00*	*Sqm*
		2		*0.900*	*0.500*	*0.90*	*Sqm*
		2	*0.31*		*0.200*	*0.12*	*Sqm*
		2		*0.900*	*0.200*	*0.36*	*Sqm*
		2	*0.20*		*0.400*	*0.16*	*Sqm*
		2		*0.900*	*0.400*	*0.72*	*Sqm*
		2	*1.55*		*0.500*	*1.55*	*Sqm*
		2		*0.900*	*0.500*	*0.90*	*Sqm*
		2	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*0.900*	*0.700*	*1.26*	*Sqm*
	Crest	*2*	*0.83*		*1.067*	*1.77*	*Sqm*
		2		*0.900*	*1.067*	*1.92*	*Sqm*
	Toe Wall D/S Portion	*2*	*6.65*		*0.300*	*3.99*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*6.35*		*0.600*	*7.62*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.150*	*0.90*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.600*	*3.60*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**151.80**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.50*	*2.142*		*6.43*	*Sqm*
	TOTAL					**6.43**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.50*	*0.300*	*0.300*	**0.14**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.50*	*0.300*	*0.150*	**0.14**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*12.15*	*0.450*		*5.47*	*Sqm*
	On Abutment Top (Right Side)	*1*	*12.15*	*0.450*		*5.47*	*Sqm*
	TOTAL					**10.93**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	*1*		*1.739*		*1.74*	*Cum*
	Abutment						
	Section 1-1	*2*	*1.07*	*1.000*		*2.145*	*Cum*
	Section 2-2	*2*	*3.00*	*0.744*		*4.464*	*Cum*
	Section 3-3	*2*	*1.45*	*0.556*		*1.612*	*Cum*
	Section 5-5	*2*	*4.03*	*1.000*		*8.064*	*Cum*
	Section 6-6	*2*	*1.86*	*0.556*		*2.063*	*Cum*
	D/S protection	*2*					
	Toe wall	*2*	*6.65*	*0.150*	*0.600*	*1.995*	*Cum*
		2	*1.50*	*0.150*	*0.600*	*0.270*	*Cum*
	TOTAL					**22.35**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF SHARDA TYPE FALL FOR PAWAI MR.						
	SHARDA TYPE FALL OF HEIGHT 1.067 METER AT CH. 0.200 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.22*	*1.780*	*3.544*	*15.436*	*Cum*
	Section 2-2	*2*	*3.00*	*1.140*	*3.544*	*24.241*	*Cum*
	Section 3-3	*2*	*2.20*	*1.020*	*3.344*	*15.008*	*Cum*
	Section 5-5	*2*	*2.29*	*1.930*	*3.544*	*31.299*	*Cum*
	Section 6-6	*2*	*0.96*	*1.020*	*3.344*	*6.515*	*Cum*
	U/S Key Floor	*1*	*0.63*	*1.500*	*0.850*	*0.797*	*Cum*
	U/S Floor	*1*	*2.50*	*1.500*	*2.017*	*7.564*	*Cum*
	D/S Floor	*1*	*3.00*	*1.500*	*1.050*	*4.725*	*Cum*
		1	*2.50*	*1.500*	*0.850*	*3.188*	*Cum*
	D/S Key Floor	*1*	*0.70*	*1.500*	*0.750*	*0.788*	*Cum*
	Toe Wall D/S Portion	*1*	*5.45*	*0.750*	*0.900*	*3.679*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*1.50*	*0.600*	*0.750*	*1.350*	*Cum*
						114.59	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*1.500*	*0.150*	*0.12*	*Cum*
		1	*0.78*	*1.500*	*0.150*	*0.18*	*Cum*
		1	*0.26*	*1.500*	*0.150*	*0.06*	*Cum*
		1	*0.14*	*1.500*	*0.150*	*0.03*	*Cum*
		1	*4.42*	*1.500*	*0.150*	*0.99*	*Cum*
		1	*0.42*	*1.500*	*0.150*	*0.10*	*Cum*
		1	*0.99*	*1.500*	*0.150*	*0.22*	*Cum*
		1	*1.12*	*1.500*	*0.150*	*0.25*	*Cum*
		1	*0.54*	*1.500*	*0.150*	*0.12*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.22*	*1.780*	*0.150*	*0.65*	*Cum*
	Section 2-2	*2*	*3.00*	*1.140*	*0.150*	*1.03*	*Cum*
	Section 3-3	*2*	*2.20*	*1.020*	*0.150*	*0.67*	*Cum*
	Section 5-5	*2*	*2.29*	*1.930*	*0.150*	*1.32*	*Cum*
	Section 6-6	*2*	*0.96*	*1.020*	*0.150*	*0.29*	*Cum*
	Toe Wall D/S Portion	*1*	*5.45*	*0.750*	*0.300*	*1.23*	*Cum*
	Toe Wall D/S Portion	*1*	*5.15*	*0.450*	*0.600*	*1.39*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.600*	*0.150*	*0.27*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.300*	*0.600*	*0.54*	*Cum*
	TOTAL					**9.47**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.00*	*0.450*	*0.450*	*0.40*	*Cum*
		2	*1.00*	*0.965*	*1.717*	*3.31*	*Cum*
		2	*1.00*	*1.630*	*0.600*	*1.95*	*Cum*
	Section 2-2	*2*	*3.00*	*0.450*	*0.450*	*1.22*	*Cum*
		2	*3.00*	*0.645*	*0.650*	*2.52*	*Cum*
		2	*3.00*	*0.990*	*0.600*	*3.56*	*Cum*
	Section 3-3	*2*	*1.92*	*0.450*	*0.450*	*0.78*	*Cum*
		2	*1.92*	*0.585*	*0.450*	*1.01*	*Cum*
		2	*1.92*	*0.870*	*0.500*	*1.67*	*Cum*
	Section 5-5	*2*	*2.24*	*0.450*	*0.450*	*0.91*	*Cum*
		2	*2.24*	*0.965*	*1.717*	*7.44*	*Cum*
		2	*2.24*	*1.630*	*0.500*	*3.66*	*Cum*
	Section 6-6	*2*	*1.39*	*0.450*	*0.450*	*0.56*	*Cum*
		2	*1.39*	*0.585*	*0.450*	*0.73*	*Cum*
		2	*1.39*	*0.870*	*0.500*	*1.21*	*Cum*
	Floor	*1*	*0.63*	*1.500*	*0.700*	*0.66*	*Cum*
		1	*5.50*	*1.500*	*0.500*	*4.13*	*Cum*
		1	*4.24*	*1.500*	*0.100*	*0.64*	*Cum*
		1	*0.26*	*1.500*	*0.300*	*0.12*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		1	*0.20*	*1.500*	*0.750*	*0.23*	*Cum*
		1	*2.30*	*1.500*	*0.500*	*1.73*	*Cum*
		1	*0.70*	*1.500*	*1.000*	*1.05*	*Cum*
	Crest	*1*	*0.97*	*1.500*	*1.357*	*1.97*	*Cum*
	TOTAL					**41.42**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.75*	*1.500*	*0.150*	*0.17*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*10.45*	*0.450*	*0.050*	*0.24*	*Cum*
	On Abutment Top (Right Side)	*1*	*10.45*	*0.450*	*0.050*	*0.24*	*Cum*
	TOTAL					**0.64**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**41.42**	**0.00**	**0.124**	**7850.0**	**975.44**	**Kg**
	Total Weight in Metric Tonne					**0.98**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.00*		*0.450*	*1.80*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.00*		*1.717*	*6.86*	*Sqm*
		4		*0.965*	*1.717*	*6.63*	*Sqm*
		4	*1.00*		*0.600*	*2.40*	*Sqm*
		4		*1.630*	*0.600*	*3.91*	*Sqm*
	Section 2-2	*4*	*3.00*		*0.450*	*5.40*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.00*		*0.650*	*7.80*	*Sqm*
		4		*0.645*	*0.650*	*1.68*	*Sqm*
		4	*3.00*		*0.600*	*7.20*	*Sqm*
		4		*0.990*	*0.600*	*2.38*	*Sqm*
	Section 3-3	*4*	*1.92*		*0.450*	*3.45*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.92*		*0.450*	*3.45*	*Sqm*
		4		*0.585*	*0.450*	*1.05*	*Sqm*
		4	*1.92*		*0.500*	*3.83*	*Sqm*
		4		*0.870*	*0.500*	*1.74*	*Sqm*
	Section 5-5	*4*	*2.24*		*0.450*	*4.04*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.24*		*1.717*	*15.41*	*Sqm*
		4		*0.965*	*1.717*	*6.63*	*Sqm*
		4	*2.24*		*0.500*	*4.49*	*Sqm*
		4		*1.630*	*0.500*	*3.26*	*Sqm*
	Section 6-6	*4*	*1.39*		*0.450*	*2.50*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.39*		*0.450*	*2.50*	*Sqm*
		4		*0.585*	*0.450*	*1.05*	*Sqm*
		4	*1.39*		*0.500*	*2.78*	*Sqm*
		4		*0.870*	*0.500*	*1.74*	*Sqm*
	Floor	*2*	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*1.500*	*0.700*	*2.10*	*Sqm*
		2	*5.50*		*0.500*	*5.50*	*Sqm*
		2		*1.500*	*0.500*	*1.50*	*Sqm*
		2	*0.26*		*0.300*	*0.15*	*Sqm*
		2		*1.500*	*0.300*	*0.90*	*Sqm*
		2	*0.20*		*0.750*	*0.30*	*Sqm*
		2		*1.500*	*0.750*	*2.25*	*Sqm*
		2	*2.30*		*0.500*	*2.30*	*Sqm*
		2		*1.500*	*0.500*	*1.50*	*Sqm*
		2	*0.70*		*1.000*	*1.40*	*Sqm*
		2		*1.500*	*1.000*	*3.00*	*Sqm*
	Crest	*2*	*0.97*		*1.357*	*2.63*	*Sqm*
		2		*1.500*	*1.357*	*4.07*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.45*		*0.300*	*3.27*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Toe Wall D/S Portion	*2*	*5.15*		*0.600*	*6.18*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.150*	*0.90*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.600*	*3.60*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**152.51**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.50*	*1.962*		*5.89*	*Sqm*
	TOTAL					**5.89**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.50*	*0.900*	*0.300*	**0.41**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.50*	*0.900*	*0.150*	**0.41**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*10.45*	*0.450*		*4.70*	*Sqm*
	On Abutment Top (Right Side)	*1*	*10.45*	*0.450*		*4.70*	*Sqm*
	TOTAL					**9.41**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	*1*		*4.956*		*4.96*	*Cum*
	Abutment						
	Section 1-1	*2*	*1.22*	*2.155*		*5.273*	*Cum*
	Section 2-2	*2*	*3.00*	*0.757*		*4.542*	*Cum*
	Section 3-3	*2*	*2.20*	*0.556*		*2.446*	*Cum*
	Section 5-5	*2*	*2.29*	*2.134*		*9.765*	*Cum*
	Section 6-6	*2*	*0.96*	*0.556*		*1.062*	*Cum*
	D/S protection	*2*					
	Toe wall	*2*	*5.45*	*0.150*	*0.600*	*1.635*	*Cum*
		2	*1.50*	*0.150*	*0.600*	*0.270*	*Cum*
	TOTAL					**29.95**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 0.914 METER AT CH. 0.375 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.14*	*1.688*	*2.508*	*9.669*	*Cum*
	Section 2-2	*2*	*2.75*	*1.140*	*2.508*	*15.725*	*Cum*
	Section 3-3	*2*	*1.70*	*1.020*	*2.308*	*8.004*	*Cum*
	Section 5-5	*2*	*2.31*	*1.838*	*2.508*	*21.260*	*Cum*
	Section 6-6	*2*	*0.96*	*1.020*	*2.308*	*4.496*	*Cum*
	U/S Key Floor	*1*	*0.63*	*1.500*	*0.850*	*0.797*	*Cum*
	U/S Floor	*1*	*2.25*	*1.500*	*1.764*	*5.954*	*Cum*
	D/S Floor	*1*	*2.75*	*1.500*	*0.950*	*3.919*	*Cum*
		1	*2.00*	*1.500*	*0.750*	*2.250*	*Cum*
	D/S Key Floor	*1*	*0.65*	*1.500*	*0.650*	*0.634*	*Cum*
	Toe Wall D/S Portion	*1*	*5.45*	*0.750*	*0.900*	*3.679*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*1.50*	*0.600*	*0.750*	*1.350*	*Cum*
						77.74	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*1.500*	*0.150*	*0.12*	*Cum*
		1	*0.78*	*1.500*	*0.150*	*0.18*	*Cum*
		1	*4.23*	*1.500*	*0.150*	*0.95*	*Cum*
		1	*0.28*	*1.500*	*0.150*	*0.06*	*Cum*
		1	*0.79*	*1.500*	*0.150*	*0.18*	*Cum*
		1	*0.78*	*1.500*	*0.150*	*0.18*	*Cum*
		1	*0.54*	*1.500*	*0.150*	*0.12*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.14*	*1.688*	*0.150*	*0.58*	*Cum*
	Section 2-2	*2*	*2.75*	*1.140*	*0.150*	*0.94*	*Cum*
	Section 3-3	*2*	*1.70*	*1.020*	*0.150*	*0.52*	*Cum*
	Section 5-5	*2*	*2.31*	*1.838*	*0.150*	*1.27*	*Cum*
	Section 6-6	*2*	*0.96*	*1.020*	*0.150*	*0.29*	*Cum*
	Toe Wall D/S Portion	*1*	*5.45*	*0.750*	*0.300*	*1.23*	*Cum*
	Toe Wall D/S Portion	*1*	*5.15*	*0.450*	*0.600*	*1.39*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.600*	*0.150*	*0.27*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.300*	*0.600*	*0.54*	*Cum*
	TOTAL					**8.82**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*0.92*	*0.450*	*0.450*	*0.37*	*Cum*
		2	*0.92*	*0.919*	*1.564*	*2.63*	*Cum*
		2	*0.92*	*1.538*	*0.500*	*1.41*	*Cum*
	Section 2-2	*2*	*2.75*	*0.450*	*0.450*	*1.11*	*Cum*
		2	*2.75*	*0.645*	*0.650*	*2.31*	*Cum*
		2	*2.75*	*0.990*	*0.500*	*2.72*	*Cum*
	Section 3-3	*2*	*1.92*	*0.450*	*0.450*	*0.78*	*Cum*
		2	*1.92*	*0.585*	*0.450*	*1.01*	*Cum*
		2	*1.92*	*0.870*	*0.500*	*1.67*	*Cum*
	Section 5-5	*2*	*2.26*	*0.450*	*0.450*	*0.92*	*Cum*
		2	*2.26*	*0.919*	*1.564*	*6.50*	*Cum*
		2	*2.26*	*1.538*	*0.500*	*3.48*	*Cum*
	Section 6-6	*2*	*1.39*	*0.450*	*0.450*	*0.56*	*Cum*
		2	*1.39*	*0.585*	*0.450*	*0.73*	*Cum*
		2	*1.39*	*0.870*	*0.500*	*1.21*	*Cum*
	Floor	*1*	*0.63*	*1.500*	*0.700*	*0.66*	*Cum*
		1	*5.00*	*1.500*	*0.500*	*3.75*	*Cum*
		1	*0.16*	*1.500*	*0.200*	*0.05*	*Cum*
		1	*0.20*	*1.500*	*0.400*	*0.12*	*Cum*
		1	*1.80*	*1.500*	*0.500*	*1.35*	*Cum*
		1	*0.65*	*1.500*	*0.800*	*0.78*	*Cum*
	Crest	*1*	*0.89*	*1.500*	*1.204*	*1.61*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	TOTAL					**35.72**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.70*	*1.500*	*0.150*	*0.16*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*9.60*	*0.450*	*0.050*	*0.22*	*Cum*
	On Abutment Top (Right Side)	*1*	*9.60*	*0.450*	*0.050*	*0.22*	*Cum*
	TOTAL					**0.59**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**35.72**	**0.00**	**0.107**	**7850.0**	**841.30**	**Kg**
	Total Weight in Metric Tonne					**0.84**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*0.92*		*0.450*	*1.65*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*0.92*		*1.564*	*5.73*	*Sqm*
		4		*0.919*	*1.564*	*5.75*	*Sqm*
		4	*0.92*		*0.500*	*1.83*	*Sqm*
		4		*1.538*	*0.500*	*3.08*	*Sqm*
	Section 2-2	*4*	*2.75*		*0.450*	*4.95*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.75*		*0.650*	*7.15*	*Sqm*
		4		*0.645*	*0.650*	*1.68*	*Sqm*
		4	*2.75*		*0.500*	*5.50*	*Sqm*
		4		*0.990*	*0.500*	*1.98*	*Sqm*
	Section 3-3	*4*	*1.92*		*0.450*	*3.45*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.92*		*0.450*	*3.45*	*Sqm*
		4		*0.585*	*0.450*	*1.05*	*Sqm*
		4	*1.92*		*0.500*	*3.83*	*Sqm*
		4		*0.870*	*0.500*	*1.74*	*Sqm*
	Section 5-5	*4*	*2.26*		*0.450*	*4.07*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.26*		*1.564*	*14.15*	*Sqm*
		4		*0.919*	*1.564*	*5.75*	*Sqm*
		4	*2.26*		*0.500*	*4.52*	*Sqm*
		4		*1.538*	*0.500*	*3.08*	*Sqm*
	Section 6-6	*4*	*1.39*		*0.450*	*2.50*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.39*		*0.450*	*2.50*	*Sqm*
		4		*0.585*	*0.450*	*1.05*	*Sqm*
		4	*1.39*		*0.500*	*2.78*	*Sqm*
		4		*0.870*	*0.500*	*1.74*	*Sqm*
	Floor	*2*	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*1.500*	*0.700*	*2.10*	*Sqm*
		2	*5.00*		*0.500*	*5.00*	*Sqm*
		2		*1.500*	*0.500*	*1.50*	*Sqm*
		2	*0.16*		*0.200*	*0.06*	*Sqm*
		2		*1.500*	*0.200*	*0.60*	*Sqm*
		2	*0.20*		*0.400*	*0.16*	*Sqm*
		2		*1.500*	*0.400*	*1.20*	*Sqm*
		2	*1.80*		*0.500*	*1.80*	*Sqm*
		2		*1.500*	*0.500*	*1.50*	*Sqm*
		2	*0.65*		*0.800*	*1.04*	*Sqm*
		2		*1.500*	*0.800*	*2.40*	*Sqm*
	Crest	*2*	*0.89*		*1.204*	*2.15*	*Sqm*
		2		*1.500*	*1.204*	*3.61*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.45*		*0.300*	*3.27*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.15*		*0.600*	*6.18*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.150*	*0.90*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.600*	*3.60*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**139.03**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.50*	*1.962*		*5.89*	*Sqm*
	TOTAL					**5.89**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.50*	*0.900*	*0.300*	**0.41**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.50*	*0.900*	*0.150*	**0.41**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*9.60*	*0.450*		*4.32*	*Sqm*
	On Abutment Top (Right Side)	*1*	*9.60*	*0.450*		*4.32*	*Sqm*
	TOTAL					**8.64**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1		3.546		3.55	**Cum**
	Abutment						
	Section 1-1	2	*1.14*	*1.645*		*3.757*	*Cum*
	Section 2-2	2	*2.75*	*0.742*		*4.081*	*Cum*
	Section 3-3	2	*1.70*	*0.556*		*1.890*	*Cum*
	Section 5-5	2	*2.31*	*1.650*		*7.610*	*Cum*
	Section 6-6	2	*0.96*	*0.556*		*1.062*	*Cum*
	D/S protection	2					
	Toe wall	2	*5.45*	*0.150*	*0.600*	*1.635*	*Cum*
		2	*1.50*	0.150	*0.600*	*0.270*	*Cum*
	TOTAL					**23.85**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 1.829 METER AT CH. 1.720 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.54*	*2.177*	*1.241*	*8.299*	*Cum*
	Section 2-2	*2*	*3.70*	*1.050*	*1.241*	*9.643*	*Cum*
	Section 3-3	*2*	*4.00*	*0.930*	*1.041*	*7.745*	*Cum*
	Section 5-5	*2*	*1.99*	*2.327*	*1.241*	*11.514*	*Cum*
	Section 6-6	*2*	*0.82*	*0.930*	*1.041*	*1.588*	*Cum*
	U/S Key Floor	*1*	*0.65*	*0.750*	*0.950*	*0.463*	*Cum*
	U/S Floor	*1*	*3.50*	*0.750*	*3.129*	*8.214*	*Cum*
	D/S Floor	*1*	*3.50*	*0.750*	*1.400*	*3.675*	*Cum*
		1	*1.50*	*0.750*	*1.200*	*1.350*	*Cum*
		2	*3.00*	*0.750*	*0.850*	*3.825*	*Cum*
	D/S Key Floor	*1*	*0.90*	*0.750*	*1.100*	*0.743*	*Cum*
	Toe Wall D/S Portion	*1*	*4.25*	*0.750*	*0.900*	*2.869*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*1.50*	*0.600*	*0.750*	*1.350*	*Cum*
						61.28	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*0.750*	*0.150*	*0.06*	*Cum*
		1	*0.90*	*0.750*	*0.150*	*0.10*	*Cum*
		1	*0.66*	*0.750*	*0.150*	*0.07*	*Cum*
		1	*0.35*	*0.750*	*0.150*	*0.04*	*Cum*
		1	*5.35*	*0.750*	*0.150*	*0.60*	*Cum*
		1	*0.50*	*0.750*	*0.150*	*0.06*	*Cum*
		1	*1.00*	*0.750*	*0.150*	*0.11*	*Cum*
		1	*0.14*	*0.750*	*0.150*	*0.02*	*Cum*
		1	*1.40*	*0.750*	*0.150*	*0.16*	*Cum*
		1	*2.01*	*0.750*	*0.150*	*0.23*	*Cum*
		1	*0.54*	*0.750*	*0.150*	*0.06*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.54*	*2.177*	*0.150*	*1.00*	*Cum*
	Section 2-2	*2*	*3.70*	*1.050*	*0.150*	*1.17*	*Cum*
	Section 3-3	*2*	*4.00*	*0.930*	*0.150*	*1.12*	*Cum*
	Section 5-5	*2*	*1.99*	*2.327*	*0.150*	*1.39*	*Cum*
	Section 6-6	*2*	*0.82*	*0.930*	*0.150*	*0.23*	*Cum*
	Toe Wall D/S Portion	*1*	*4.25*	*0.750*	*0.300*	*0.96*	*Cum*
	Toe Wall D/S Portion	*1*	*3.95*	*0.450*	*0.600*	*1.07*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.600*	*0.150*	*0.27*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.300*	*0.600*	*0.54*	*Cum*
	TOTAL					**9.25**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.31*	*0.450*	*0.450*	*0.53*	*Cum*
		2	*1.31*	*1.164*	*2.379*	*7.26*	*Cum*
		2	*1.31*	*2.027*	*0.950*	*5.05*	*Cum*
	Section 2-2	*2*	*3.70*	*0.450*	*0.450*	*1.50*	*Cum*
		2	*3.70*	*0.600*	*0.500*	*2.22*	*Cum*
		2	*3.70*	*0.900*	*0.950*	*6.33*	*Cum*
	Section 3-3	*2*	*3.76*	*0.450*	*0.450*	*1.52*	*Cum*
		2	*3.76*	*0.540*	*0.300*	*1.22*	*Cum*
		2	*3.76*	*0.780*	*0.700*	*4.11*	*Cum*
	Section 5-5	*2*	*1.95*	*0.450*	*0.450*	*0.79*	*Cum*
		2	*1.95*	*1.164*	*2.379*	*10.79*	*Cum*
		2	*1.95*	*2.027*	*0.700*	*5.53*	*Cum*
	Section 6-6	*2*	*1.29*	*0.450*	*0.450*	*0.52*	*Cum*
		2	*1.29*	*0.540*	*0.300*	*0.42*	*Cum*
		2	*1.29*	*0.780*	*0.700*	*1.40*	*Cum*
	Floor	*1*	*0.65*	*0.750*	*0.800*	*0.39*	*Cum*
		1	*7.00*	*0.750*	*0.700*	*3.68*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		1	*5.21*	*0.750*	*0.250*	*0.98*	*Cum*
		1	*0.32*	*0.750*	*0.350*	*0.08*	*Cum*
		1	*0.20*	*0.750*	*0.750*	*0.11*	*Cum*
		1	*1.30*	*0.750*	*0.800*	*0.78*	*Cum*
		1	*0.10*	*0.750*	*0.750*	*0.06*	*Cum*
		1	*2.90*	*0.750*	*0.700*	*1.52*	*Cum*
		1	*0.90*	*0.750*	*1.800*	*1.22*	*Cum*
	Crest	*1*	*1.24*	*0.750*	*2.094*	*1.95*	*Cum*
	TOTAL					**59.94**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.90*	*0.750*	*0.150*	*0.10*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*12.91*	*0.450*	*0.050*	*0.29*	*Cum*
	On Abutment Top (Right Side)	*1*	*12.91*	*0.450*	*0.050*	*0.29*	*Cum*
	TOTAL					**0.68**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**59.94**	**0.00**	**0.180**	**7850.0**	**1411.69**	**Kg**
	Total Weight in Metric Tonne					**1.41**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.31*		*0.450*	*2.36*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.31*		*2.379*	*12.48*	*Sqm*
		4		*1.164*	*2.379*	*11.07*	*Sqm*
		4	*1.31*		*0.950*	*4.98*	*Sqm*
		4		*2.027*	*0.950*	*7.70*	*Sqm*
	Section 2-2	*4*	*3.70*		*0.450*	*6.66*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.70*		*0.500*	*7.40*	*Sqm*
		4		*0.600*	*0.500*	*1.20*	*Sqm*
		4	*3.70*		*0.950*	*14.06*	*Sqm*
		4		*0.900*	*0.950*	*3.42*	*Sqm*
	Section 3-3	*4*	*3.76*		*0.450*	*6.77*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.76*		*0.300*	*4.51*	*Sqm*
		4		*0.540*	*0.300*	*0.65*	*Sqm*
		4	*3.76*		*0.700*	*10.53*	*Sqm*
		4		*0.780*	*0.700*	*2.18*	*Sqm*
	Section 5-5	*4*	*1.95*		*0.450*	*3.51*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.95*		*2.379*	*18.55*	*Sqm*
		4		*1.164*	*2.379*	*11.07*	*Sqm*
		4	*1.95*		*0.700*	*5.46*	*Sqm*
		4		*2.027*	*0.700*	*5.68*	*Sqm*
	Section 6-6	*4*	*1.29*		*0.450*	*2.31*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.29*		*0.300*	*1.54*	*Sqm*
		4		*0.540*	*0.300*	*0.65*	*Sqm*
		4	*1.29*		*0.700*	*3.60*	*Sqm*
		4		*0.780*	*0.700*	*2.18*	*Sqm*
	Floor	*2*	*0.65*		*0.800*	*1.04*	*Sqm*
		2		*0.750*	*0.800*	*1.20*	*Sqm*
		2	*7.00*		*0.700*	*9.80*	*Sqm*
		2		*0.750*	*0.700*	*1.05*	*Sqm*
		2	*0.32*		*0.350*	*0.23*	*Sqm*
		2		*0.750*	*0.350*	*0.53*	*Sqm*
		2	*0.20*		*0.750*	*0.30*	*Sqm*
		2		*0.750*	*0.750*	*1.13*	*Sqm*
		2	*1.30*		*0.800*	*2.08*	*Sqm*
		2		*0.750*	*0.800*	*1.20*	*Sqm*
		2	*0.100*		*0.750*	*0.15*	*Sqm*
		2		*0.750*	*0.750*	*1.13*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	*2.900*		*0.700*	*4.06*	*Sqm*
		2		*0.750*	*0.700*	*1.05*	*Sqm*
		2	*0.90*		*1.800*	*3.24*	*Sqm*
		2		*0.750*	*1.800*	*2.70*	*Sqm*
	Crest	*2*	*1.24*		*2.094*	*5.20*	*Sqm*
		2		*0.750*	*2.094*	*3.14*	*Sqm*
	Toe Wall D/S Portion	*2*	*4.25*		*0.300*	*2.55*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*3.95*		*0.600*	*4.74*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.150*	*0.90*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.600*	*3.60*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**207.64**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.50*	*1.692*		*5.08*	*Sqm*
	TOTAL					**5.08**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.50*	*0.150*	*0.300*	**0.07**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.50*	*0.150*	*0.150*	**0.07**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*12.91*	*0.450*		*5.81*	*Sqm*
	On Abutment Top (Right Side)	*1*	*12.91*	*0.450*		*5.81*	*Sqm*
	TOTAL					**11.62**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	*1*		*8.910*		*8.91*	*Cum*
	Abutment						
	Section 1-1	*2*	*1.54*	*0.200*		*0.614*	*Cum*
	Section 2-2	*2*	*3.70*	*0.200*		*1.480*	*Cum*
	Section 3-3	*2*	*4.00*	*0.097*		*0.776*	*Cum*
	Section 5-5	*2*	*1.99*	*0.200*		*0.797*	*Cum*
	Section 6-6	*2*	*0.82*	*0.097*		*0.159*	*Cum*
	D/S protection	*2*					
	Toe wall	*2*	*4.25*	*0.150*	*0.600*	*1.275*	*Cum*
		2	*1.50*	*0.150*	*0.600*	*0.270*	*Cum*
	TOTAL					**14.28**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF SHARDA TYPE FALL FOR BHUTAILI MR.						
	SHARDA TYPE FALL OF HEIGHT 1.524 METER AT CH.0.580 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.37*	*2.054*	*1.440*	*8.095*	*Cum*
	Section 2-2	*2*	*3.65*	*1.140*	*1.440*	*11.984*	*Cum*
	Section 3-3	*2*	*3.30*	*1.020*	*1.240*	*8.348*	*Cum*
	Section 5-5	*2*	*2.23*	*2.204*	*1.440*	*14.155*	*Cum*
	Section 6-6	*2*	*0.96*	*1.020*	*1.240*	*2.416*	*Cum*
	U/S Key Floor	*1*	*0.70*	*1.200*	*1.150*	*0.966*	*Cum*
	U/S Floor	*1*	*3.25*	*1.200*	*2.830*	*11.037*	*Cum*
	D/S Floor	*1*	*3.25*	*1.200*	*0.850*	*3.315*	*Cum*
		1	*4.79*	*1.200*	*0.200*	*1.149*	*Cum*
		1	*2.00*	*1.200*	*0.650*	*1.558*	*Cum*
		1	*2.00*	*1.200*	*0.500*	*1.200*	*Cum*
	D/S Key Floor	*1*	*0.83*	*1.200*	*0.770*	*0.762*	*Cum*
	Toe Wall D/S Portion	*1*	*5.15*	*0.750*	*0.900*	*3.476*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*1.50*	*0.600*	*0.750*	*1.350*	*Cum*
						69.81	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*1.200*	*0.150*	*0.10*	*Cum*
		1	*1.17*	*1.350*	*0.150*	*0.24*	*Cum*
		1	*0.38*	*1.350*	*0.150*	*0.08*	*Cum*
		1	*0.49*	*1.350*	*0.150*	*0.10*	*Cum*
		1	*4.82*	*1.350*	*0.150*	*0.98*	*Cum*
		1	*0.49*	*1.350*	*0.150*	*0.10*	*Cum*
		1	*1.59*	*1.350*	*0.150*	*0.32*	*Cum*
		1	*0.21*	*1.350*	*0.150*	*0.04*	*Cum*
		1	*0.50*	*1.350*	*0.150*	*0.10*	*Cum*
		1	*1.68*	*1.350*	*0.150*	*0.34*	*Cum*
		1	*0.54*	*1.350*	*0.150*	*0.11*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.37*	*2.05*	*0.150*	*0.84*	*Cum*
	Section 2-2	*2*	*3.65*	*1.14*	*0.150*	*1.25*	*Cum*
	Section 3-3	*2*	*3.30*	*1.02*	*0.150*	*1.01*	*Cum*
	Section 5-5	*2*	*2.23*	*2.20*	*0.150*	*1.47*	*Cum*
	Section 6-6	*2*	*0.96*	*1.02*	*0.150*	*0.29*	*Cum*
	Toe Wall D/S Portion	*1*	*5.15*	*0.75*	*0.300*	*1.16*	*Cum*
	Toe Wall D/S Portion	*1*	*4.85*	*0.45*	*0.600*	*1.31*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.60*	*0.150*	*0.27*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.30*	*0.600*	*0.54*	*Cum*
	TOTAL					**10.65**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.14*	*0.450*	*0.450*	*0.46*	*Cum*
		2	*1.14*	*1.102*	*2.174*	*5.48*	*Cum*
		2	*1.14*	*1.904*	*0.800*	*3.48*	*Cum*
	Section 2-2	*2*	*3.65*	*0.450*	*0.450*	*1.48*	*Cum*
		2	*3.65*	*0.645*	*0.650*	*3.06*	*Cum*
		2	*3.65*	*0.990*	*0.800*	*5.78*	*Cum*
	Section 3-3	*2*	*3.02*	*0.450*	*0.450*	*1.22*	*Cum*
		2	*3.02*	*0.585*	*0.450*	*1.59*	*Cum*
		2	*3.02*	*0.870*	*0.650*	*3.41*	*Cum*
	Section 5-5	*2*	*2.19*	*0.450*	*0.450*	*0.89*	*Cum*
		2	*2.19*	*1.102*	*2.174*	*10.47*	*Cum*
		2	*2.19*	*1.904*	*0.500*	*4.16*	*Cum*
	Section 6-6	*2*	*1.39*	*0.450*	*0.450*	*0.56*	*Cum*
		2	*1.39*	*0.585*	*0.450*	*0.73*	*Cum*
		2	*1.39*	*0.870*	*0.500*	*1.21*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Floor	*1*	*0.70*	*1.200*	*1.000*	*0.84*	*Cum*
		1	*6.50*	*1.200*	*0.500*	*3.90*	*Cum*
		1	*4.79*	*1.200*	*0.200*	*1.15*	*Cum*
		1	*0.24*	*1.200*	*0.350*	*0.10*	*Cum*
		1	*0.20*	*1.200*	*0.550*	*0.13*	*Cum*
		1	*1.80*	*1.200*	*0.650*	*1.40*	*Cum*
		1	*0.15*	*1.200*	*0.575*	*0.10*	*Cum*
		1	*1.85*	*1.200*	*0.500*	*1.11*	*Cum*
		1	*0.83*	*1.200*	*1.500*	*1.49*	*Cum*
	Crest	*1*	*1.09*	*1.200*	*1.814*	*2.38*	*Cum*
	TOTAL					**56.59**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.80*	*1.200*	*0.150*	*0.14*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*15.38*	*0.450*	*0.050*	*0.35*	*Cum*
	On Abutment Top (Right Side)	*1*	*15.38*	*0.450*	*0.050*	*0.35*	*Cum*
	TOTAL					**0.84**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**56.59**	**0.003**	**0.170**	**7850.0**	**1332.79**	**Kg**
	Total Weight in Metric Tonne					**1.33**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.14*		*0.450*	*2.06*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.14*		*2.174*	*9.94*	*Sqm*
		4		*1.102*	*2.174*	*9.58*	*Sqm*
		4	*1.14*		*0.800*	*3.66*	*Sqm*
		4		*1.904*	*0.800*	*6.09*	*Sqm*
	Section 2-2	*4*	*3.65*		*0.450*	*6.57*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.65*		*0.650*	*9.49*	*Sqm*
		4		*0.645*	*0.650*	*1.68*	*Sqm*
		4	*3.65*		*0.800*	*11.68*	*Sqm*
		4		*0.990*	*0.800*	*3.17*	*Sqm*
	Section 3-3	*4*	*3.02*		*0.450*	*5.43*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.02*		*0.450*	*5.43*	*Sqm*
		4		*0.585*	*0.450*	*1.05*	*Sqm*
		4	*3.02*		*0.650*	*7.84*	*Sqm*
		4		*0.870*	*0.650*	*2.26*	*Sqm*
	Section 5-5	*4*	*2.19*		*0.450*	*3.93*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.19*		*2.174*	*19.01*	*Sqm*
		4		*1.102*	*2.174*	*9.58*	*Sqm*
		4	*2.19*		*0.500*	*4.37*	*Sqm*
		4		*1.904*	*0.500*	*3.81*	*Sqm*
	Section 6-6	*4*	*1.39*		*0.450*	*2.50*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.39*		*0.450*	*2.50*	*Sqm*
		4		*0.585*	*0.450*	*1.05*	*Sqm*
		4	*1.39*		*0.500*	*2.78*	*Sqm*
		4		*0.870*	*0.500*	*1.74*	*Sqm*
	Floor	*2*	*0.70*		*1.000*	*1.40*	*Sqm*
		2		*1.200*	*1.000*	*2.40*	*Sqm*
		2	*6.50*		*0.500*	*6.50*	*Sqm*
		2		*1.200*	*0.500*	*1.20*	*Sqm*
		2	*0.24*		*0.350*	*0.17*	*Sqm*
		2		*1.200*	*0.350*	*0.84*	*Sqm*
		2	*4.79*		*0.2*	*1.92*	*Sqm*
		2		*1.2*	*0.2*	*0.48*	*Sqm*
		2	*0.24*		*0.35*	*0.17*	*Sqm*
		2		*1.2*	*0.35*	*0.84*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	*1.80*		*0.65*	*2.34*	*Sqm*
		2		*1.2*	*0.65*	*1.56*	*Sqm*
		2	*0.15*		*0.575*	*0.17*	*Sqm*
		2		*1.2*	*0.575*	*1.38*	*Sqm*
		2	*1.85*		*0.500*	*1.85*	*Sqm*
		2		*1.200*	*0.500*	*1.20*	*Sqm*
		2	*0.83*		*1.500*	*2.48*	*Sqm*
		2		*1.200*	*1.500*	*3.60*	*Sqm*
	Crest	*2*	*1.09*		*1.814*	*3.97*	*Sqm*
		2		*1.200*	*1.814*	*4.35*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.15*		*0.300*	*3.09*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*4.85*		*0.600*	*5.82*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.150*	*0.90*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.600*	*3.60*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**195.55**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.50*	*1.961*		*5.88*	*Sqm*
	TOTAL					**5.88**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.50*	*0.600*	*0.300*	**0.27**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.50*	*0.600*	*0.150*	**0.27**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*15.38*	*0.450*		*6.92*	*Sqm*
	On Abutment Top (Right Side)	*1*	*15.38*	*0.450*		*6.92*	*Sqm*
	TOTAL					**13.84**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1		*9.568*		*9.568*	*Cum*
	Abutment						
	Section 1-1	*2*	*1.37*	*2.990*		*8.184*	*Cum*
	Section 2-2	*2*	*3.65*	*0.786*		*5.738*	*Cum*
	Section 3-3	*2*	*3.30*	*0.578*		*3.815*	*Cum*
	Section 5-5	*2*	*2.23*	*2.946*		*13.139*	*Cum*
	Section 6-6	*2*	*0.96*	*0.578*		*1.104*	*Cum*
	Toe wall	*2*	*5.15*	*0.150*	*0.600*	*1.545*	*Cum*
		2	*1.50*	*0.150*	*0.600*	*0.270*	*Cum*
	TOTAL					**43.36**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 0.610 METER AT CH.1.350 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.15*	*1.476*	*0.681*	*2.313*	*Cum*
	Section 2-2	*2*	*2.00*	*1.110*	*0.681*	*3.024*	*Cum*
	Section 3-3	*2*	*2.45*	*0.990*	*0.481*	*2.333*	*Cum*
	Section 5-5	*2*	*2.25*	*1.626*	*0.681*	*4.988*	*Cum*
	Section 6-6	*2*	*0.91*	*0.990*	*0.481*	*0.867*	*Cum*
	U/S Key Floor	*1*	*0.63*	*1.000*	*0.850*	*0.531*	*Cum*
	U/S Floor	*1*	*2.25*	*1.000*	*1.460*	*3.285*	*Cum*
	D/S Floor	*1*	*2.00*	*1.000*	*0.850*	*1.700*	*Cum*
		1	*2.75*	*1.000*	*0.650*	*1.788*	*Cum*
	D/S Key Floor	*1*	*0.63*	*1.000*	*0.850*	*0.531*	*Cum*
	Toe Wall D/S Portion	*1*	*4.80*	*0.750*	*0.900*	*3.240*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*1.50*	*0.600*	*0.750*	*1.350*	*Cum*
						25.95	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*1.000*	*0.150*	*0.08*	*Cum*
		1	*0.78*	*1.000*	*0.150*	*0.12*	*Cum*
		1	*3.63*	*1.000*	*0.150*	*0.54*	*Cum*
		1	*0.28*	*1.000*	*0.150*	*0.04*	*Cum*
		1	*1.39*	*1.000*	*0.150*	*0.21*	*Cum*
		1	*0.78*	*1.000*	*0.150*	*0.12*	*Cum*
		1	*0.54*	*1.000*	*0.150*	*0.08*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.15*	*1.48*	*0.150*	*0.51*	*Cum*
	Section 2-2	*2*	*2.00*	*1.11*	*0.150*	*0.67*	*Cum*
	Section 3-3	*2*	*2.45*	*0.99*	*0.150*	*0.73*	*Cum*
	Section 5-5	*2*	*2.25*	*1.63*	*0.150*	*1.10*	*Cum*
	Section 6-6	*2*	*0.91*	*0.99*	*0.150*	*0.27*	*Cum*
	Toe Wall D/S Portion	*1*	*4.80*	*0.75*	*0.300*	*1.08*	*Cum*
	Toe Wall D/S Portion	*1*	*4.50*	*0.45*	*0.600*	*1.22*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.60*	*0.150*	*0.27*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.30*	*0.600*	*0.54*	*Cum*
	TOTAL					**7.57**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.03*	*0.450*	*0.450*	*0.42*	*Cum*
		2	*1.03*	*0.813*	*1.210*	*2.03*	*Cum*
		2	*1.03*	*1.326*	*0.500*	*1.37*	*Cum*
	Section 2-2	*2*	*2.00*	*0.450*	*0.450*	*0.81*	*Cum*
		2	*2.00*	*0.630*	*0.600*	*1.51*	*Cum*
		2	*2.00*	*0.960*	*0.500*	*1.92*	*Cum*
	Section 3-3	*2*	*2.18*	*0.450*	*0.450*	*0.88*	*Cum*
		2	*2.18*	*0.570*	*0.400*	*0.99*	*Cum*
		2	*2.18*	*0.840*	*0.500*	*1.83*	*Cum*
	Section 5-5	*2*	*2.20*	*0.450*	*0.450*	*0.89*	*Cum*
		2	*2.20*	*0.813*	*1.210*	*4.33*	*Cum*
		2	*2.20*	*1.326*	*0.500*	*2.92*	*Cum*
	Section 6-6	*2*	*1.33*	*0.450*	*0.450*	*0.54*	*Cum*
		2	*1.33*	*0.570*	*0.400*	*0.61*	*Cum*
		2	*1.33*	*0.840*	*0.500*	*1.12*	*Cum*
	Floor	*1*	*0.63*	*1.000*	*0.700*	*0.44*	*Cum*
		1	*4.25*	*1.000*	*0.500*	*2.13*	*Cum*
		1	*0.31*	*1.000*	*0.200*	*0.06*	*Cum*
		1	*0.20*	*1.000*	*0.400*	*0.08*	*Cum*
		1	*2.55*	*1.000*	*0.500*	*1.28*	*Cum*
		1	*0.63*	*1.000*	*0.700*	*0.44*	*Cum*
	Crest	*1*	*0.74*	*1.000*	*0.885*	*0.65*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	TOTAL					**27.23**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.60*	*1.000*	*0.150*	*0.09*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*10.08*	*0.450*	*0.050*	*0.23*	*Cum*
	On Abutment Top (Right Side)	*1*	*10.08*	*0.450*	*0.050*	*0.23*	*Cum*
	TOTAL					**0.54**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**27.23**	**0.003**	**0.082**	**7850.0**	**641.33**	**Kg**
	Total Weight in Metric Tonne					**0.64**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.03*		*0.450*	*1.86*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.03*		*1.210*	*4.99*	*Sqm*
		4		*0.813*	*1.210*	*3.93*	*Sqm*
		4	*1.03*		*0.500*	*2.06*	*Sqm*
		4		*1.326*	*0.500*	*2.65*	*Sqm*
	Section 2-2	*4*	*2.00*		*0.450*	*3.60*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.00*		*0.600*	*4.80*	*Sqm*
		4		*0.630*	*0.600*	*1.51*	*Sqm*
		4	*2.00*		*0.500*	*4.00*	*Sqm*
		4		*0.960*	*0.500*	*1.92*	*Sqm*
	Section 3-3	*4*	*2.18*		*0.450*	*3.92*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.18*		*0.400*	*3.49*	*Sqm*
		4		*0.570*	*0.400*	*0.91*	*Sqm*
		4	*2.18*		*0.500*	*4.36*	*Sqm*
		4		*0.840*	*0.500*	*1.68*	*Sqm*
	Section 5-5	*4*	*2.20*		*0.450*	*3.96*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.20*		*1.210*	*10.65*	*Sqm*
		4		*0.813*	*1.210*	*3.93*	*Sqm*
		4	*2.20*		*0.500*	*4.40*	*Sqm*
		4		*1.326*	*0.500*	*2.65*	*Sqm*
	Section 6-6	*4*	*1.33*		*0.450*	*2.39*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.33*		*0.400*	*2.13*	*Sqm*
		4		*0.570*	*0.400*	*0.91*	*Sqm*
		4	*1.33*		*0.500*	*2.66*	*Sqm*
		4		*0.840*	*0.500*	*1.68*	*Sqm*
	Floor	*2*	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*1.000*	*0.700*	*1.40*	*Sqm*
		2	*4.25*		*0.500*	*4.25*	*Sqm*
		2		*1.000*	*0.500*	*1.00*	*Sqm*
		2	*0.31*		*0.200*	*0.12*	*Sqm*
		2		*1.000*	*0.200*	*0.40*	*Sqm*
		2	*0.20*		*0.400*	*0.16*	*Sqm*
		2		*1.000*	*0.400*	*0.80*	*Sqm*
		2	*2.55*		*0.500*	*2.55*	*Sqm*
		2		*1.000*	*0.500*	*1.00*	*Sqm*
		2	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*1.000*	*0.700*	*1.40*	*Sqm*
	Crest	*2*	*0.74*		*0.885*	*1.31*	*Sqm*
		2		*1.000*	*0.885*	*1.77*	*Sqm*
	Toe Wall D/S Portion	*2*	*4.80*		*0.300*	*2.88*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*4.50*		*0.600*	*5.40*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.150*	*0.90*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.600*	*3.60*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**117.87**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.50*	*1.871*		*5.61*	*Sqm*
	TOTAL					**5.61**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.50*	*0.400*	*0.300*	**0.18**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.50*	*0.400*	*0.150*	**0.18**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*10.08*	*0.450*		*4.54*	*Sqm*
	On Abutment Top (Right Side)	*1*	*10.08*	*0.450*		*4.54*	*Sqm*
	TOTAL					**9.07**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	*1*		*3.482*		*3.48*	*Cum*
	Abutment						
	Section 1-1	*2*	*1.15*	*1.390*		*3.198*	*Cum*
	Section 2-2	*2*	*2.00*	*0.693*		*2.772*	*Cum*
	Section 3-3	*2*	*2.45*	*0.513*		*2.514*	*Cum*
	Section 5-5	*2*	*2.25*	*1.390*		*6.262*	*Cum*
	Section 6-6	*2*	*0.91*	*0.513*		*0.934*	*Cum*
	Toe wall	*2*	*4.80*	*0.150*	*0.600*	*1.440*	*Cum*
		2	*1.50*	*0.150*	*0.600*	*0.270*	*Cum*
	TOTAL					**20.87**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF SHARDA TYPE FALL FOR SALOPURA MINOR						
	SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH.0.487 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.26*	*1.902*	*1.902*	*9.113*	*Cum*
	Section 2-2	*2*	*3.50*	*1.170*	*1.902*	*15.568*	*Cum*
	Section 3-3	*2*	*2.22*	*1.050*	*1.702*	*7.935*	*Cum*
	Section 5-5	*2*	*2.37*	*2.052*	*1.902*	*18.484*	*Cum*
	Section 6-6	*2*	*1.00*	*1.050*	*1.702*	*3.574*	*Cum*
	U/S Key Floor	*1*	*0.68*	*1.200*	*1.050*	*0.851*	*Cum*
	U/S Floor	*1*	*3.00*	*1.200*	*2.220*	*7.992*	*Cum*
	D/S Floor	*1*	*3.50*	*1.200*	*0.850*	*3.570*	*Cum*
		1	*2.85*	*1.200*	*0.650*	*2.223*	*Cum*
	D/S Key Floor	*1*	*0.76*	*1.200*	*1.400*	*1.281*	*Cum*
	Toe Wall D/S Portion	*1*	*5.30*	*0.750*	*0.900*	*3.578*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*1.75*	*0.600*	*0.750*	*1.575*	*Cum*
						75.74	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*1.200*	*0.150*	*0.10*	*Cum*
		1	*1.01*	*1.200*	*0.150*	*0.18*	*Cum*
		1	*0.55*	*1.200*	*0.150*	*0.10*	*Cum*
		1	*0.21*	*1.200*	*0.150*	*0.04*	*Cum*
		1	*4.93*	*1.200*	*0.150*	*0.89*	*Cum*
		1	*0.49*	*1.200*	*0.150*	*0.09*	*Cum*
		1	*0.86*	*1.200*	*0.150*	*0.16*	*Cum*
		1	*1.40*	*1.200*	*0.150*	*0.25*	*Cum*
		1	*0.54*	*1.200*	*0.150*	*0.10*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.26*	*1.902*	*0.150*	*0.72*	*Cum*
	Section 2-2	*2*	*3.50*	*1.170*	*0.150*	*1.23*	*Cum*
	Section 3-3	*2*	*2.22*	*1.050*	*0.150*	*0.70*	*Cum*
	Section 5-5	*2*	*2.37*	*2.052*	*0.150*	*1.46*	*Cum*
	Section 6-6	*2*	*1.00*	*1.050*	*0.150*	*0.32*	*Cum*
	Toe Wall D/S Portion	*1*	*5.30*	*0.750*	*0.300*	*1.19*	*Cum*
	Toe Wall D/S Portion	*1*	*5.00*	*0.450*	*0.600*	*1.35*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.75*	*0.600*	*0.150*	*0.32*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.75*	*0.300*	*0.600*	*0.63*	*Cum*
	TOTAL					**9.80**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.11*	*0.450*	*0.450*	*0.45*	*Cum*
		2	*1.11*	*1.026*	*1.920*	*4.37*	*Cum*
		2	*1.11*	*1.752*	*0.650*	*2.53*	*Cum*
	Section 2-2	*2*	*3.50*	*0.450*	*0.450*	*1.42*	*Cum*
		2	*3.50*	*0.660*	*0.700*	*3.23*	*Cum*
		2	*3.50*	*1.020*	*0.650*	*4.64*	*Cum*
	Section 3-3	*2*	*1.90*	*0.450*	*0.450*	*0.77*	*Cum*
		2	*1.90*	*0.600*	*0.500*	*1.14*	*Cum*
		2	*1.90*	*0.900*	*0.500*	*1.71*	*Cum*
	Section 5-5	*2*	*2.32*	*0.450*	*0.450*	*0.94*	*Cum*
		2	*2.32*	*1.026*	*1.920*	*9.16*	*Cum*
		2	*2.32*	*1.752*	*0.500*	*4.07*	*Cum*
	Section 6-6	*2*	*1.53*	*0.450*	*0.450*	*0.62*	*Cum*
		2	*1.53*	*0.600*	*0.500*	*0.92*	*Cum*
		2	*1.53*	*0.900*	*0.500*	*1.37*	*Cum*
	Floor	*1*	*0.68*	*1.200*	*0.900*	*0.73*	*Cum*
		1	*1.75*	*1.200*	*0.500*	*1.05*	*Cum*
		1	*0.20*	*1.200*	*0.575*	*0.14*	*Cum*
		1	*4.75*	*1.200*	*0.650*	*3.70*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		1	*0.35*	*1.200*	*0.232*	*0.10*	*Cum*
		1	*0.20*	*1.200*	*0.400*	*0.10*	*Cum*
		1	*2.30*	*1.200*	*0.500*	*1.38*	*Cum*
		1	*0.76*	*1.200*	*1.250*	*1.14*	*Cum*
	Crest	*1*	*1.00*	*1.200*	*1.495*	*1.79*	*Cum*
	TOTAL					**47.47**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.75*	*1.200*	*0.150*	*0.14*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*11.20*	*0.450*	*0.050*	*0.25*	*Cum*
	On Abutment Top (Right Side)	*1*	*11.20*	*0.450*	*0.050*	*0.25*	*Cum*
	TOTAL					**0.64**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**47.47**	**0.00**	**0.142**	**7850.0**	**1117.82**	**Kg**
	Total Weight in Metric Tonne					**1.12**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.11*		*0.450*	*2.00*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.11*		*1.920*	*8.52*	*Sqm*
		4		*1.026*	*1.920*	*7.88*	*Sqm*
		4	*1.11*		*0.650*	*2.89*	*Sqm*
		4		*1.752*	*0.650*	*4.56*	*Sqm*
	Section 2-2	*4*	*3.50*		*0.450*	*6.30*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.50*		*0.700*	*9.79*	*Sqm*
		4		*0.660*	*0.700*	*1.85*	*Sqm*
		4	*3.50*		*0.650*	*9.09*	*Sqm*
		4		*1.020*	*0.650*	*2.65*	*Sqm*
	Section 3-3	*4*	*1.90*		*0.450*	*3.42*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.90*		*0.500*	*3.80*	*Sqm*
		4		*0.600*	*0.500*	*1.20*	*Sqm*
		4	*1.90*		*0.500*	*3.80*	*Sqm*
		4		*0.900*	*0.500*	*1.80*	*Sqm*
	Section 5-5	*4*	*2.32*		*0.450*	*4.18*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.32*		*1.920*	*17.85*	*Sqm*
		4		*1.026*	*1.920*	*7.88*	*Sqm*
		4	*2.32*		*0.500*	*4.65*	*Sqm*
		4		*1.752*	*0.500*	*3.50*	*Sqm*
	Section 6-6	*4*	*1.53*		*0.450*	*2.75*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.53*		*0.500*	*3.05*	*Sqm*
		4		*0.600*	*0.500*	*1.20*	*Sqm*
		4	*1.53*		*0.500*	*3.05*	*Sqm*
		4		*0.900*	*0.500*	*1.80*	*Sqm*
	Floor	*2*	*0.68*		*0.900*	*1.22*	*Sqm*
		2		*1.200*	*0.900*	*2.16*	*Sqm*
		2	*1.75*		*0.500*	*1.75*	*Sqm*
		2		*1.200*	*0.500*	*1.20*	*Sqm*
		2	*4.75*		*0.650*	*6.17*	*Sqm*
		2		*1.200*	*0.650*	*1.56*	*Sqm*
		2	*0.35*		*0.232*	*0.16*	*Sqm*
		2		*1.200*	*0.232*	*0.56*	*Sqm*
		2	*0.20*		*0.400*	*0.16*	*Sqm*
		2		*1.200*	*0.400*	*0.96*	*Sqm*
		2	*2.300*		*0.500*	*2.30*	*Sqm*
		2		*1.200*	*0.500*	*1.20*	*Sqm*
		2	*0.76*		*1.250*	*1.91*	*Sqm*
		2		*1.200*	*1.250*	*3.00*	*Sqm*
	Crest	*2*	*1.00*		*1.495*	*2.99*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2		*1.200*	*1.495*	*3.59*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.30*		*0.300*	*3.18*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.00*		*0.600*	*6.00*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.150*	*1.05*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.600*	*4.20*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**170.90**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.75*	*2.051*		*7.18*	*Sqm*
	TOTAL					**7.18**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.75*	*0.600*	*0.300*	**0.32**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.75*	*0.600*	*0.150*	**0.32**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*11.20*	*0.450*		*5.04*	*Sqm*
	On Abutment Top (Right Side)	*1*	*11.20*	*0.450*		*5.04*	*Sqm*
	TOTAL					**10.08**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1		7.818		7.82	Cum
	Abutment						
	Section 1-1	2	*1.26*	*0.654*		*1.647*	*Cum*
	Section 2-2	2	*3.50*	*0.635*		*4.442*	*Cum*
	Section 3-3	2	*2.22*	*0.570*		*2.531*	*Cum*
	Section 5-5	2	*2.37*	*0.654*		*3.097*	*Cum*
	Section 6-6	2	*1.00*	*0.570*		*1.140*	*Cum*
	Toe wall	2	*5.30*	*0.150*	*0.600*	*1.590*	*Cum*
		2	*1.75*	0.150	*0.600*	*0.315*	*Cum*
	TOTAL					**22.58**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 2.134 METER AT CH.1.185 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.64*	*2.402*	*2.350*	*18.548*	*Cum*
	Section 2-2	*2*	*4.25*	*1.122*	*2.350*	*22.401*	*Cum*
	Section 3-3	*2*	*4.45*	*1.002*	*2.150*	*19.182*	*Cum*
	Section 5-5	*2*	*2.26*	*2.552*	*2.350*	*27.161*	*Cum*
	Section 6-6	*2*	*1.05*	*1.002*	*2.150*	*4.515*	*Cum*
	U/S Key Floor	*1*	*0.73*	*1.200*	*1.250*	*1.088*	*Cum*
	U/S Floor	*1*	*4.00*	*1.200*	*3.534*	*16.963*	*Cum*
	D/S Floor	*1*	*4.25*	*1.200*	*1.000*	*5.100*	*Cum*
		1	*5.15*	*1.200*	*0.800*	*4.944*	*Cum*
	D/S Key Floor	*1*	*0.93*	*1.200*	*2.050*	*2.276*	*Cum*
	Toe Wall D/S Portion	*1*	*5.30*	*0.750*	*0.900*	*3.578*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*1.50*	*0.600*	*0.750*	*1.350*	*Cum*
						127.11	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*1.200*	*0.150*	*0.10*	*Cum*
		1	*1.23*	*1.200*	*0.150*	*0.22*	*Cum*
		1	*0.71*	*1.200*	*0.150*	*0.13*	*Cum*
		1	*0.57*	*1.200*	*0.150*	*0.10*	*Cum*
		1	*6.26*	*1.200*	*0.150*	*1.13*	*Cum*
		1	*0.57*	*1.200*	*0.150*	*0.10*	*Cum*
		1	*2.64*	*1.200*	*0.150*	*0.48*	*Cum*
		1	*2.12*	*1.200*	*0.150*	*0.38*	*Cum*
		1	*0.54*	*1.200*	*0.150*	*0.10*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.64*	*2.402*	*0.150*	*1.18*	*Cum*
	Section 2-2	*2*	*4.25*	*1.122*	*0.150*	*1.43*	*Cum*
	Section 3-3	*2*	*4.45*	*1.002*	*0.150*	*1.34*	*Cum*
	Section 5-5	*2*	*2.26*	*2.552*	*0.150*	*1.73*	*Cum*
	Section 6-6	*2*	*1.05*	*1.002*	*0.150*	*0.32*	*Cum*
	Toe Wall D/S Portion	*1*	*5.30*	*0.750*	*0.300*	*1.19*	*Cum*
	Toe Wall D/S Portion	*1*	*5.00*	*0.450*	*0.600*	*1.35*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.600*	*0.150*	*0.27*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.300*	*0.600*	*0.54*	*Cum*
	TOTAL					**12.09**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.49*	*0.450*	*0.450*	*0.60*	*Cum*
		2	*1.49*	*1.276*	*2.754*	*10.49*	*Cum*
		2	*1.49*	*2.252*	*1.050*	*7.06*	*Cum*
	Section 2-2	*2*	*4.25*	*0.450*	*0.450*	*1.72*	*Cum*
		2	*4.25*	*0.636*	*0.620*	*3.35*	*Cum*
		2	*4.25*	*0.972*	*1.050*	*8.67*	*Cum*
	Section 3-3	*2*	*4.18*	*0.450*	*0.450*	*1.69*	*Cum*
		2	*4.18*	*0.576*	*0.420*	*2.02*	*Cum*
		2	*4.18*	*0.852*	*0.850*	*6.05*	*Cum*
	Section 5-5	*2*	*2.22*	*0.450*	*0.450*	*0.90*	*Cum*
		2	*2.22*	*1.276*	*2.754*	*15.61*	*Cum*
		2	*2.22*	*2.252*	*0.650*	*6.50*	*Cum*
	Section 6-6	*2*	*1.55*	*0.450*	*0.450*	*0.63*	*Cum*
		2	*1.55*	*0.576*	*0.420*	*0.75*	*Cum*
		2	*1.55*	*0.852*	*0.850*	*2.24*	*Cum*
	Floor	*1*	*0.73*	*1.200*	*1.100*	*0.96*	*Cum*
		1	*1.87*	*1.200*	*0.650*	*1.45*	*Cum*
		1	*0.40*	*1.200*	*0.850*	*0.41*	*Cum*
		1	*5.98*	*1.200*	*1.050*	*7.54*	*Cum*
		1	*0.40*	*1.200*	*0.352*	*0.17*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		1	*0.20*	*1.200*	*0.750*	*0.18*	*Cum*
		1	*4.55*	*1.200*	*0.850*	*4.64*	*Cum*
		1	*0.93*	*1.200*	*1.900*	*2.11*	*Cum*
	Crest	*1*	*1.34*	*1.200*	*2.354*	*3.79*	*Cum*
	TOTAL					**89.54**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.95*	*1.200*	*0.150*	*0.17*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*14.69*	*0.450*	*0.050*	*0.33*	*Cum*
	On Abutment Top (Right Side)	*1*	*14.69*	*0.450*	*0.050*	*0.33*	*Cum*
	TOTAL					**0.83**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**89.54**	**0.00**	**0.269**	**7850.0**	**2108.61**	**Kg**
	Total Weight in Metric Tonne					**2.11**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.49*		*0.450*	*2.69*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.49*		*2.754*	*16.45*	*Sqm*
		4		*1.276*	*2.754*	*14.06*	*Sqm*
		4	*1.49*		*1.050*	*6.27*	*Sqm*
		4		*2.252*	*1.050*	*9.46*	*Sqm*
	Section 2-2	*4*	*4.25*		*0.450*	*7.65*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.25*		*0.620*	*10.54*	*Sqm*
		4		*0.636*	*0.620*	*1.58*	*Sqm*
		4	*4.25*		*1.050*	*17.84*	*Sqm*
		4		*0.972*	*1.050*	*4.08*	*Sqm*
	Section 3-3	*4*	*4.18*		*0.450*	*7.52*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.18*		*0.420*	*7.02*	*Sqm*
		4		*0.576*	*0.420*	*0.97*	*Sqm*
		4	*4.18*		*0.850*	*14.20*	*Sqm*
		4		*0.852*	*0.850*	*2.90*	*Sqm*
	Section 5-5	*4*	*2.22*		*0.450*	*4.00*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.22*		*2.754*	*24.46*	*Sqm*
		4		*1.276*	*2.754*	*14.06*	*Sqm*
		4	*2.22*		*0.650*	*5.77*	*Sqm*
		4		*2.252*	*0.650*	*5.86*	*Sqm*
	Section 6-6	*4*	*1.55*		*0.450*	*2.79*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.55*		*0.420*	*2.60*	*Sqm*
		4		*0.576*	*0.420*	*0.97*	*Sqm*
		4	*1.55*		*0.850*	*5.27*	*Sqm*
		4		*0.852*	*0.850*	*2.90*	*Sqm*
	Floor	*2*	*0.73*		*1.100*	*1.60*	*Sqm*
		2		*1.200*	*1.100*	*2.64*	*Sqm*
		2	*1.87*		*0.650*	*2.42*	*Sqm*
		2		*1.200*	*0.650*	*1.56*	*Sqm*
		2	*5.98*		*1.050*	*12.57*	*Sqm*
		2		*1.200*	*1.050*	*2.52*	*Sqm*
		2	*0.40*		*0.352*	*0.28*	*Sqm*
		2		*1.200*	*0.352*	*0.84*	*Sqm*
		2	*0.20*		*0.750*	*0.30*	*Sqm*
		2		*1.200*	*0.750*	*1.80*	*Sqm*
		2	*4.550*		*0.850*	*7.74*	*Sqm*
		2		*1.200*	*0.850*	*2.04*	*Sqm*
		2	*0.93*		*1.900*	*3.52*	*Sqm*
		2		*1.200*	*1.900*	*4.56*	*Sqm*
	Crest	*2*	*1.34*		*2.354*	*6.32*	*Sqm*
		2		*1.200*	*2.354*	*5.65*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Toe Wall D/S Portion	*2*	*5.30*		*0.300*	*3.18*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.00*		*0.600*	*6.00*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.150*	*0.90*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.600*	*3.60*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**268.01**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.50*	*1.907*		*5.72*	*Sqm*
	TOTAL					**5.72**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.50*	*0.600*	*0.300*	**0.27**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.50*	*0.600*	*0.150*	**0.27**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*14.69*	*0.450*		*6.61*	*Sqm*
	On Abutment Top (Right Side)	*1*	*14.69*	*0.450*		*6.61*	*Sqm*
	TOTAL					**13.22**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1		18.690		18.69	Cum
	Abutment						
	Section 1-1	2	*1.64*	*0.551*		*1.811*	*Cum*
	Section 2-2	2	*4.25*	*0.546*		*4.639*	*Cum*
	Section 3-3	2	*4.45*	*0.554*		*4.933*	*Cum*
	Section 5-5	2	*2.26*	*0.551*		*2.496*	*Cum*
	Section 6-6	2	*1.05*	*0.554*		*1.161*	*Cum*
	Toe wall	2	*5.30*	*0.150*	*0.600*	*1.590*	*Cum*
		2	*1.50*	0.150	*0.600*	*0.270*	*Cum*
	TOTAL					**35.59**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH.2.800 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.20*	*1.602*	*2.004*	*7.683*	*Cum*
	Section 2-2	*2*	*2.50*	*1.050*	*2.004*	*10.521*	*Cum*
	Section 3-3	*2*	*2.70*	*0.930*	*1.804*	*9.060*	*Cum*
	Section 5-5	*2*	*2.39*	*1.752*	*2.004*	*16.800*	*Cum*
	Section 6-6	*2*	*0.82*	*0.930*	*1.804*	*2.751*	*Cum*
	U/S Key Floor	*1*	*0.64*	*0.750*	*0.900*	*0.430*	*Cum*
	U/S Floor	*1*	*2.75*	*0.750*	*2.170*	*4.476*	*Cum*
	D/S Floor	*1*	*2.50*	*0.750*	*0.850*	*1.594*	*Cum*
		1	*3.30*	*0.750*	*0.650*	*1.609*	*Cum*
	D/S Key Floor	*1*	*0.73*	*0.750*	*1.250*	*0.680*	*Cum*
	Toe Wall D/S Portion	*1*	*4.25*	*0.750*	*0.900*	*2.869*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*1.50*	*0.600*	*0.750*	*1.350*	*Cum*
						59.82	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*0.750*	*0.150*	*0.06*	*Cum*
		1	*0.84*	*0.750*	*0.150*	*0.09*	*Cum*
		1	*0.51*	*0.750*	*0.150*	*0.06*	*Cum*
		1	*0.14*	*0.750*	*0.150*	*0.02*	*Cum*
		1	*3.89*	*0.750*	*0.150*	*0.44*	*Cum*
		1	*0.42*	*0.750*	*0.150*	*0.05*	*Cum*
		1	*1.44*	*0.750*	*0.150*	*0.16*	*Cum*
		1	*1.23*	*0.750*	*0.150*	*0.14*	*Cum*
		1	*0.54*	*0.750*	*0.150*	*0.06*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.20*	*1.602*	*0.150*	*0.58*	*Cum*
	Section 2-2	*2*	*2.50*	*1.050*	*0.150*	*0.79*	*Cum*
	Section 3-3	*2*	*2.70*	*0.930*	*0.150*	*0.75*	*Cum*
	Section 5-5	*2*	*2.39*	*1.752*	*0.150*	*1.26*	*Cum*
	Section 6-6	*2*	*0.82*	*0.930*	*0.150*	*0.23*	*Cum*
	Toe Wall D/S Portion	*1*	*4.25*	*0.750*	*0.300*	*0.96*	*Cum*
	Toe Wall D/S Portion	*1*	*3.95*	*0.450*	*0.600*	*1.07*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.600*	*0.150*	*0.27*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.300*	*0.600*	*0.54*	*Cum*
	TOTAL					**7.51**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.05*	*0.450*	*0.450*	*0.42*	*Cum*
		2	*1.05*	*0.876*	*1.420*	*2.60*	*Cum*
		2	*1.05*	*1.452*	*0.600*	*1.82*	*Cum*
	Section 2-2	*2*	*2.50*	*0.450*	*0.450*	*1.01*	*Cum*
		2	*2.50*	*0.600*	*0.500*	*1.50*	*Cum*
		2	*2.50*	*0.900*	*0.600*	*2.70*	*Cum*
	Section 3-3	*2*	*2.46*	*0.450*	*0.450*	*1.00*	*Cum*
		2	*2.46*	*0.540*	*0.300*	*0.80*	*Cum*
		2	*2.46*	*0.780*	*0.500*	*1.92*	*Cum*
	Section 5-5	*2*	*2.35*	*0.450*	*0.450*	*0.95*	*Cum*
		2	*2.35*	*0.876*	*1.420*	*5.84*	*Cum*
		2	*2.35*	*1.452*	*0.500*	*3.41*	*Cum*
	Section 6-6	*2*	*1.29*	*0.450*	*0.450*	*0.52*	*Cum*
		2	*1.29*	*0.540*	*0.300*	*0.42*	*Cum*
		2	*1.29*	*0.780*	*0.500*	*1.00*	*Cum*
	Floor	*1*	*0.64*	*0.750*	*0.750*	*0.36*	*Cum*
		1	*1.50*	*0.750*	*0.500*	*0.56*	*Cum*
		1	*0.10*	*0.750*	*0.550*	*0.04*	*Cum*
		1	*3.66*	*0.750*	*0.600*	*1.65*	*Cum*
		1	*0.30*	*0.750*	*0.257*	*0.06*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		1	*0.20*	*0.750*	*0.400*	*0.06*	*Cum*
		1	*2.80*	*0.750*	*0.500*	*1.05*	*Cum*
		1	*0.73*	*0.750*	*1.100*	*0.60*	*Cum*
	Crest	*1*	*0.93*	*0.750*	*1.430*	*1.00*	*Cum*
	TOTAL					**31.30**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.70*	*0.750*	*0.150*	*0.08*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*10.42*	*0.450*	*0.050*	*0.23*	*Cum*
	On Abutment Top (Right Side)	*1*	*10.42*	*0.450*	*0.050*	*0.23*	*Cum*
	TOTAL					**0.55**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**31.30**	**0.00**	**0.094**	**7850.0**	**737.01**	**Kg**
	Total Weight in Metric Tonne					**0.74**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.05*		*0.450*	*1.88*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.05*		*1.420*	*5.95*	*Sqm*
		4		*0.876*	*1.420*	*4.98*	*Sqm*
		4	*1.05*		*0.600*	*2.51*	*Sqm*
		4		*1.452*	*0.600*	*3.48*	*Sqm*
	Section 2-2	*4*	*2.50*		*0.450*	*4.50*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.50*		*0.500*	*5.00*	*Sqm*
		4		*0.600*	*0.500*	*1.20*	*Sqm*
		4	*2.50*		*0.600*	*6.00*	*Sqm*
		4		*0.900*	*0.600*	*2.16*	*Sqm*
	Section 3-3	*4*	*2.46*		*0.450*	*4.43*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.46*		*0.300*	*2.95*	*Sqm*
		4		*0.540*	*0.300*	*0.65*	*Sqm*
		4	*2.46*		*0.500*	*4.92*	*Sqm*
		4		*0.780*	*0.500*	*1.56*	*Sqm*
	Section 5-5	*4*	*2.35*		*0.450*	*4.23*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.35*		*1.420*	*13.34*	*Sqm*
		4		*0.876*	*1.420*	*4.98*	*Sqm*
		4	*2.35*		*0.500*	*4.70*	*Sqm*
		4		*1.452*	*0.500*	*2.90*	*Sqm*
	Section 6-6	*4*	*1.29*		*0.450*	*2.31*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.29*		*0.300*	*1.54*	*Sqm*
		4		*0.540*	*0.300*	*0.65*	*Sqm*
		4	*1.29*		*0.500*	*2.57*	*Sqm*
		4		*0.780*	*0.500*	*1.56*	*Sqm*
	Floor	*2*	*0.64*		*0.750*	*0.96*	*Sqm*
		2		*0.750*	*0.750*	*1.13*	*Sqm*
		2	*1.50*		*0.500*	*1.50*	*Sqm*
		2		*0.750*	*0.500*	*0.75*	*Sqm*
		2	*3.66*		*0.600*	*4.39*	*Sqm*
		2		*0.750*	*0.600*	*0.90*	*Sqm*
		2	*0.30*		*0.257*	*0.15*	*Sqm*
		2		*0.750*	*0.257*	*0.39*	*Sqm*
		2	*0.20*		*0.400*	*0.16*	*Sqm*
		2		*0.750*	*0.400*	*0.60*	*Sqm*
		2	*2.800*		*0.500*	*2.80*	*Sqm*
		2		*0.750*	*0.500*	*0.75*	*Sqm*
		2	*0.73*		*1.100*	*1.60*	*Sqm*
		2		*0.750*	*1.100*	*1.65*	*Sqm*
	Crest	*2*	*0.93*		*1.430*	*2.66*	*Sqm*
		2		*0.750*	*1.430*	*2.15*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Toe Wall D/S Portion	*2*	*4.25*		*0.300*	*2.55*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*3.95*		*0.600*	*4.74*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.150*	*0.90*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.600*	*3.60*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**131.39**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.50*	*1.691*		*5.07*	*Sqm*
	TOTAL					**5.07**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.50*	*0.150*	*0.300*	**0.07**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.50*	*0.150*	*0.150*	**0.07**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*10.42*	*0.450*		*4.69*	*Sqm*
	On Abutment Top (Right Side)	*1*	*10.42*	*0.450*		*4.69*	*Sqm*
	TOTAL					**9.38**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1		5.643		5.64	Cum
	Abutment						
	Section 1-1	2	*1.20*	*1.160*		*2.776*	*Cum*
	Section 2-2	2	*2.50*	*0.585*		*2.925*	*Cum*
	Section 3-3	2	*2.70*	*0.408*		*2.203*	*Cum*
	Section 5-5	2	*2.39*	*1.160*		*5.551*	*Cum*
	Section 6-6	2	*0.82*	*0.408*		*0.669*	*Cum*
	Toe wall	2	*4.25*	*0.150*	*0.600*	*1.275*	*Cum*
		2	*1.50*	0.150	*0.600*	*0.270*	*Cum*
	TOTAL					**21.31**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF SHARDA TYPE FALL FOR SINGHI SUB DISTRIBUTARY						
	SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH.0.650 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.59*	*2.262*	*2.828*	*20.342*	*Cum*
	Section 2-2	*2*	*4.50*	*1.530*	*2.828*	*38.942*	*Cum*
	Section 3-3	*2*	*2.70*	*1.410*	*2.628*	*20.010*	*Cum*
	Section 5-5	*2*	*6.68*	*2.412*	*2.828*	*91.096*	*Cum*
	Section 6-6	*2*	*3.74*	*1.410*	*2.628*	*27.717*	*Cum*
	U/S Key Floor	*1*	*0.65*	*3.950*	*0.950*	*2.439*	*Cum*
	U/S Floor	*1*	*3.50*	*3.950*	*2.370*	*32.765*	*Cum*
	D/S Floor	*1*	*4.50*	*3.950*	*0.950*	*16.886*	*Cum*
		1	*3.40*	*3.950*	*0.750*	*10.073*	*Cum*
	D/S Key Floor	*1*	*0.80*	*3.950*	*1.550*	*4.898*	*Cum*
	Toe Wall D/S Portion	*1*	*14.25*	*0.750*	*0.900*	*9.619*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*3.50*	*0.600*	*0.750*	*3.150*	*Cum*
						277.94	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*3.950*	*0.150*	*0.32*	*Cum*
		1	*0.89*	*3.950*	*0.150*	*0.53*	*Cum*
		1	*0.79*	*3.950*	*0.150*	*0.47*	*Cum*
		1	*0.28*	*3.950*	*0.150*	*0.17*	*Cum*
		1	*6.53*	*3.950*	*0.150*	*3.87*	*Cum*
		1	*0.57*	*3.950*	*0.150*	*0.33*	*Cum*
		1	*0.89*	*3.950*	*0.150*	*0.53*	*Cum*
		1	*1.57*	*3.950*	*0.150*	*0.93*	*Cum*
		1	*0.54*	*3.950*	*0.150*	*0.32*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.59*	*2.262*	*0.150*	*1.08*	*Cum*
	Section 2-2	*2*	*4.50*	*1.530*	*0.150*	*2.07*	*Cum*
	Section 3-3	*2*	*2.70*	*1.410*	*0.150*	*1.14*	*Cum*
	Section 5-5	*2*	*6.68*	*2.412*	*0.150*	*4.83*	*Cum*
	Section 6-6	*2*	*3.74*	*1.410*	*0.150*	*1.58*	*Cum*
	Toe Wall D/S Portion	*1*	*14.25*	*0.750*	*0.300*	*3.21*	*Cum*
	Toe Wall D/S Portion	*1*	*13.95*	*0.450*	*0.600*	*3.77*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*3.50*	*0.600*	*0.150*	*0.63*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*3.50*	*0.300*	*0.600*	*1.26*	*Cum*
	TOTAL					**27.03**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.30*	*0.450*	*0.450*	*0.52*	*Cum*
		2	*1.30*	*1.206*	*2.520*	*7.88*	*Cum*
		2	*1.30*	*2.112*	*0.800*	*4.38*	*Cum*
	Section 2-2	*2*	*4.50*	*0.450*	*0.450*	*1.82*	*Cum*
		2	*4.50*	*0.840*	*1.300*	*9.83*	*Cum*
		2	*4.50*	*1.380*	*0.800*	*9.94*	*Cum*
	Section 3-3	*2*	*2.22*	*0.450*	*0.450*	*0.90*	*Cum*
		2	*2.22*	*0.780*	*1.100*	*3.81*	*Cum*
		2	*2.22*	*1.260*	*0.600*	*3.36*	*Cum*
	Section 5-5	*2*	*6.63*	*0.450*	*0.450*	*2.69*	*Cum*
		2	*6.63*	*1.206*	*2.520*	*40.32*	*Cum*
		2	*6.63*	*2.112*	*0.600*	*16.81*	*Cum*
	Section 6-6	*2*	*4.45*	*0.450*	*0.450*	*1.80*	*Cum*
		2	*4.45*	*0.780*	*1.100*	*7.63*	*Cum*
		2	*4.45*	*1.260*	*0.600*	*6.72*	*Cum*
	Floor	*1*	*0.65*	*3.950*	*0.800*	*2.05*	*Cum*
		1	*1.80*	*3.950*	*0.600*	*4.27*	*Cum*
		1	*0.20*	*3.950*	*0.700*	*0.55*	*Cum*
		1	*6.00*	*3.950*	*0.800*	*18.95*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		1	*0.40*	*3.950*	*0.607*	*0.96*	*Cum*
		1	*0.20*	*3.950*	*0.500*	*0.40*	*Cum*
		1	*2.80*	*3.950*	*0.600*	*6.64*	*Cum*
		1	*0.80*	*3.950*	*1.400*	*4.42*	*Cum*
	Crest	*1*	*1.20*	*3.950*	*1.790*	*8.47*	*Cum*
	TOTAL					**165.12**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.90*	*3.950*	*0.150*	*0.53*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*20.43*	*0.450*	*0.050*	*0.46*	*Cum*
	On Abutment Top (Right Side)	*1*	*20.43*	*0.450*	*0.050*	*0.46*	*Cum*
	TOTAL					**1.45**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.2% of M-20	**165.12**	**0.00**	**0.330**	**7850.0**	**2592.37**	**Kg**
	Total Weight in Metric Tonne					**2.59**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.30*		*0.450*	*2.33*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.30*		*2.520*	*13.06*	*Sqm*
		4		*1.206*	*2.520*	*12.16*	*Sqm*
		4	*1.30*		*0.800*	*4.15*	*Sqm*
		4		*2.112*	*0.800*	*6.76*	*Sqm*
	Section 2-2	*4*	*4.50*		*0.450*	*8.10*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.50*		*1.300*	*23.40*	*Sqm*
		4		*0.840*	*1.300*	*4.37*	*Sqm*
		4	*4.50*		*0.800*	*14.40*	*Sqm*
		4		*1.380*	*0.800*	*4.42*	*Sqm*
	Section 3-3	*4*	*2.22*		*0.450*	*4.00*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.22*		*1.100*	*9.77*	*Sqm*
		4		*0.780*	*1.100*	*3.43*	*Sqm*
		4	*2.22*		*0.600*	*5.33*	*Sqm*
		4		*1.260*	*0.600*	*3.02*	*Sqm*
	Section 5-5	*4*	*6.63*		*0.450*	*11.94*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*6.63*		*2.520*	*66.87*	*Sqm*
		4		*1.206*	*2.520*	*12.16*	*Sqm*
		4	*6.63*		*0.600*	*15.92*	*Sqm*
		4		*2.112*	*0.600*	*5.07*	*Sqm*
	Section 6-6	*4*	*4.45*		*0.450*	*8.00*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.45*		*1.100*	*19.56*	*Sqm*
		4		*0.780*	*1.100*	*3.43*	*Sqm*
		4	*4.45*		*0.600*	*10.67*	*Sqm*
		4		*1.260*	*0.600*	*3.02*	*Sqm*
	Floor	*2*	*0.65*		*0.800*	*1.04*	*Sqm*
		2		*3.950*	*0.800*	*6.32*	*Sqm*
		2	*1.80*		*0.600*	*2.16*	*Sqm*
		2		*3.950*	*0.600*	*4.74*	*Sqm*
		2	*6.00*		*0.800*	*9.60*	*Sqm*
		2		*3.950*	*0.800*	*6.32*	*Sqm*
		2	*0.40*		*0.607*	*0.49*	*Sqm*
		2		*3.950*	*0.607*	*4.80*	*Sqm*
		2	*0.20*		*0.500*	*0.20*	*Sqm*
		2		*3.950*	*0.500*	*3.95*	*Sqm*
		2	*2.800*		*0.600*	*3.36*	*Sqm*
		2		*3.950*	*0.600*	*4.74*	*Sqm*
		2	*0.80*		*1.400*	*2.24*	*Sqm*
		2		*3.950*	*1.400*	*11.06*	*Sqm*
	Crest	*2*	*1.20*		*1.790*	*4.29*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2		*3.950*	*1.790*	*14.14*	*Sqm*
	Toe Wall D/S Portion	*2*	*14.25*		*0.300*	*8.55*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*13.95*		*0.600*	*16.74*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*3.50*		*0.150*	*2.10*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*3.50*		*0.600*	*8.40*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**396.68**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*3.50*	*5.332*		*37.32*	*Sqm*
	TOTAL					**37.32**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*3.50*	*3.350*	*0.300*	**3.52**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*3.50*	*3.350*	*0.150*	**3.52**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*20.43*	*0.450*		*9.19*	*Sqm*
	On Abutment Top (Right Side)	*1*	*20.43*	*0.450*		*9.19*	*Sqm*
	TOTAL					**18.39**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	*1*		*17.942*		*17.94*	*Cum*
	Abutment						
	Section 1-1	*2*	*1.59*	*1.468*		*4.668*	*Cum*
	Section 2-2	*2*	*4.50*	*1.425*		*12.825*	*Cum*
	Section 3-3	*2*	*2.70*	*1.210*		*6.534*	*Cum*
	Section 5-5	*2*	*6.68*	*1.468*		*19.605*	*Cum*
	Section 6-6	*2*	*3.74*	*1.210*		*9.051*	*Cum*
	Toe wall	*2*	*14.25*	*0.150*	*0.600*	*4.275*	*Cum*
		2	*3.50*	*0.150*	*0.600*	*0.630*	*Cum*
	TOTAL					**75.53**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH.1.350 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.59*	*2.262*	*1.822*	*13.106*	*Cum*
	Section 2-2	*2*	*4.50*	*1.530*	*1.822*	*25.089*	*Cum*
	Section 3-3	*2*	*2.70*	*1.410*	*1.622*	*12.350*	*Cum*
	Section 5-5	*2*	*6.68*	*2.412*	*1.822*	*58.691*	*Cum*
	Section 6-6	*2*	*3.74*	*1.410*	*1.622*	*17.107*	*Cum*
	U/S Key Floor	*1*	*0.65*	*3.950*	*0.950*	*2.439*	*Cum*
	U/S Floor	*1*	*3.50*	*3.950*	*2.370*	*32.765*	*Cum*
	D/S Floor	*1*	*4.50*	*3.950*	*0.950*	*16.886*	*Cum*
		1	*3.40*	*3.950*	*0.750*	*10.073*	*Cum*
	D/S Key Floor	*1*	*0.80*	*3.950*	*1.550*	*4.898*	*Cum*
	Toe Wall D/S Portion	*1*	*14.25*	*0.750*	*0.900*	*9.619*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*3.50*	*0.600*	*0.750*	*3.150*	*Cum*
						206.17	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*3.950*	*0.150*	*0.32*	*Cum*
		1	*0.89*	*3.950*	*0.150*	*0.53*	*Cum*
		1	*0.79*	*3.950*	*0.150*	*0.47*	*Cum*
		1	*0.28*	*3.950*	*0.150*	*0.17*	*Cum*
		1	*6.53*	*3.950*	*0.150*	*3.87*	*Cum*
		1	*0.57*	*3.950*	*0.150*	*0.33*	*Cum*
		1	*0.89*	*3.950*	*0.150*	*0.53*	*Cum*
		1	*1.57*	*3.950*	*0.150*	*0.93*	*Cum*
		1	*0.54*	*3.950*	*0.150*	*0.32*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.59*	*2.262*	*0.150*	*1.08*	*Cum*
	Section 2-2	*2*	*4.50*	*1.530*	*0.150*	*2.07*	*Cum*
	Section 3-3	*2*	*2.70*	*1.410*	*0.150*	*1.14*	*Cum*
	Section 5-5	*2*	*6.68*	*2.412*	*0.150*	*4.83*	*Cum*
	Section 6-6	*2*	*3.74*	*1.410*	*0.150*	*1.58*	*Cum*
	Toe Wall D/S Portion	*1*	*14.25*	*0.750*	*0.300*	*3.21*	*Cum*
	Toe Wall D/S Portion	*1*	*13.95*	*0.450*	*0.600*	*3.77*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*3.50*	*0.600*	*0.150*	*0.63*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*3.50*	*0.300*	*0.600*	*1.26*	*Cum*
	TOTAL					**27.03**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.30*	*0.450*	*0.450*	*0.52*	*Cum*
		2	*1.30*	*1.206*	*2.520*	*7.88*	*Cum*
		2	*1.30*	*2.112*	*0.800*	*4.38*	*Cum*
	Section 2-2	*2*	*4.50*	*0.450*	*0.450*	*1.82*	*Cum*
		2	*4.50*	*0.840*	*1.300*	*9.83*	*Cum*
		2	*4.50*	*1.380*	*0.800*	*9.94*	*Cum*
	Section 3-3	*2*	*2.22*	*0.450*	*0.450*	*0.90*	*Cum*
		2	*2.22*	*0.780*	*1.100*	*3.81*	*Cum*
		2	*2.22*	*1.260*	*0.600*	*3.36*	*Cum*
	Section 5-5	*2*	*6.63*	*0.450*	*0.450*	*2.69*	*Cum*
		2	*6.63*	*1.206*	*2.520*	*40.32*	*Cum*
		2	*6.63*	*2.112*	*0.600*	*16.81*	*Cum*
	Section 6-6	*2*	*4.45*	*0.450*	*0.450*	*1.80*	*Cum*
		2	*4.45*	*0.780*	*1.100*	*7.63*	*Cum*
		2	*4.45*	*1.260*	*0.600*	*6.72*	*Cum*
	Floor	*1*	*0.65*	*3.950*	*0.800*	*2.05*	*Cum*
		1	*1.80*	*3.950*	*0.600*	*4.27*	*Cum*
		1	*0.20*	*3.950*	*0.700*	*0.55*	*Cum*
		1	*6.00*	*3.950*	*0.800*	*18.95*	*Cum*
		1	*0.40*	*3.950*	*0.607*	*0.96*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		1	*0.20*	*3.950*	*0.500*	*0.40*	*Cum*
		1	*2.80*	*3.950*	*0.600*	*6.64*	*Cum*
		1	*0.80*	*3.950*	*1.400*	*4.42*	*Cum*
	Crest	*1*	*1.20*	*3.950*	*1.790*	*8.47*	*Cum*
	TOTAL					**165.12**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.90*	*3.950*	*0.150*	*0.53*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*20.43*	*0.450*	*0.050*	*0.46*	*Cum*
	On Abutment Top (Right Side)	*1*	*20.43*	*0.450*	*0.050*	*0.46*	*Cum*
	TOTAL					**1.45**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.2% of M-20	**165.12**	**0.002**	**0.330**	**7850.0**	**2592.37**	**Kg**
	Total Weight in Metric Tonne					**2.59**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.30*		*0.450*	*2.33*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.30*		*2.520*	*13.06*	*Sqm*
		4		*1.206*	*2.520*	*12.16*	*Sqm*
		4	*1.30*		*0.800*	*4.15*	*Sqm*
		4		*2.112*	*0.800*	*6.76*	*Sqm*
	Section 2-2	*4*	*4.50*		*0.450*	*8.10*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.50*		*1.300*	*23.40*	*Sqm*
		4		*0.840*	*1.300*	*4.37*	*Sqm*
		4	*4.50*		*0.800*	*14.40*	*Sqm*
		4		*1.380*	*0.800*	*4.42*	*Sqm*
	Section 3-3	*4*	*2.22*		*0.450*	*4.00*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.22*		*1.100*	*9.77*	*Sqm*
		4		*0.780*	*1.100*	*3.43*	*Sqm*
		4	*2.22*		*0.600*	*5.33*	*Sqm*
		4		*1.260*	*0.600*	*3.02*	*Sqm*
	Section 5-5	*4*	*6.63*		*0.450*	*11.94*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*6.63*		*2.520*	*66.87*	*Sqm*
		4		*1.206*	*2.520*	*12.16*	*Sqm*
		4	*6.63*		*0.600*	*15.92*	*Sqm*
		4		*2.112*	*0.600*	*5.07*	*Sqm*
	Section 6-6	*4*	*4.45*		*0.450*	*8.00*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.45*		*1.100*	*19.56*	*Sqm*
		4		*0.780*	*1.100*	*3.43*	*Sqm*
		4	*4.45*		*0.600*	*10.67*	*Sqm*
		4		*1.260*	*0.600*	*3.02*	*Sqm*
	Floor	*2*	*0.65*		*0.800*	*1.04*	*Sqm*
		2		*3.950*	*0.800*	*6.32*	*Sqm*
		2	*1.80*		*0.600*	*2.16*	*Sqm*
		2		*3.950*	*0.600*	*4.74*	*Sqm*
		2	*6.00*		*0.800*	*9.60*	*Sqm*
		2		*3.950*	*0.800*	*6.32*	*Sqm*
		2	*0.40*		*0.607*	*0.49*	*Sqm*
		2		*3.950*	*0.607*	*4.80*	*Sqm*
		2	*0.20*		*0.500*	*0.20*	*Sqm*
		2		*3.950*	*0.500*	*3.95*	*Sqm*
		2	*2.800*		*0.600*	*3.36*	*Sqm*
		2		*3.950*	*0.600*	*4.74*	*Sqm*
		2	*0.80*		*1.400*	*2.24*	*Sqm*
		2		*3.950*	*1.400*	*11.06*	*Sqm*
	Crest	*2*	*1.20*		*1.790*	*4.29*	*Sqm*
		2		*3.950*	*1.790*	*14.14*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Toe Wall D/S Portion	*2*	*14.25*		*0.300*	*8.55*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*13.95*		*0.600*	*16.74*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*3.50*		*0.150*	*2.10*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*3.50*		*0.600*	*8.40*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**396.68**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*3.50*	*5.332*		*37.32*	*Sqm*
	TOTAL					**37.32**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*3.50*	*3.350*	*0.300*	**3.52**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*3.50*	*3.350*	*0.150*	**3.52**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*20.43*	*0.450*		*9.19*	*Sqm*
	On Abutment Top (Right Side)	*1*	*20.43*	*0.450*		*9.19*	*Sqm*
	TOTAL					**18.39**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	*1*		*17.942*		*17.94*	*Cum*
	Abutment						
	Section 1-1	*2*	*1.59*	*0.457*		*1.453*	*Cum*
	Section 2-2	*2*	*4.50*	*0.457*		*4.113*	*Cum*
	Section 3-3	*2*	*2.70*	*0.579*		*3.127*	*Cum*
	Section 5-5	*2*	*6.68*	*0.457*		*6.103*	*Cum*
	Section 6-6	*2*	*3.74*	*0.579*		*4.331*	*Cum*
	Toe wall	*2*	*14.25*	*0.150*	*0.600*	*4.275*	*Cum*
		2	*3.50*	*0.150*	*0.600*	*0.630*	*Cum*
	TOTAL					**41.97**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 0.305 METER AT CH. 2.740 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*0.97*	*1.833*	*2.227*	*7.883*	*Cum*
	Section 2-2	*2*	*2.75*	*1.650*	*2.227*	*20.210*	*Cum*
	Section 3-3	*2*	*2.45*	*1.530*	*2.027*	*15.196*	*Cum*
	Section 5-5	*2*	*6.79*	*1.983*	*2.227*	*59.980*	*Cum*
	Section 6-6	*2*	*3.74*	*1.530*	*2.027*	*23.198*	*Cum*
	U/S Key Floor	*1*	*0.63*	*3.950*	*0.850*	*2.098*	*Cum*
	U/S Floor	*1*	*2.00*	*3.950*	*1.155*	*9.125*	*Cum*
	D/S Floor	*1*	*2.75*	*3.950*	*0.850*	*9.233*	*Cum*
		1	*3.09*	*3.950*	*0.650*	*7.930*	*Cum*
	D/S Key Floor	*1*	*0.63*	*3.950*	*0.850*	*2.098*	*Cum*
	Toe Wall D/S Portion	*1*	*14.25*	*0.750*	*0.900*	*9.619*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*3.50*	*0.600*	*0.750*	*3.150*	*Cum*
						169.72	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*3.950*	*0.150*	*0.32*	*Cum*
		1	*0.78*	*3.950*	*0.150*	*0.46*	*Cum*
		1	*4.33*	*3.950*	*0.150*	*2.56*	*Cum*
		1	*0.28*	*3.950*	*0.150*	*0.17*	*Cum*
		1	*1.12*	*3.950*	*0.150*	*0.66*	*Cum*
		1	*0.78*	*3.950*	*0.150*	*0.46*	*Cum*
		1	*0.54*	*3.950*	*0.150*	*0.32*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*0.97*	*1.833*	*0.150*	*0.53*	*Cum*
	Section 2-2	*2*	*2.75*	*1.650*	*0.150*	*1.36*	*Cum*
	Section 3-3	*2*	*2.45*	*1.530*	*0.150*	*1.12*	*Cum*
	Section 5-5	*2*	*6.79*	*1.983*	*0.150*	*4.04*	*Cum*
	Section 6-6	*2*	*3.74*	*1.530*	*0.150*	*1.72*	*Cum*
	Toe Wall D/S Portion	*1*	*14.25*	*0.750*	*0.300*	*3.21*	*Cum*
	Toe Wall D/S Portion	*1*	*13.95*	*0.450*	*0.600*	*3.77*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*3.50*	*0.600*	*0.150*	*0.63*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*3.50*	*0.300*	*0.600*	*1.26*	*Cum*
	TOTAL					**22.60**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*0.82*	*0.450*	*0.450*	*0.33*	*Cum*
		2	*0.82*	*0.992*	*1.805*	*2.92*	*Cum*
		2	*0.82*	*1.683*	*0.500*	*1.37*	*Cum*
	Section 2-2	*2*	*2.75*	*0.450*	*0.450*	*1.11*	*Cum*
		2	*2.75*	*0.900*	*1.500*	*7.43*	*Cum*
		2	*2.75*	*1.500*	*0.500*	*4.13*	*Cum*
	Section 3-3	*2*	*1.97*	*0.450*	*0.450*	*0.80*	*Cum*
		2	*1.97*	*0.840*	*1.300*	*4.30*	*Cum*
		2	*1.97*	*1.380*	*0.500*	*2.72*	*Cum*
	Section 5-5	*2*	*6.75*	*0.450*	*0.450*	*2.73*	*Cum*
		2	*6.75*	*0.992*	*1.805*	*24.15*	*Cum*
		2	*6.75*	*1.683*	*0.500*	*11.36*	*Cum*
	Section 6-6	*2*	*4.45*	*0.450*	*0.450*	*1.80*	*Cum*
		2	*4.45*	*0.840*	*1.300*	*9.71*	*Cum*
		2	*4.45*	*1.380*	*0.500*	*6.13*	*Cum*
	Floor	*1*	*0.63*	*3.950*	*0.700*	*1.73*	*Cum*
		1	*4.75*	*3.950*	*0.500*	*9.38*	*Cum*
		1	*0.40*	*3.950*	*0.200*	*0.32*	*Cum*
		1	*0.539*	*3.950*	*0.200*	*0.43*	*Cum*
		1	*2.55*	*3.950*	*0.500*	*5.04*	*Cum*
		1	*0.63*	*3.950*	*0.700*	*1.73*	*Cum*
	Crest	*1*	*0.75*	*3.950*	*0.910*	*2.70*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	TOTAL					**102.30**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.60*	*3.950*	*0.150*	*0.36*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*17.84*	*0.450*	*0.050*	*0.40*	*Cum*
	On Abutment Top (Right Side)	*1*	*17.84*	*0.450*	*0.050*	*0.40*	*Cum*
	TOTAL					**1.16**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.2% of M-20	**102.30**	**0.002**	**0.205**	**7850.0**	**1606.12**	**Kg**
	Total Weight in Metric Tonne					**1.61**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*0.82*		*0.450*	*1.47*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*0.82*		*1.805*	*5.89*	*Sqm*
		4		*0.992*	*1.805*	*7.16*	*Sqm*
		4	*0.82*		*0.500*	*1.63*	*Sqm*
		4		*1.683*	*0.500*	*3.37*	*Sqm*
	Section 2-2	*4*	*2.75*		*0.450*	*4.95*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.75*		*1.500*	*16.50*	*Sqm*
		4		*0.900*	*1.500*	*5.40*	*Sqm*
		4	*2.75*		*0.500*	*5.50*	*Sqm*
		4		*1.500*	*0.500*	*3.00*	*Sqm*
	Section 3-3	*4*	*1.97*		*0.450*	*3.55*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.97*		*1.300*	*10.24*	*Sqm*
		4		*0.840*	*1.300*	*4.37*	*Sqm*
		4	*1.97*		*0.500*	*3.94*	*Sqm*
		4		*1.380*	*0.500*	*2.76*	*Sqm*
	Section 5-5	*4*	*6.75*		*0.450*	*12.14*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*6.75*		*1.805*	*48.71*	*Sqm*
		4		*0.992*	*1.805*	*7.16*	*Sqm*
		4	*6.75*		*0.500*	*13.49*	*Sqm*
		4		*1.683*	*0.500*	*3.37*	*Sqm*
	Section 6-6	*4*	*4.45*		*0.450*	*8.00*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.45*		*1.300*	*23.11*	*Sqm*
		4		*0.840*	*1.300*	*4.37*	*Sqm*
		4	*4.45*		*0.500*	*8.89*	*Sqm*
		4		*1.380*	*0.500*	*2.76*	*Sqm*
	Floor	*2*	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*3.950*	*0.700*	*5.53*	*Sqm*
		2	*4.75*		*0.500*	*4.75*	*Sqm*
		2		*3.950*	*0.500*	*3.95*	*Sqm*
		2	*0.40*		*0.200*	*0.16*	*Sqm*
		2		*3.950*	*0.200*	*1.58*	*Sqm*
		2	*0.54*		*0.200*	*0.22*	*Sqm*
		2		*3.950*	*0.200*	*1.58*	*Sqm*
		2	*2.55*		*0.500*	*2.55*	*Sqm*
		2		*3.950*	*0.500*	*3.95*	*Sqm*
		2	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*3.950*	*0.700*	*5.53*	*Sqm*
	Crest	*2*	*0.75*		*0.910*	*1.37*	*Sqm*
		2		*3.950*	*0.910*	*7.19*	*Sqm*
	Toe Wall D/S Portion	*2*	*14.25*		*0.300*	*8.55*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*13.95*		*0.600*	*16.74*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*3.50*		*0.150*	*2.10*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Toe Wall for resting Brick Edging	*4*	*3.50*		*0.600*	*8.40*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**293.74**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*3.50*	*5.332*		*37.32*	*Sqm*
	TOTAL					**37.32**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*3.50*	*3.350*	*0.300*	**3.52**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*3.50*	*3.350*	*0.150*	**3.52**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*17.84*	*0.450*		*8.03*	*Sqm*
	On Abutment Top (Right Side)	*1*	*17.84*	*0.450*		*8.03*	*Sqm*
	TOTAL					**16.05**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	*1*		*2.173*		*2.17*	*Cum*
	Abutment						
	Section 1-1	*2*	*0.97*	*1.173*		*2.264*	*Cum*
	Section 2-2	*2*	*2.75*	*1.163*		*6.397*	*Cum*
	Section 3-3	*2*	*2.45*	*1.129*		*5.532*	*Cum*
	Section 5-5	*2*	*6.79*	*1.173*		*15.925*	*Cum*
	Section 6-6	*2*	*3.74*	*1.129*		*8.445*	*Cum*
	Toe wall	*2*	*14.25*	*0.150*	*0.600*	*4.275*	*Cum*
		2	*3.50*	*0.150*	*0.600*	*0.630*	*Cum*
	TOTAL					**45.64**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 0.762 METER AT CH.3.850 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.15*	*1.987*	*2.139*	*9.746*	*Cum*
	Section 2-2	*2*	*3.50*	*1.530*	*2.139*	*22.909*	*Cum*
	Section 3-3	*2*	*1.95*	*1.410*	*1.939*	*10.663*	*Cum*
	Section 5-5	*2*	*6.73*	*2.137*	*2.139*	*61.567*	*Cum*
	Section 6-6	*2*	*3.74*	*1.410*	*1.939*	*20.450*	*Cum*
	U/S Key Floor	*1*	*0.63*	*3.500*	*0.850*	*1.859*	*Cum*
	U/S Floor	*1*	*2.75*	*3.500*	*1.712*	*16.478*	*Cum*
	D/S Floor	*1*	*3.50*	*3.500*	*0.850*	*10.413*	*Cum*
		1	*2.55*	*3.500*	*0.650*	*5.801*	*Cum*
	D/S Key Floor	*1*	*0.70*	*3.500*	*1.150*	*2.818*	*Cum*
	Toe Wall D/S Portion	*1*	*13.80*	*0.750*	*0.900*	*9.315*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*3.50*	*0.600*	*0.750*	*3.150*	*Cum*
						175.17	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*3.500*	*0.150*	*0.28*	*Cum*
		1	*0.78*	*3.500*	*0.150*	*0.41*	*Cum*
		1	*0.54*	*3.500*	*0.150*	*0.29*	*Cum*
		1	*0.14*	*3.500*	*0.150*	*0.07*	*Cum*
		1	*5.18*	*3.500*	*0.150*	*2.72*	*Cum*
		1	*0.42*	*3.500*	*0.150*	*0.22*	*Cum*
		1	*0.44*	*3.500*	*0.150*	*0.23*	*Cum*
		1	*1.12*	*3.500*	*0.150*	*0.59*	*Cum*
		1	*0.54*	*3.500*	*0.150*	*0.28*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.15*	*1.987*	*0.150*	*0.68*	*Cum*
	Section 2-2	*2*	*3.50*	*1.530*	*0.150*	*1.61*	*Cum*
	Section 3-3	*2*	*1.95*	*1.410*	*0.150*	*0.82*	*Cum*
	Section 5-5	*2*	*6.73*	*2.137*	*0.150*	*4.32*	*Cum*
	Section 6-6	*2*	*3.74*	*1.410*	*0.150*	*1.58*	*Cum*
	Toe Wall D/S Portion	*1*	*13.80*	*0.750*	*0.300*	*3.11*	*Cum*
	Toe Wall D/S Portion	*1*	*13.50*	*0.450*	*0.600*	*3.65*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*3.50*	*0.600*	*0.150*	*0.63*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*3.50*	*0.300*	*0.600*	*1.26*	*Cum*
	TOTAL					**22.75**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.00*	*0.450*	*0.450*	*0.40*	*Cum*
		2	*1.00*	*1.069*	*2.062*	*4.39*	*Cum*
		2	*1.00*	*1.837*	*0.600*	*2.20*	*Cum*
	Section 2-2	*2*	*3.50*	*0.450*	*0.450*	*1.42*	*Cum*
		2	*3.50*	*0.840*	*1.300*	*7.64*	*Cum*
		2	*3.50*	*1.380*	*0.600*	*5.80*	*Cum*
	Section 3-3	*2*	*1.47*	*0.450*	*0.450*	*0.60*	*Cum*
		2	*1.47*	*0.780*	*1.100*	*2.52*	*Cum*
		2	*1.47*	*1.260*	*0.500*	*1.85*	*Cum*
	Section 5-5	*2*	*6.69*	*0.450*	*0.450*	*2.71*	*Cum*
		2	*6.69*	*1.069*	*2.062*	*29.48*	*Cum*
		2	*6.69*	*1.837*	*0.600*	*14.75*	*Cum*
	Section 6-6	*2*	*4.45*	*0.450*	*0.450*	*1.80*	*Cum*
		2	*4.45*	*0.780*	*1.100*	*7.63*	*Cum*
		2	*4.45*	*1.260*	*0.600*	*6.72*	*Cum*
	Floor	*1*	*0.63*	*3.500*	*0.700*	*1.53*	*Cum*
		1	*1.50*	*3.500*	*0.500*	*2.62*	*Cum*
		1	*0.20*	*3.500*	*0.550*	*0.39*	*Cum*
		1	*4.65*	*3.500*	*0.600*	*9.77*	*Cum*
		1	*0.30*	*3.500*	*0.557*	*0.58*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		1	*0.20*	*3.500*	*0.400*	*0.28*	*Cum*
		1	*2.05*	*3.500*	*0.500*	*3.59*	*Cum*
		1	*0.70*	*3.500*	*1.000*	*2.45*	*Cum*
	Crest	*1*	*0.93*	*3.500*	*1.357*	*4.40*	*Cum*
	TOTAL					**115.51**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.70*	*3.500*	*0.150*	*0.37*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*18.34*	*0.450*	*0.050*	*0.41*	*Cum*
	On Abutment Top (Right Side)	*1*	*18.34*	*0.450*	*0.050*	*0.41*	*Cum*
	TOTAL					**1.19**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.2% of M-20	**115.51**	**0.002**	**0.231**	**7850.0**	**1813.58**	**Kg**
	Total Weight in Metric Tonne					**1.81**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.00*		*0.450*	*1.79*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.00*		*2.062*	*8.22*	*Sqm*
		4		*1.069*	*2.062*	*8.81*	*Sqm*
		4	*1.00*		*0.600*	*2.39*	*Sqm*
		4		*1.837*	*0.600*	*4.41*	*Sqm*
	Section 2-2	*4*	*3.50*		*0.450*	*6.30*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.50*		*1.300*	*18.20*	*Sqm*
		4		*0.840*	*1.300*	*4.37*	*Sqm*
		4	*3.50*		*0.600*	*8.40*	*Sqm*
		4		*1.380*	*0.600*	*3.31*	*Sqm*
	Section 3-3	*4*	*1.47*		*0.450*	*2.65*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.47*		*1.100*	*6.47*	*Sqm*
		4		*0.780*	*1.100*	*3.43*	*Sqm*
		4	*1.47*		*0.500*	*2.94*	*Sqm*
		4		*1.260*	*0.500*	*2.52*	*Sqm*
	Section 5-5	*4*	*6.69*		*0.450*	*12.04*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*6.69*		*2.062*	*55.18*	*Sqm*
		4		*1.069*	*2.062*	*8.81*	*Sqm*
		4	*6.69*		*0.600*	*16.06*	*Sqm*
		4		*1.837*	*0.600*	*4.41*	*Sqm*
	Section 6-6	*4*	*4.45*		*0.450*	*8.00*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.45*		*1.100*	*19.56*	*Sqm*
		4		*0.780*	*1.100*	*3.43*	*Sqm*
		4	*4.45*		*0.600*	*10.67*	*Sqm*
		4		*1.260*	*0.600*	*3.02*	*Sqm*
	Floor	*2*	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*3.500*	*0.700*	*4.90*	*Sqm*
		2	*1.50*		*0.500*	*1.50*	*Sqm*
		2		*3.500*	*0.500*	*3.50*	*Sqm*
		2	*4.65*		*0.600*	*5.58*	*Sqm*
		2		*3.500*	*0.600*	*4.20*	*Sqm*
		2	*0.30*		*0.557*	*0.33*	*Sqm*
		2		*3.500*	*0.557*	*3.90*	*Sqm*
		2	*0.20*		*0.400*	*0.16*	*Sqm*
		2		*3.500*	*0.400*	*2.80*	*Sqm*
		2	*2.050*		*0.500*	*2.05*	*Sqm*
		2		*3.500*	*0.500*	*3.50*	*Sqm*
		2	*0.70*		*1.000*	*1.40*	*Sqm*
		2		*3.500*	*1.000*	*7.00*	*Sqm*
	Crest	*2*	*0.93*		*1.357*	*2.51*	*Sqm*
		2		*3.500*	*1.357*	*9.50*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Toe Wall D/S Portion	*2*	*13.80*		*0.300*	*8.28*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*13.50*		*0.600*	*16.20*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*3.50*		*0.150*	*2.10*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*3.50*		*0.600*	*8.40*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**320.21**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*3.50*	*5.332*		*37.32*	*Sqm*
	TOTAL					**37.32**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*3.50*	*2.900*	*0.300*	**3.05**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*3.50*	*2.900*	*0.150*	**3.05**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*18.34*	*0.450*		*8.25*	*Sqm*
	On Abutment Top (Right Side)	*1*	*18.34*	*0.450*		*8.25*	*Sqm*
	TOTAL					**16.50**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1		7.750		7.75	Cum
	Abutment						
	Section 1-1	2	*1.15*	*1.085*		*2.488*	*Cum*
	Section 2-2	2	*3.50*	*1.083*		*7.581*	*Cum*
	Section 3-3	2	*1.95*	*1.141*		*4.450*	*Cum*
	Section 5-5	2	*6.73*	*1.085*		*14.614*	*Cum*
	Section 6-6	2	*3.74*	*1.141*		*8.535*	*Cum*
	Toe wall	2	*13.80*	*0.150*	*0.600*	*4.140*	*Cum*
		2	*3.50*	0.150	*0.600*	*0.630*	*Cum*
	TOTAL					**50.19**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 1.524 METER AT CH.4.455 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.55*	*2.444*	*2.970*	*22.466*	*Cum*
	Section 2-2	*2*	*5.00*	*1.530*	*2.970*	*45.441*	*Cum*
	Section 3-3	*2*	*3.70*	*1.410*	*2.770*	*28.902*	*Cum*
	Section 5-5	*2*	*6.64*	*2.594*	*2.970*	*102.304*	*Cum*
	Section 6-6	*2*	*3.74*	*1.410*	*2.770*	*29.215*	*Cum*
	U/S Key Floor	*1*	*0.68*	*3.500*	*1.050*	*2.481*	*Cum*
	U/S Floor	*1*	*4.00*	*3.500*	*2.824*	*39.536*	*Cum*
	D/S Floor	*1*	*5.00*	*3.500*	*0.950*	*16.625*	*Cum*
		1	*2.70*	*3.500*	*0.750*	*7.088*	*Cum*
	D/S Key Floor	*1*	*1.65*	*3.500*	*0.750*	*4.331*	*Cum*
	Toe Wall D/S Portion	*1*	*13.80*	*0.750*	*0.900*	*9.315*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*3.50*	*0.600*	*0.750*	*3.150*	*Cum*
						310.85	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*3.500*	*0.150*	*0.28*	*Cum*
		1	*1.01*	*3.500*	*0.150*	*0.53*	*Cum*
		1	*0.95*	*3.500*	*0.150*	*0.50*	*Cum*
		1	*0.49*	*3.500*	*0.150*	*0.26*	*Cum*
		1	*7.18*	*3.500*	*0.150*	*3.77*	*Cum*
		1	*0.64*	*3.500*	*0.150*	*0.33*	*Cum*
		1	*1.39*	*3.500*	*0.150*	*0.73*	*Cum*
		1	*0.14*	*3.500*	*0.150*	*0.07*	*Cum*
		1	*0.22*	*3.500*	*0.150*	*0.12*	*Cum*
		1	*1.84*	*3.500*	*0.150*	*0.97*	*Cum*
		1	*0.54*	*3.500*	*0.150*	*0.28*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.55*	*2.444*	*0.150*	*1.13*	*Cum*
	Section 2-2	*2*	*5.00*	*1.530*	*0.150*	*2.30*	*Cum*
	Section 3-3	*2*	*3.70*	*1.410*	*0.150*	*1.57*	*Cum*
	Section 5-5	*2*	*6.64*	*2.594*	*0.150*	*5.17*	*Cum*
	Section 6-6	*2*	*3.74*	*1.410*	*0.150*	*1.58*	*Cum*
	Toe Wall D/S Portion	*1*	*13.80*	*0.750*	*0.300*	*3.11*	*Cum*
	Toe Wall D/S Portion	*1*	*13.50*	*0.450*	*0.600*	*3.65*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*3.50*	*0.600*	*0.150*	*0.63*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*3.50*	*0.300*	*0.600*	*1.26*	*Cum*
	TOTAL					**28.23**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.40*	*0.450*	*0.450*	*0.57*	*Cum*
		2	*1.40*	*1.297*	*2.824*	*10.24*	*Cum*
		2	*1.40*	*2.294*	*0.950*	*6.09*	*Cum*
	Section 2-2	*2*	*5.00*	*0.450*	*0.450*	*2.03*	*Cum*
		2	*5.00*	*0.840*	*1.300*	*10.92*	*Cum*
		2	*5.00*	*1.380*	*0.950*	*13.11*	*Cum*
	Section 3-3	*2*	*3.22*	*0.450*	*0.450*	*1.30*	*Cum*
		2	*3.22*	*0.780*	*1.100*	*5.53*	*Cum*
		2	*3.22*	*1.260*	*0.700*	*5.68*	*Cum*
	Section 5-5	*2*	*6.60*	*0.450*	*0.450*	*2.67*	*Cum*
		2	*6.60*	*1.297*	*2.824*	*48.32*	*Cum*
		2	*6.60*	*2.294*	*0.600*	*18.16*	*Cum*
	Section 6-6	*2*	*4.45*	*0.450*	*0.450*	*1.80*	*Cum*
		2	*4.45*	*0.780*	*1.100*	*7.63*	*Cum*
		2	*4.45*	*1.260*	*0.600*	*6.72*	*Cum*
	Floor	*1*	*0.68*	*3.500*	*0.900*	*2.13*	*Cum*
		1	*2.20*	*3.500*	*0.600*	*4.62*	*Cum*
		1	*0.35*	*3.500*	*0.775*	*0.95*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		1	*6.65*	*3.500*	*0.950*	*22.10*	*Cum*
		1	*0.45*	*3.500*	*0.632*	*1.00*	*Cum*
		1	*0.20*	*3.500*	*0.600*	*0.42*	*Cum*
		1	*2.05*	*3.500*	*0.700*	*5.02*	*Cum*
		1	*2.05*	*3.500*	*1.700*	*12.20*	*Cum*
		1	*0.10*	*3.500*	*0.650*	*0.23*	*Cum*
		1	*1.65*	*3.500*	*0.600*	*3.47*	*Cum*
		1	*0.86*	*3.500*	*1.650*	*4.98*	*Cum*
	Crest	*1*	*1.30*	*3.500*	*2.094*	*9.52*	*Cum*
	TOTAL					**207.38**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.95*	*3.500*	*0.150*	*0.50*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*22.08*	*0.450*	*0.050*	*0.50*	*Cum*
	On Abutment Top (Right Side)	*1*	*22.08*	*0.450*	*0.050*	*0.50*	*Cum*
	TOTAL					**1.49**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.2% of M-20	**207.38**	**0.002**	**0.415**	**7850.0**	**3255.87**	**Kg**
	Total Weight in Metric Tonne					**3.26**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.40*		*0.450*	*2.52*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.40*		*2.824*	*15.79*	*Sqm*
		4		*1.297*	*2.824*	*14.65*	*Sqm*
		4	*1.40*		*0.950*	*5.31*	*Sqm*
		4		*2.294*	*0.950*	*8.72*	*Sqm*
	Section 2-2	*4*	*5.00*		*0.450*	*9.00*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*5.00*		*1.300*	*26.00*	*Sqm*
		4		*0.840*	*1.300*	*4.37*	*Sqm*
		4	*5.00*		*0.950*	*19.00*	*Sqm*
		4		*1.380*	*0.950*	*5.24*	*Sqm*
	Section 3-3	*4*	*3.22*		*0.450*	*5.80*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.22*		*1.100*	*14.17*	*Sqm*
		4		*0.780*	*1.100*	*3.43*	*Sqm*
		4	*3.22*		*0.700*	*9.02*	*Sqm*
		4		*1.260*	*0.700*	*3.53*	*Sqm*
	Section 5-5	*4*	*6.60*		*0.450*	*11.87*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*6.60*		*2.824*	*74.50*	*Sqm*
		4		*1.297*	*2.824*	*14.65*	*Sqm*
		4	*6.60*		*0.600*	*15.83*	*Sqm*
		4		*2.294*	*0.600*	*5.51*	*Sqm*
	Section 6-6	*4*	*4.45*		*0.450*	*8.00*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.45*		*1.100*	*19.56*	*Sqm*
		4		*0.780*	*1.100*	*3.43*	*Sqm*
		4	*4.45*		*0.600*	*10.67*	*Sqm*
		4		*1.260*	*0.600*	*3.02*	*Sqm*
	Floor	*2*	*0.68*		*0.900*	*1.22*	*Sqm*
		2		*3.500*	*0.900*	*6.30*	*Sqm*
		2	*2.20*		*0.600*	*2.64*	*Sqm*
		2		*3.500*	*0.600*	*4.20*	*Sqm*
		2	*0.35*		*0.775*	*0.54*	*Sqm*
		2		*3.500*	*0.775*	*5.43*	*Sqm*
		2	*6.65*		*0.950*	*12.63*	*Sqm*
		2		*3.500*	*0.950*	*6.65*	*Sqm*
		2	*0.45*		*0.632*	*0.57*	*Sqm*
		2		*3.500*	*0.632*	*4.42*	*Sqm*
		2	*0.20*		*0.600*	*0.24*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2		*3.500*	*0.600*	*4.20*	*Sqm*
		2	*2.050*		*0.700*	*2.87*	*Sqm*
		2		*3.500*	*0.700*	*4.90*	*Sqm*
		2	*0.100*		*0.650*	*0.13*	*Sqm*
		2		*3.500*	*0.650*	*4.55*	*Sqm*
		2	*1.65*		*0.600*	*1.98*	*Sqm*
		2		*3.500*	*0.600*	*4.20*	*Sqm*
		2	*0.86*		*1.650*	*2.85*	*Sqm*
		2		*3.500*	*1.650*	*11.55*	*Sqm*
	Crest	*2*	*1.30*		*2.094*	*5.44*	*Sqm*
		2		*3.500*	*2.094*	*14.66*	*Sqm*
	Toe Wall D/S Portion	*2*	*13.80*		*0.300*	*8.28*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*13.50*		*0.600*	*16.20*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*3.50*		*0.150*	*2.10*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*3.50*		*0.600*	*8.40*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**456.84**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*3.50*	*5.332*		*37.32*	*Sqm*
	TOTAL					**37.32**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*3.50*	*2.900*	*0.300*	**3.05**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*3.50*	*2.900*	*0.150*	**3.05**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*22.08*	*0.450*		*9.94*	*Sqm*
	On Abutment Top (Right Side)	*1*	*22.08*	*0.450*		*9.94*	*Sqm*
	TOTAL					**19.87**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1		25.632		25.63	Cum
	Abutment						
	Section 1-1	2	*1.55*	*1.291*		*3.996*	*Cum*
	Section 2-2	2	*5.00*	*1.277*		*12.770*	*Cum*
	Section 3-3	2	*3.70*	*1.230*		*9.102*	*Cum*
	Section 5-5	2	*6.64*	*1.291*		*17.143*	*Cum*
	Section 6-6	2	*3.74*	*1.230*		*9.200*	*Cum*
	Toe wall	2	*13.80*	*0.150*	*0.600*	*4.140*	*Cum*
		2	*3.50*	0.150	*0.600*	*0.630*	*Cum*
	TOTAL					**82.61**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF SHARDA TYPE FALL FOR SAHOKARMA MINOR						
	SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH.0.450 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.26*	*1.902*	*1.770*	*8.477*	*Cum*
	Section 2-2	*2*	*3.25*	*1.170*	*1.770*	*13.453*	*Cum*
	Section 3-3	*2*	*2.20*	*1.050*	*1.570*	*7.260*	*Cum*
	Section 5-5	*2*	*2.37*	*2.052*	*1.770*	*17.201*	*Cum*
	Section 6-6	*2*	*1.00*	*1.050*	*1.570*	*3.297*	*Cum*
	U/S Key Floor	*1*	*0.63*	*1.050*	*0.850*	*0.558*	*Cum*
	U/S Floor	*1*	*2.75*	*1.050*	*2.220*	*6.410*	*Cum*
	D/S Floor	*1*	*3.25*	*1.050*	*0.900*	*3.071*	*Cum*
		1	*2.80*	*1.050*	*0.700*	*2.058*	*Cum*
	D/S Key Floor	*1*	*0.75*	*1.050*	*1.350*	*1.063*	*Cum*
	Toe Wall D/S Portion	*1*	*5.15*	*0.750*	*0.900*	*3.476*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*1.75*	*0.600*	*0.750*	*1.575*	*Cum*
						67.90	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*1.050*	*0.150*	*0.09*	*Cum*
		1	*0.73*	*1.050*	*0.150*	*0.11*	*Cum*
		1	*0.47*	*1.050*	*0.150*	*0.07*	*Cum*
		1	*0.14*	*1.050*	*0.150*	*0.02*	*Cum*
		1	*4.75*	*1.050*	*0.150*	*0.75*	*Cum*
		1	*0.42*	*1.050*	*0.150*	*0.07*	*Cum*
		1	*0.87*	*1.050*	*0.150*	*0.14*	*Cum*
		1	*1.34*	*1.050*	*0.150*	*0.21*	*Cum*
		1	*0.54*	*1.050*	*0.150*	*0.09*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.26*	*1.902*	*0.150*	*0.72*	*Cum*
	Section 2-2	*2*	*3.25*	*1.170*	*0.150*	*1.14*	*Cum*
	Section 3-3	*2*	*2.20*	*1.050*	*0.150*	*0.69*	*Cum*
	Section 5-5	*2*	*2.37*	*2.052*	*0.150*	*1.46*	*Cum*
	Section 6-6	*2*	*1.00*	*1.050*	*0.150*	*0.32*	*Cum*
	Toe Wall D/S Portion	*1*	*5.15*	*0.750*	*0.300*	*1.16*	*Cum*
	Toe Wall D/S Portion	*1*	*4.85*	*0.450*	*0.600*	*1.31*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.75*	*0.600*	*0.150*	*0.32*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.75*	*0.300*	*0.600*	*0.63*	*Cum*
	TOTAL					**9.28**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.26*	*0.450*	*0.450*	*0.51*	*Cum*
		2	*1.26*	*1.026*	*1.920*	*4.96*	*Cum*
		2	*1.26*	*1.752*	*0.650*	*2.87*	*Cum*
	Section 2-2	*2*	*3.25*	*0.450*	*0.450*	*1.32*	*Cum*
		2	*3.25*	*0.660*	*0.700*	*3.00*	*Cum*
		2	*3.25*	*1.020*	*0.650*	*4.31*	*Cum*
	Section 3-3	*2*	*1.90*	*0.450*	*0.450*	*0.77*	*Cum*
		2	*1.90*	*0.600*	*0.500*	*1.14*	*Cum*
		2	*1.90*	*0.900*	*0.550*	*1.88*	*Cum*
	Section 5-5	*2*	*2.32*	*0.450*	*0.450*	*0.94*	*Cum*
		2	*2.32*	*1.026*	*1.920*	*9.16*	*Cum*
		2	*2.32*	*1.752*	*0.550*	*4.48*	*Cum*
	Section 6-6	*2*	*1.53*	*0.450*	*0.450*	*0.62*	*Cum*
		2	*1.53*	*0.600*	*0.500*	*0.92*	*Cum*
		2	*1.53*	*0.900*	*0.550*	*1.51*	*Cum*
	Floor	*1*	*0.63*	*1.050*	*0.700*	*0.46*	*Cum*
		1	*1.40*	*1.050*	*0.550*	*0.81*	*Cum*
		1	*0.10*	*1.050*	*0.600*	*0.06*	*Cum*
		1	*4.50*	*1.050*	*0.650*	*3.07*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		1	*0.30*	*1.050*	*0.277*	*0.09*	*Cum*
		1	*0.20*	*1.050*	*0.453*	*0.10*	*Cum*
		1	*2.30*	*1.050*	*0.550*	*1.33*	*Cum*
		1	*0.75*	*1.050*	*1.200*	*0.95*	*Cum*
	Crest	*1*	*1.00*	*1.050*	*1.490*	*1.56*	*Cum*
	TOTAL					**46.79**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.75*	*1.050*	*0.150*	*0.12*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*10.95*	*0.450*	*0.050*	*0.25*	*Cum*
	On Abutment Top (Right Side)	*1*	*10.95*	*0.450*	*0.050*	*0.25*	*Cum*
	TOTAL					**0.61**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**46.79**	**0.00**	**0.140**	**7850.0**	**1101.95**	**Kg**
	Total Weight in Metric Tonne					**1.10**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.26*		*0.450*	*2.27*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.26*		*1.920*	*9.67*	*Sqm*
		4		*1.026*	*1.920*	*7.88*	*Sqm*
		4	*1.26*		*0.650*	*3.27*	*Sqm*
		4		*1.752*	*0.650*	*4.56*	*Sqm*
	Section 2-2	*4*	*3.25*		*0.450*	*5.85*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.25*		*0.700*	*9.09*	*Sqm*
		4		*0.660*	*0.700*	*1.85*	*Sqm*
		4	*3.25*		*0.650*	*8.44*	*Sqm*
		4		*1.020*	*0.650*	*2.65*	*Sqm*
	Section 3-3	*4*	*1.90*		*0.450*	*3.42*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.90*		*0.500*	*3.80*	*Sqm*
		4		*0.600*	*0.500*	*1.20*	*Sqm*
		4	*1.90*		*0.550*	*4.18*	*Sqm*
		4		*0.900*	*0.550*	*1.98*	*Sqm*
	Section 5-5	*4*	*2.32*		*0.450*	*4.18*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.32*		*1.920*	*17.85*	*Sqm*
		4		*1.026*	*1.920*	*7.88*	*Sqm*
		4	*2.32*		*0.550*	*5.11*	*Sqm*
		4		*1.752*	*0.550*	*3.85*	*Sqm*
	Section 6-6	*4*	*1.53*		*0.450*	*2.75*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.53*		*0.500*	*3.05*	*Sqm*
		4		*0.600*	*0.500*	*1.20*	*Sqm*
		4	*1.53*		*0.550*	*3.36*	*Sqm*
		4		*0.900*	*0.550*	*1.98*	*Sqm*
	Floor	*2*	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*1.050*	*0.700*	*1.47*	*Sqm*
		2	*1.40*		*0.550*	*1.54*	*Sqm*
		2		*1.050*	*0.550*	*1.16*	*Sqm*
		2	*4.50*		*0.650*	*5.85*	*Sqm*
		2		*1.050*	*0.650*	*1.37*	*Sqm*
		2	*0.30*		*0.277*	*0.17*	*Sqm*
		2		*1.050*	*0.277*	*0.58*	*Sqm*
		2	*0.20*		*0.453*	*0.18*	*Sqm*
		2		*1.050*	*0.453*	*0.95*	*Sqm*
		2	*2.300*		*0.550*	*2.53*	*Sqm*
		2		*1.050*	*0.550*	*1.16*	*Sqm*
		2	*0.75*		*1.200*	*1.80*	*Sqm*
		2		*1.050*	*1.200*	*2.52*	*Sqm*
	Crest	*2*	*1.00*		*1.490*	*2.98*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2		*1.050*	*1.490*	*3.13*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.15*		*0.300*	*3.09*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*4.85*		*0.600*	*5.82*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.150*	*1.05*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.600*	*4.20*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**169.85**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.75*	*2.051*		*7.18*	*Sqm*
	TOTAL					**7.18**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.75*	*0.450*	*0.300*	**0.24**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.75*	*0.450*	*0.150*	**0.24**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*10.95*	*0.450*		*4.93*	*Sqm*
	On Abutment Top (Right Side)	*1*	*10.95*	*0.450*		*4.93*	*Sqm*
	TOTAL					**9.85**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1		5.872		5.87	Cum
	Abutment						
	Section 1-1	2	*1.26*	*0.589*		*1.482*	*Cum*
	Section 2-2	2	*3.25*	*0.576*		*3.742*	*Cum*
	Section 3-3	2	*2.20*	*0.577*		*2.541*	*Cum*
	Section 5-5	2	*2.37*	*0.589*		*2.787*	*Cum*
	Section 6-6	2	*1.00*	*0.577*		*1.154*	*Cum*
	Toe wall	2	*5.15*	*0.150*	*0.600*	*1.545*	*Cum*
		2	*1.75*	0.150	*0.600*	*0.315*	*Cum*
	TOTAL					**19.44**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 1.524 METER AT CH.0.620 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.42*	*2.084*	*1.937*	*11.440*	*Cum*
	Section 2-2	*2*	*3.50*	*1.170*	*1.937*	*15.855*	*Cum*
	Section 3-3	*2*	*4.40*	*1.050*	*1.737*	*16.050*	*Cum*
	Section 5-5	*2*	*2.33*	*2.234*	*1.937*	*20.165*	*Cum*
	Section 6-6	*2*	*0.63*	*1.050*	*1.737*	*2.298*	*Cum*
	U/S Key Floor	*1*	*0.70*	*1.050*	*1.150*	*0.845*	*Cum*
	U/S Floor	*1*	*3.50*	*1.050*	*2.674*	*9.827*	*Cum*
	D/S Floor	*1*	*3.50*	*1.050*	*1.150*	*4.226*	*Cum*
		1	*5.30*	*1.050*	*0.950*	*5.287*	*Cum*
	D/S Key Floor	*1*	*2.60*	*1.050*	*0.700*	*1.911*	*Cum*
	Toe Wall D/S Portion	*1*	*5.15*	*0.750*	*0.900*	*3.476*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*1.75*	*0.600*	*0.750*	*1.575*	*Cum*
						92.96	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*1.050*	*0.150*	*0.09*	*Cum*
		1	*1.06*	*1.050*	*0.150*	*0.17*	*Cum*
		1	*0.72*	*1.050*	*0.150*	*0.11*	*Cum*
		1	*0.35*	*1.050*	*0.150*	*0.06*	*Cum*
		1	*5.19*	*1.050*	*0.150*	*0.82*	*Cum*
		1	*0.49*	*1.050*	*0.150*	*0.08*	*Cum*
		1	*1.53*	*1.050*	*0.150*	*0.24*	*Cum*
		1	*0.14*	*1.050*	*0.150*	*0.02*	*Cum*
		1	*1.27*	*1.050*	*0.150*	*0.20*	*Cum*
		1	*1.62*	*1.050*	*0.150*	*0.26*	*Cum*
		1	*0.54*	*1.050*	*0.150*	*0.09*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.42*	*2.084*	*0.150*	*0.89*	*Cum*
	Section 2-2	*2*	*3.50*	*1.170*	*0.150*	*1.23*	*Cum*
	Section 3-3	*2*	*4.40*	*1.050*	*0.150*	*1.39*	*Cum*
	Section 5-5	*2*	*2.33*	*2.234*	*0.150*	*1.56*	*Cum*
	Section 6-6	*2*	*0.63*	*1.050*	*0.150*	*0.20*	*Cum*
	Toe Wall D/S Portion	*1*	*5.15*	*0.750*	*0.300*	*1.16*	*Cum*
	Toe Wall D/S Portion	*1*	*4.85*	*0.450*	*0.600*	*1.31*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.75*	*0.600*	*0.150*	*0.32*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.75*	*0.300*	*0.600*	*0.63*	*Cum*
	TOTAL					**10.79**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.27*	*0.450*	*0.450*	*0.51*	*Cum*
		2	*1.27*	*1.117*	*2.224*	*6.31*	*Cum*
		2	*1.27*	*1.934*	*0.800*	*3.93*	*Cum*
	Section 2-2	*2*	*3.50*	*0.450*	*0.450*	*1.42*	*Cum*
		2	*3.50*	*0.660*	*0.700*	*3.23*	*Cum*
		2	*3.50*	*1.020*	*1.800*	*12.84*	*Cum*
	Section 3-3	*2*	*4.10*	*0.450*	*0.450*	*1.66*	*Cum*
		2	*4.10*	*0.600*	*0.500*	*2.46*	*Cum*
		2	*4.10*	*0.900*	*2.000*	*14.77*	*Cum*
	Section 5-5	*2*	*2.29*	*0.450*	*0.450*	*0.93*	*Cum*
		2	*2.29*	*1.117*	*2.224*	*11.36*	*Cum*
		2	*2.29*	*1.934*	*0.550*	*4.86*	*Cum*
	Section 6-6	*2*	*1.34*	*0.450*	*0.450*	*0.54*	*Cum*
		2	*1.34*	*0.600*	*0.500*	*0.80*	*Cum*
		2	*1.34*	*0.900*	*0.550*	*1.33*	*Cum*
	Floor	*1*	*0.70*	*1.050*	*1.000*	*0.74*	*Cum*
		1	*1.80*	*1.050*	*0.550*	*1.04*	*Cum*
		1	*0.25*	*1.050*	*0.675*	*0.18*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		1	*4.95*	*1.050*	*0.800*	*4.15*	*Cum*
		1	*0.29*	*1.050*	*0.350*	*0.11*	*Cum*
		1	*0.20*	*1.050*	*0.550*	*0.12*	*Cum*
		1	*1.79*	*1.050*	*0.650*	*1.22*	*Cum*
		1	*0.10*	*1.050*	*0.600*	*0.06*	*Cum*
		1	*2.60*	*1.050*	*0.550*	*1.50*	*Cum*
		1	*0.81*	*1.050*	*1.450*	*1.24*	*Cum*
	Crest	*1*	*1.15*	*1.050*	*1.789*	*2.16*	*Cum*
	TOTAL					**79.47**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.85*	*1.050*	*0.150*	*0.13*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*18.73*	*0.450*	*0.050*	*0.42*	*Cum*
	On Abutment Top (Right Side)	*1*	*18.73*	*0.450*	*0.050*	*0.42*	*Cum*
	TOTAL					**0.98**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**79.47**	**0.00**	**0.238**	**7850.0**	**1871.45**	**Kg**
	Total Weight in Metric Tonne					**1.87**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.27*		*0.450*	*2.29*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.27*		*2.224*	*11.30*	*Sqm*
		4		*1.117*	*2.224*	*9.94*	*Sqm*
		4	*1.27*		*0.800*	*4.06*	*Sqm*
		4		*1.934*	*0.800*	*6.19*	*Sqm*
	Section 2-2	*4*	*3.50*		*0.450*	*6.30*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.50*		*0.700*	*9.79*	*Sqm*
		4		*0.660*	*0.700*	*1.85*	*Sqm*
		4	*3.50*		*1.800*	*25.19*	*Sqm*
		4		*1.020*	*1.800*	*7.34*	*Sqm*
	Section 3-3	*4*	*4.10*		*0.450*	*7.38*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*4.10*		*0.500*	*8.20*	*Sqm*
		4		*0.600*	*0.500*	*1.20*	*Sqm*
		4	*4.10*		*2.000*	*32.82*	*Sqm*
		4		*0.900*	*2.000*	*7.20*	*Sqm*
	Section 5-5	*4*	*2.29*		*0.450*	*4.11*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.29*		*2.224*	*20.34*	*Sqm*
		4		*1.117*	*2.224*	*9.94*	*Sqm*
		4	*2.29*		*0.550*	*5.03*	*Sqm*
		4		*1.934*	*0.550*	*4.25*	*Sqm*
	Section 6-6	*4*	*1.34*		*0.450*	*2.41*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.34*		*0.500*	*2.68*	*Sqm*
		4		*0.600*	*0.500*	*1.20*	*Sqm*
		4	*1.34*		*0.550*	*2.95*	*Sqm*
		4		*0.900*	*0.550*	*1.98*	*Sqm*
	Floor	*2*	*0.70*		*1.000*	*1.40*	*Sqm*
		2		*1.050*	*1.000*	*2.10*	*Sqm*
		2	*1.80*		*0.550*	*1.98*	*Sqm*
		2		*1.050*	*0.550*	*1.16*	*Sqm*
		2	*0.25*		*0.675*	*0.34*	*Sqm*
		2		*1.050*	*0.675*	*1.42*	*Sqm*
		2	*4.95*		*0.800*	*7.91*	*Sqm*
		2		*1.050*	*0.800*	*1.68*	*Sqm*
		2	*0.29*		*0.350*	*0.21*	*Sqm*
		2		*1.050*	*0.350*	*0.74*	*Sqm*
		2	*0.20*		*0.550*	*0.22*	*Sqm*
		2		*1.050*	*0.550*	*1.16*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	*1.79*		*0.650*	*2.33*	*Sqm*
		2		*1.050*	*0.650*	*1.37*	*Sqm*
		2	*0.10*		*0.600*	*0.12*	*Sqm*
		2		*1.050*	*0.600*	*1.26*	*Sqm*
		2	*2.60*		*0.550*	*2.86*	*Sqm*
		2		*1.050*	*0.550*	*1.16*	*Sqm*
		2	*0.81*		*1.450*	*2.36*	*Sqm*
		2		*1.050*	*1.450*	*3.05*	*Sqm*
	Crest	*2*	*1.15*		*1.789*	*4.11*	*Sqm*
		2		*1.050*	*1.789*	*3.76*	*Sqm*
	Toe Wall D/S Portion	*2*	*5.15*		*0.300*	*3.09*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*4.85*		*0.600*	*5.82*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.150*	*1.05*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.75*		*0.600*	*4.20*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**258.87**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.75*	*2.051*		*7.18*	*Sqm*
	TOTAL					**7.18**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.75*	*0.450*	*0.300*	**0.24**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.75*	*0.450*	*0.150*	**0.24**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*18.73*	*0.450*		*8.43*	*Sqm*
	On Abutment Top (Right Side)	*1*	*18.73*	*0.450*		*8.43*	*Sqm*
	TOTAL					**16.86**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	4.00			**4.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	*1*		*11.417*		*11.42*	*Cum*
	Abutment						
	Section 1-1	*2*	*1.42*	*0.504*		*1.428*	*Cum*
	Section 2-2	*2*	*3.50*	*0.208*		*1.455*	*Cum*
	Section 3-3	*2*	*4.40*	*0.208*		*1.830*	*Cum*
	Section 5-5	*2*	*2.33*	*0.504*		*2.349*	*Cum*
	Section 6-6	*2*	*0.63*	*0.208*		*0.262*	*Cum*
	Toe wall	*2*	*5.15*	*0.150*	*0.600*	*1.545*	*Cum*
		2	*1.75*	*0.150*	*0.600*	*0.315*	*Cum*
	TOTAL					**20.60**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF SHARDA TYPE FALL FOR DHAMNI MINOR						
	SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH.3.300 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.25*	*1.902*	*1.703*	*8.124*	*Cum*
	Section 2-2	*2*	*3.00*	*1.110*	*1.703*	*11.342*	*Cum*
	Section 3-3	*2*	*2.45*	*0.990*	*1.503*	*7.297*	*Cum*
	Section 5-5	*2*	*2.44*	*2.052*	*1.703*	*17.039*	*Cum*
	Section 6-6	*2*	*0.91*	*0.990*	*1.503*	*2.708*	*Cum*
	U/S Key Floor	*1*	*0.63*	*0.950*	*0.850*	*0.505*	*Cum*
	U/S Floor	*1*	*2.75*	*0.950*	*2.220*	*5.800*	*Cum*
	D/S Floor	*1*	*3.00*	*0.950*	*0.900*	*2.565*	*Cum*
		1	*3.05*	*0.950*	*0.700*	*2.028*	*Cum*
	D/S Key Floor	*1*	*0.75*	*0.950*	*1.350*	*0.962*	*Cum*
	Toe Wall D/S Portion	*1*	*4.75*	*0.750*	*0.900*	*3.206*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*1.50*	*0.600*	*0.750*	*1.350*	*Cum*
						62.93	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*0.950*	*0.150*	*0.08*	*Cum*
		1	*0.73*	*0.950*	*0.150*	*0.10*	*Cum*
		1	*0.48*	*0.950*	*0.150*	*0.07*	*Cum*
		1	*0.14*	*0.950*	*0.150*	*0.02*	*Cum*
		1	*4.49*	*0.950*	*0.150*	*0.64*	*Cum*
		1	*0.42*	*0.950*	*0.150*	*0.06*	*Cum*
		1	*1.12*	*0.950*	*0.150*	*0.16*	*Cum*
		1	*1.34*	*0.950*	*0.150*	*0.19*	*Cum*
		1	*0.54*	*0.950*	*0.150*	*0.08*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.25*	*1.902*	*0.150*	*0.72*	*Cum*
	Section 2-2	*2*	*3.00*	*1.110*	*0.150*	*1.00*	*Cum*
	Section 3-3	*2*	*2.45*	*0.990*	*0.150*	*0.73*	*Cum*
	Section 5-5	*2*	*2.44*	*2.052*	*0.150*	*1.50*	*Cum*
	Section 6-6	*2*	*0.91*	*0.990*	*0.150*	*0.27*	*Cum*
	Toe Wall D/S Portion	*1*	*4.75*	*0.750*	*0.300*	*1.07*	*Cum*
	Toe Wall D/S Portion	*1*	*4.45*	*0.450*	*0.600*	*1.20*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.600*	*0.150*	*0.27*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.300*	*0.600*	*0.54*	*Cum*
	TOTAL					**8.69**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.25*	*0.450*	*0.450*	*0.51*	*Cum*
		2	*1.25*	*1.026*	*1.920*	*4.94*	*Cum*
		2	*1.25*	*1.752*	*0.650*	*2.86*	*Cum*
	Section 2-2	*2*	*3.00*	*0.450*	*0.450*	*1.22*	*Cum*
		2	*3.00*	*0.630*	*0.600*	*2.27*	*Cum*
		2	*3.00*	*0.960*	*0.650*	*3.74*	*Cum*
	Section 3-3	*2*	*2.18*	*0.450*	*0.450*	*0.88*	*Cum*
		2	*2.18*	*0.570*	*0.400*	*0.99*	*Cum*
		2	*2.18*	*0.840*	*0.550*	*2.02*	*Cum*
	Section 5-5	*2*	*2.39*	*0.450*	*0.450*	*0.97*	*Cum*
		2	*2.39*	*1.026*	*1.920*	*9.43*	*Cum*
		2	*2.39*	*1.752*	*0.550*	*4.61*	*Cum*
	Section 6-6	*2*	*1.41*	*0.450*	*0.450*	*0.57*	*Cum*
		2	*1.41*	*0.570*	*0.400*	*0.64*	*Cum*
		2	*1.41*	*0.840*	*0.550*	*1.30*	*Cum*
	Floor	*1*	*0.63*	*0.950*	*0.700*	*0.42*	*Cum*
		1	*1.40*	*0.950*	*0.550*	*0.73*	*Cum*
		1	*0.10*	*0.950*	*0.600*	*0.06*	*Cum*
		1	*4.24*	*0.950*	*0.650*	*2.62*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		1	*0.30*	*0.950*	*0.277*	*0.08*	*Cum*
		1	*0.20*	*0.950*	*0.453*	*0.09*	*Cum*
		1	*2.55*	*0.950*	*0.550*	*1.33*	*Cum*
		1	*0.75*	*0.950*	*1.200*	*0.86*	*Cum*
	Crest	*1*	*1.00*	*0.950*	*1.475*	*1.40*	*Cum*
	TOTAL					**44.52**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.75*	*0.950*	*0.150*	*0.11*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*12.81*	*0.450*	*0.050*	*0.29*	*Cum*
	On Abutment Top (Right Side)	*1*	*12.81*	*0.450*	*0.050*	*0.29*	*Cum*
	TOTAL					**0.68**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**44.52**	**0.00**	**0.134**	**7850.0**	**1048.47**	**Kg**
	Total Weight in Metric Tonne					**1.05**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.25*		*0.450*	*2.26*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.25*		*1.920*	*9.63*	*Sqm*
		4		*1.026*	*1.920*	*7.88*	*Sqm*
		4	*1.25*		*0.650*	*3.26*	*Sqm*
		4		*1.752*	*0.650*	*4.56*	*Sqm*
	Section 2-2	*4*	*3.00*		*0.450*	*5.40*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.00*		*0.600*	*7.20*	*Sqm*
		4		*0.630*	*0.600*	*1.51*	*Sqm*
		4	*3.00*		*0.650*	*7.80*	*Sqm*
		4		*0.960*	*0.650*	*2.50*	*Sqm*
	Section 3-3	*4*	*2.18*		*0.450*	*3.93*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.18*		*0.400*	*3.49*	*Sqm*
		4		*0.570*	*0.400*	*0.91*	*Sqm*
		4	*2.18*		*0.550*	*4.80*	*Sqm*
		4		*0.840*	*0.550*	*1.85*	*Sqm*
	Section 5-5	*4*	*2.39*		*0.450*	*4.31*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.39*		*1.920*	*18.39*	*Sqm*
		4		*1.026*	*1.920*	*7.88*	*Sqm*
		4	*2.39*		*0.550*	*5.27*	*Sqm*
		4		*1.752*	*0.550*	*3.85*	*Sqm*
	Section 6-6	*4*	*1.41*		*0.450*	*2.53*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.41*		*0.400*	*2.25*	*Sqm*
		4		*0.570*	*0.400*	*0.91*	*Sqm*
		4	*1.41*		*0.550*	*3.09*	*Sqm*
		4		*0.840*	*0.550*	*1.85*	*Sqm*
	Floor	*2*	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*0.950*	*0.700*	*1.33*	*Sqm*
		2	*1.40*		*0.550*	*1.54*	*Sqm*
		2		*0.950*	*0.550*	*1.05*	*Sqm*
		2	*4.24*		*0.650*	*5.51*	*Sqm*
		2		*0.950*	*0.650*	*1.24*	*Sqm*
		2	*0.30*		*0.277*	*0.17*	*Sqm*
		2		*0.950*	*0.277*	*0.53*	*Sqm*
		2	*0.20*		*0.453*	*0.18*	*Sqm*
		2		*0.950*	*0.453*	*0.86*	*Sqm*
		2	*2.550*		*0.550*	*2.81*	*Sqm*
		2		*0.950*	*0.550*	*1.05*	*Sqm*
		2	*0.75*		*1.200*	*1.80*	*Sqm*
		2		*0.950*	*1.200*	*2.28*	*Sqm*
	Crest	*2*	*1.00*		*1.475*	*2.94*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2		*0.950*	*1.475*	*2.80*	*Sqm*
	Toe Wall D/S Portion	*2*	*4.75*		*0.300*	*2.85*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*
	Toe Wall D/S Portion	*2*	*4.45*		*0.600*	*5.34*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.150*	*0.90*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.600*	*3.60*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**163.05**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.50*	*1.871*		*5.61*	*Sqm*
	TOTAL					**5.61**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.50*	*0.350*	*0.300*	**0.16**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.50*	*0.350*	*0.150*	**0.16**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*12.81*	*0.450*		*5.76*	*Sqm*
	On Abutment Top (Right Side)	*1*	*12.81*	*0.450*		*5.76*	*Sqm*
	TOTAL					**11.53**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1		5.678		5.68	Cum
	Abutment						
	Section 1-1	2	*1.25*	*0.531*		*1.332*	*Cum*
	Section 2-2	2	*3.00*	*0.519*		*3.114*	*Cum*
	Section 3-3	2	*2.45*	*0.493*		*2.418*	*Cum*
	Section 5-5	2	*2.44*	*0.531*		*2.589*	*Cum*
	Section 6-6	2	*0.91*	*0.493*		*0.897*	*Cum*
	Toe wall	2	*4.75*	*0.150*	*0.600*	*1.425*	*Cum*
		2	*1.50*	0.150	*0.600*	*0.270*	*Cum*
	TOTAL					**17.72**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	SHARDA TYPE FALL OF HEIGHT 0.762 METER AT CH.4.800 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.04*	*1.507*	*1.610*	*5.023*	*Cum*
	Section 2-2	*2*	*2.50*	*1.050*	*1.610*	*8.453*	*Cum*
	Section 3-3	*2*	*2.20*	*0.930*	*1.410*	*5.770*	*Cum*
	Section 5-5	*2*	*0.63*	*1.657*	*1.610*	*3.361*	*Cum*
	Section 6-6	*2*	*0.15*	*0.930*	*1.410*	*0.393*	*Cum*
	U/S Key Floor	*1*	*0.63*	*0.800*	*0.850*	*0.425*	*Cum*
	U/S Floor	*1*	*2.00*	*0.800*	*1.612*	*2.579*	*Cum*
	D/S Floor	*1*	*2.50*	*0.800*	*0.850*	*1.700*	*Cum*
		1	*2.61*	*0.800*	*0.650*	*1.356*	*Cum*
	D/S Key Floor	*1*	*0.63*	*0.800*	*0.850*	*0.425*	*Cum*
						29.48	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*0.800*	*0.150*	*0.07*	*Cum*
		1	*0.78*	*0.800*	*0.150*	*0.09*	*Cum*
		1	*3.88*	*0.800*	*0.150*	*0.47*	*Cum*
		1	*0.28*	*0.800*	*0.150*	*0.03*	*Cum*
		1	*1.14*	*0.800*	*0.150*	*0.14*	*Cum*
		1	*0.78*	*0.800*	*0.150*	*0.09*	*Cum*
		1	*0.54*	*0.800*	*0.150*	*0.07*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.04*	*1.507*	*0.150*	*0.47*	*Cum*
	Section 2-2	*2*	*2.50*	*1.050*	*0.150*	*0.79*	*Cum*
	Section 3-3	*2*	*2.20*	*0.930*	*0.150*	*0.61*	*Cum*
	Section 5-5	*2*	*0.63*	*1.657*	*0.150*	*0.31*	*Cum*
	Section 6-6	*2*	*0.15*	*0.930*	*0.150*	*0.04*	*Cum*
	TOTAL					**3.18**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*0.88*	*0.450*	*0.450*	*0.36*	*Cum*
		2	*0.88*	*0.829*	*1.262*	*1.84*	*Cum*
		2	*0.88*	*1.357*	*0.500*	*1.20*	*Cum*
	Section 2-2	*2*	*2.50*	*0.450*	*0.450*	*1.01*	*Cum*
		2	*2.50*	*0.600*	*0.500*	*1.50*	*Cum*
		2	*2.50*	*0.900*	*0.500*	*2.25*	*Cum*
	Section 3-3	*2*	*1.96*	*0.450*	*0.450*	*0.79*	*Cum*
		2	*1.96*	*0.540*	*0.300*	*0.64*	*Cum*
		2	*1.96*	*0.780*	*0.500*	*1.53*	*Cum*
	Section 5-5	*2*	*0.59*	*0.450*	*0.450*	*0.24*	*Cum*
		2	*0.59*	*0.829*	*1.262*	*1.23*	*Cum*
		2	*0.59*	*1.357*	*0.500*	*0.80*	*Cum*
	Section 6-6	*2*	*0.62*	*0.450*	*0.450*	*0.25*	*Cum*
		2	*0.62*	*0.540*	*0.300*	*0.20*	*Cum*
		2	*0.62*	*0.780*	*0.500*	*0.48*	*Cum*
	Floor	*1*	*0.63*	*0.800*	*0.700*	*0.35*	*Cum*
		1	*4.50*	*0.800*	*0.500*	*1.80*	*Cum*
		1	*0.40*	*0.800*	*0.200*	*0.06*	*Cum*
		1	*0.307*	*0.800*	*0.200*	*0.05*	*Cum*
		1	*2.30*	*0.800*	*0.500*	*0.92*	*Cum*
		1	*0.63*	*0.800*	*0.700*	*0.35*	*Cum*
	Crest	*1*	*0.76*	*0.800*	*0.997*	*0.61*	*Cum*
	TOTAL					**18.44**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.60*	*0.800*	*0.150*	*0.07*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*6.73*	*0.450*	*0.050*	*0.15*	*Cum*
	On Abutment Top (Right Side)	*1*	*6.73*	*0.450*	*0.050*	*0.15*	*Cum*
	TOTAL					**0.37**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**18.44**	**0.00**	**0.055**	**7850.0**	**434.34**	**Kg**
	Total Weight in Metric Tonne					**0.43**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*0.88*		*0.450*	*1.59*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*0.88*		*1.262*	*4.45*	*Sqm*
		4		*0.829*	*1.262*	*4.18*	*Sqm*
		4	*0.88*		*0.500*	*1.76*	*Sqm*
		4		*1.357*	*0.500*	*2.71*	*Sqm*
	Section 2-2	*4*	*2.50*		*0.450*	*4.50*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.50*		*0.500*	*5.00*	*Sqm*
		4		*0.600*	*0.500*	*1.20*	*Sqm*
		4	*2.50*		*0.500*	*5.00*	*Sqm*
		4		*0.900*	*0.500*	*1.80*	*Sqm*
	Section 3-3	*4*	*1.96*		*0.450*	*3.53*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.96*		*0.300*	*2.35*	*Sqm*
		4		*0.540*	*0.300*	*0.65*	*Sqm*
		4	*1.96*		*0.500*	*3.92*	*Sqm*
		4		*0.780*	*0.500*	*1.56*	*Sqm*
	Section 5-5	*4*	*0.59*		*0.450*	*1.05*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*0.59*		*1.262*	*2.96*	*Sqm*
		4		*0.829*	*1.262*	*4.18*	*Sqm*
		4	*0.59*		*0.500*	*1.17*	*Sqm*
		4		*1.357*	*0.500*	*2.71*	*Sqm*
	Section 6-6	*4*	*0.62*		*0.450*	*1.11*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*0.62*		*0.300*	*0.74*	*Sqm*
		4		*0.540*	*0.300*	*0.65*	*Sqm*
		4	*0.62*		*0.500*	*1.23*	*Sqm*
		4		*0.780*	*0.500*	*1.56*	*Sqm*
	Floor	*2*	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*0.800*	*0.700*	*1.12*	*Sqm*
		2	*4.50*		*0.500*	*4.50*	*Sqm*
		2		*0.800*	*0.500*	*0.80*	*Sqm*
		2	*0.40*		*0.200*	*0.16*	*Sqm*
		2		*0.800*	*0.200*	*0.32*	*Sqm*
		2	*0.31*		*0.200*	*0.12*	*Sqm*
		2		*0.800*	*0.200*	*0.32*	*Sqm*
		2	*2.30*		*0.500*	*2.30*	*Sqm*
		2		*0.800*	*0.500*	*0.80*	*Sqm*
		2	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*0.800*	*0.700*	*1.12*	*Sqm*
	Crest	*2*	*0.76*		*0.997*	*1.51*	*Sqm*
		2		*0.800*	*0.997*	*1.60*	*Sqm*
	TOTAL					**82.04**	**Sqm**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*6.73*	*0.450*		*3.03*	*Sqm*
	On Abutment Top (Right Side)	*1*	*6.73*	*0.450*		*3.03*	*Sqm*
	TOTAL					**6.06**	**Sqm**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	1		1.431		1.43	Cum
	Abutment						
	Section 1-1	2	*1.04*	*0.606*		*1.254*	*Cum*
	Section 2-2	2	*2.50*	*0.570*		*2.850*	*Cum*
	Section 3-3	2	*2.20*	*0.408*		*1.795*	*Cum*
	Section 5-5	2	*0.63*	*0.606*		*0.764*	*Cum*
	Section 6-6	2	*0.15*	*0.408*		*0.122*	*Cum*
	TOTAL					**8.22**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	DETAILS OF QUANTITIES OF SHARDA TYPE FALL FOR BHADWA MR.						
	SHARDA TYPE FALL OF HEIGHT 1.220 METER AT CH. 0.450 KM						
1	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.25*	*1.842*	*1.639*	*7.563*	*Cum*
	Section 2-2	*2*	*3.00*	*1.110*	*1.639*	*10.908*	*Cum*
	Section 3-3	*2*	*2.20*	*0.990*	*1.439*	*6.274*	*Cum*
	Section 5-5	*2*	*2.17*	*1.992*	*1.639*	*14.153*	*Cum*
	Section 6-6	*2*	*0.91*	*0.990*	*1.439*	*2.593*	*Cum*
	U/S Key Floor	*1*	*0.63*	*0.900*	*0.850*	*0.478*	*Cum*
	U/S Floor	*1*	*2.50*	*0.900*	*2.220*	*4.995*	*Cum*
	D/S Floor	*1*	*3.00*	*0.900*	*0.950*	*2.565*	*Cum*
		1	*2.50*	*0.900*	*0.700*	*1.575*	*Cum*
	D/S Key Floor	*1*	*0.76*	*0.900*	*0.800*	*0.549*	*Cum*
	Toe Wall D/S Portion	*1*	*4.70*	*0.750*	*0.900*	*3.173*	*Cum*
	Boulder Pitching (D/S Portion)	*2*	*1.50*	*0.600*	*0.750*	*1.350*	*Cum*
						56.18	**Cum**
2	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	PCC Below Floor	*1*	*0.54*	*0.900*	*0.150*	*0.07*	*Cum*
		1	*0.78*	*0.900*	*0.150*	*0.11*	*Cum*
		1	*0.17*	*0.900*	*0.150*	*0.02*	*Cum*
		1	*0.21*	*0.900*	*0.150*	*0.03*	*Cum*
		1	*4.41*	*0.900*	*0.150*	*0.60*	*Cum*
		1	*0.50*	*0.900*	*0.150*	*0.07*	*Cum*
		1	*0.86*	*0.900*	*0.150*	*0.12*	*Cum*
		1	*1.40*	*0.900*	*0.150*	*0.19*	*Cum*
		1	*0.54*	*0.900*	*0.150*	*0.07*	*Cum*
	PCC Below Abutment						
	Section 1-1	*2*	*1.25*	*1.842*	*0.150*	*0.69*	*Cum*
	Section 2-2	*2*	*3.00*	*1.110*	*0.150*	*1.00*	*Cum*
	Section 3-3	*2*	*2.20*	*0.990*	*0.150*	*0.65*	*Cum*
	Section 5-5	*2*	*2.17*	*1.992*	*0.150*	*1.30*	*Cum*
	Section 6-6	*2*	*0.91*	*0.990*	*0.150*	*0.27*	*Cum*
	Toe Wall D/S Portion	*1*	*4.70*	*0.750*	*0.300*	*1.06*	*Cum*
	Toe Wall D/S Portion	*1*	*4.40*	*0.450*	*0.600*	*1.19*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.600*	*0.150*	*0.27*	*Cum*
	Toe Wall for resting Brick Edging	*2*	*1.50*	*0.300*	*0.600*	*0.54*	*Cum*
	TOTAL					**8.24**	**Cum**
3	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Abutment						
	Section 1-1	*2*	*1.03*	*0.450*	*0.450*	*0.42*	*Cum*
		2	*1.03*	*0.996*	*1.820*	*3.72*	*Cum*
		2	*1.03*	*1.692*	*0.650*	*2.26*	*Cum*
	Section 2-2	*2*	*3.00*	*0.450*	*0.450*	*1.21*	*Cum*
		2	*3.00*	*0.630*	*0.600*	*2.27*	*Cum*
		2	*3.00*	*0.960*	*0.650*	*3.74*	*Cum*
	Section 3-3	*2*	*1.93*	*0.450*	*0.450*	*0.78*	*Cum*
		2	*1.93*	*0.570*	*0.400*	*0.88*	*Cum*
		2	*1.93*	*0.840*	*0.500*	*1.62*	*Cum*
	Section 5-5	*2*	*2.12*	*0.450*	*0.450*	*0.86*	*Cum*
		2	*2.12*	*0.996*	*1.820*	*7.70*	*Cum*
		2	*2.12*	*1.692*	*0.500*	*3.59*	*Cum*
	Section 6-6	*2*	*1.33*	*0.450*	*0.450*	*0.54*	*Cum*
		2	*1.33*	*0.570*	*0.400*	*0.61*	*Cum*
		2	*1.33*	*0.840*	*0.500*	*1.12*	*Cum*
	Floor	*1*	*0.63*	*0.900*	*0.700*	*0.39*	*Cum*
		1	*5.50*	*0.900*	*0.500*	*2.48*	*Cum*
		1	*4.30*	*0.900*	*0.150*	*0.58*	*Cum*
		1	*0.23*	*0.900*	*0.350*	*0.07*	*Cum*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		1	*0.20*	*0.900*	*0.400*	*0.07*	*Cum*
		1	*2.30*	*0.900*	*0.900*	*1.86*	*Cum*
		1	*0.76*	*0.900*	*1.250*	*0.86*	*Cum*
	Crest	*1*	*0.99*	*0.900*	*1.435*	*1.28*	*Cum*
	TOTAL					**38.92**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-250 with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Over Crest	*1*	*0.75*	*0.900*	*0.150*	*0.10*	*Cum*
	Coping over Abutment Top						
	On Abutment Top (Left Side)	*1*	*10.32*	*0.450*	*0.050*	*0.23*	*Cum*
	On Abutment Top (Right Side)	*1*	*10.32*	*0.450*	*0.050*	*0.23*	*Cum*
	TOTAL					**0.57**	**Cum**
5	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	Quantity	Percent		Density		
	Taking Skin reinforcement @0.3% of M-20	**38.92**	**0.00**	**0.117**	**7850.0**	**916.55**	**Kg**
	Total Weight in Metric Tonne					**0.92**	**MT**
6	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Abutment						
	Section 1-1	*4*	*1.03*		*0.450*	*1.85*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.03*		*1.820*	*7.48*	*Sqm*
		4		*0.996*	*1.820*	*7.25*	*Sqm*
		4	*1.03*		*0.650*	*2.67*	*Sqm*
		4		*1.692*	*0.650*	*4.40*	*Sqm*
	Section 2-2	*4*	*3.00*		*0.450*	*5.40*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*3.00*		*0.600*	*7.20*	*Sqm*
		4		*0.630*	*0.600*	*1.51*	*Sqm*
		4	*3.00*		*0.650*	*7.79*	*Sqm*
		4		*0.960*	*0.650*	*2.50*	*Sqm*
	Section 3-3	*4*	*1.93*		*0.450*	*3.48*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.93*		*0.400*	*3.09*	*Sqm*
		4		*0.570*	*0.400*	*0.91*	*Sqm*
		4	*1.93*		*0.500*	*3.86*	*Sqm*
		4		*0.840*	*0.500*	*1.68*	*Sqm*
	Section 5-5	*4*	*2.12*		*0.450*	*3.82*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*2.12*		*1.820*	*15.47*	*Sqm*
		4		*0.996*	*1.820*	*7.25*	*Sqm*
		4	*2.12*		*0.500*	*4.25*	*Sqm*
		4		*1.692*	*0.500*	*3.38*	*Sqm*
	Section 6-6	*4*	*1.33*		*0.450*	*2.39*	*Sqm*
		4		*0.450*	*0.450*	*0.81*	*Sqm*
		4	*1.33*		*0.400*	*2.13*	*Sqm*
		4		*0.570*	*0.400*	*0.91*	*Sqm*
		4	*1.33*		*0.500*	*2.66*	*Sqm*
		4		*0.840*	*0.500*	*1.68*	*Sqm*
	Floor	*2*	*0.63*		*0.700*	*0.88*	*Sqm*
		2		*0.900*	*0.700*	*1.26*	*Sqm*
		2	*5.50*		*0.500*	*5.50*	*Sqm*
		2		*0.900*	*0.500*	*0.90*	*Sqm*
		2	*0.23*		*0.350*	*0.16*	*Sqm*
		2		*0.900*	*0.350*	*0.63*	*Sqm*
		2	*0.20*		*0.400*	*0.16*	*Sqm*
		2		*0.900*	*0.400*	*0.72*	*Sqm*
		2	*2.30*		*0.900*	*4.14*	*Sqm*
		2		*0.900*	*0.900*	*1.62*	*Sqm*
		2	*0.76*		*1.250*	*1.91*	*Sqm*
		2		*0.900*	*1.250*	*2.25*	*Sqm*
	Crest	*2*	*0.99*		*1.435*	*2.84*	*Sqm*
		2		*0.900*	*1.435*	*2.58*	*Sqm*
	Toe Wall D/S Portion	*2*	*4.70*		*0.300*	*2.82*	*Sqm*
		2		*0.750*	*0.300*	*0.45*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Toe Wall D/S Portion	*2*	*4.40*		*0.600*	*5.28*	*Sqm*
		2		*0.450*	*0.600*	*0.54*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.150*	*0.90*	*Sqm*
		4		*0.600*	*0.150*	*0.36*	*Sqm*
	Toe Wall for resting Brick Edging	*4*	*1.50*		*0.600*	*3.60*	*Sqm*
		4		*0.300*	*0.600*	*0.72*	*Sqm*
	TOTAL					**149.28**	**Sqm**
7	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.						
	In D/S Portion On Slopes	*2*	*1.50*	*1.872*		*5.62*	*Sqm*
	TOTAL					**5.62**	**Sqm**
8	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.						
	In D/S Portion	*1*	*1.50*	*0.300*	*0.300*	**0.14**	**Cum**
9	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.						
		2	*1.50*	*0.300*	*0.150*	**0.14**	**Cum**
10	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.						
	On Abutment Top (Left Side)	*1*	*10.32*	*0.450*		*4.64*	*Sqm*
	On Abutment Top (Right Side)	*1*	*10.32*	*0.450*		*4.64*	*Sqm*
	TOTAL					**9.28**	**Sqm**
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.						
		1	2.00			**2.00**	**No.**
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Under U/S floor	*1*		*4.294*		*4.29*	*Cum*
	Abutment						
	Section 1-1	*2*	*1.25*	*0.550*		*1.378*	*Cum*
	Section 2-2	*2*	*3.00*	*0.543*		*3.256*	*Cum*
	Section 3-3	*2*	*2.20*	*0.375*		*1.652*	*Cum*
	Section 5-5	*2*	*2.17*	*0.550*		*2.384*	*Cum*
	Section 6-6	*2*	*0.91*	*0.375*		*0.683*	*Cum*
	D/S protection	*2*					
	Toe wall	*2*	*4.70*	*0.150*	*0.600*	*1.410*	*Cum*
		2	*1.50*	*0.150*	*0.600*	*0.270*	*Cum*
	TOTAL					**15.33**	**Cum**

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND ABSTRACT OF COST FOR CONSTRUCTION OF SLAB CULVERT FOR KOTWARA DY. AOC FOR CONSTRUCTION OF SLAB BRIDGE AT KM 10.925								
S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
1	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	70.000	Sqm	**11.80**	826.31			
2	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	61.309	Cum	**195.20**	11967.60			
3	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	10.48	Cum	**6381.70**	66890.43	3.40	4.72	9.43
4	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	67.53	Cum	**6914.20**	466886.08	27.85	29.04	58.07
5	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	63.98	Cum	**8151.40**	6323.69	36.27	24.95	50.54
6	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	5.79	MT	**73574.90**	425924.23			
7	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	307.54	Sqm	**578.60**	177939.95			
8	Providing weepholes in brick masonry/stone masonry, plain/reinforced concrete abutment, wing wall, return wall with 90 mm dia PVC pipe extending through the full width of the structures with slope of 1(V):20(H) towards drawing face complete as per drawing	8.00	Rm	**152.60**	1229.60			
9	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications. (PWD NH SOR Chattisgarh, Ch- 14, Sl.No. 14.17, Pg. 60)	4.40	Cum	**66.00**	290.40			
10	Providing and laying modular strip/box seal expansion joint including anchorage catering to a horizontal movement beyond 70 mm and upto 140 mm assembly comprising of edge beams, central beam, 2modules chloroprene seal, anchorage elements, support and control system. (RCD M-126)	11.00	RM	**36993.21**	406925.31			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.(RCD 14.09)	2.00	No.	**5588.70**	11177.40			
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	64.52	Cum	**149.30**	9632.76			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	58.704	Cum	**1075.00**	63106.38			
	Coarse Aggregates (100 Km lead)	118.047	Cum	**1398.00**	165029.69			
	Cement (30 km lead)	67.525	MT	**742.00**	50103.61			
	Boulder (60 Km lead)	4.40	Cum	**1159.00**	5099.60			
	Brick (15 km lead)	480.00	No.	**3.18**	1526.40			
	Steel (30 Km lead)	5.79	MT	**742.00**	4295.43			
	TOTAL (In Rs.)				**1875174.86**			
	TOTAL (In Rs.)				**₹ 18,75,174.86**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	58.70	Cum	**584.64**	34320.48	3432.05		
	Coarse Aggregate	118.05	Cum	**944.26**	111467.05	11146.70		
	Boulders	4.40	Cum	**694.61**	3056.28	305.63		
	Total					14884.38		
	For 1 nos. fall, Total Seigniorage charges					**14884.38**		

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
AOC FOR CONSTRUCTION OF SLAB BRIDGE AT KM 11.730								
1	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	70.000	Sqm	**11.80**	826.31			
2	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	69.969	Cum	**195.20**	13657.93			
3	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	12.09	Cum	**6381.70**	77136.91	3.92	5.44	10.88
4	Providing & laying P.C.C. or **R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	113.38	Cum	**6914.20**	783920.74	46.77	48.75	97.51
5	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	63.88	Cum	**8151.40**	6323.69	36.22	24.91	50.47
6	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.	6.69	MT	**73574.90**	492131.27			
7	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	365.63	Sqm	**578.60**	211553.33			
8	Providing weepholes in brick masonry/stone masonry, plain/reinforced concrete abutment, wing wall, return wall with 90 mm dia PVC pipe extending through the full width of the structures with slope of 1(V):20(H) towards drawing face complete as per drawing	8.00	Rm	**152.60**	1229.60			
9	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications. (PWD NH SOR Chattisgarh, Ch- 14, Sl.No. 14.17, Pg. 60)	4.40	Cum	**66.00**	290.40			
10	Providing and laying modular strip/box seal expansion joint including anchorage catering to a horizontal movement beyond 70 mm and upto 140 mm assembly comprising of edge beams, central beam, 2modules chloroprene seal, anchorage elements, support and control system. (RCD M-126)	11.00	RM	**36993.21**	406925.31			
13	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.(RCD 14.09)	2.00	No.	**5588.70**	11177.40			
14	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	111.32	Cum	**149.30**	16619.98			

S. No.	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
15	**Carriage of materials**							
	Coarse Sand (60 Km lead)	79.106	Cum	**1075.00**	85038.68			
	Coarse Aggregates (100 Km lead)	158.850	Cum	**1398.00**	222072.75			
	Cement (30 km lead)	86.906	MT	**742.00**	64484.01			
	Boulder (60 Km lead)	4.40	Cum	**1159.00**	5099.60			
	Brick (15 km lead)	480.00	No.	**3.18**	1526.40			
	Steel (30 Km lead)	6.69	MT	**742.00**	4963.12			
	TOTAL (In Rs.)				**2404977.44**			
	TOTAL (In Rs.)				**₹ 24,04,977.44**			
	Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
	Coarse Sand	79.11	Cum	**584.64**	46248.39	4624.84		
	Coarse Aggregate	158.85	Cum	**944.26**	149996.00	14999.60		
	Boulders	4.40	Cum	**694.61**	3056.28	305.63		
	Total					19930.07		
	For 1 nos. fall, Total Seigniorage charges					**19930.07**		

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND							
DETAILS OF QUANTITIES OF SHARDA TYPE FALL FOR KOTWARA DY.							
BILL OF QUANTITIES FOR CONSTRUCTION OF SLAB BRIDGE AT - KM 10.925							
S.No.	**Items**	**No.**	**Length**	**Width**	**Height**	**Quantity**	**Unit**
1	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	*1*	*70.00*			**70.00**	**Sqm**
2	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Right abutment	*2*	*2.10*	*1.88*	*1.20*	*9.49*	*Cum*
		1	*4.82*	*2.20*	*1.20*	*12.72*	*Cum*
	Extra for Slope (0.5:1)	*2*	*6.92*	*0.60*	*1.20*	*9.96*	*Cum*
	Left abutment	*2*	*2.10*	*1.88*	*1.20*	*9.49*	*Cum*
		1	*4.82*	*2.20*	*1.20*	*12.72*	*Cum*
	Extra for Slope (0.5:1)	*2*	*4.82*	*0.60*	*1.20*	*6.94*	*Cum*
	TOTAL					**61.31**	**Cum**
3	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	Right abutment	*2*	*2.10*	*1.88*	*0.20*	*1.58*	*Cum*
		1	*4.82*	*2.20*	*0.20*	*2.12*	*Cum*
	Left abutment	*2*	*2.10*	*1.88*	*0.20*	*1.58*	*Cum*
		1	*4.82*	*2.20*	*0.20*	*2.12*	*Cum*
	Levelling course	*2*	*5.50*	*3.50*	*0.08*	*3.08*	*Cum*
	TOTAL					**10.48**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Right abutment	*1*	*4.82*	*2.00*	*0.20*	*1.93*	*Cum*
		1	*4.82*	*1.80*	*0.80*	*6.94*	*Cum*
		1	*4.82*	*1.11*	*1.93*	*10.33*	*Cum*
		1	*4.82*	*0.82*	*0.20*	*0.79*	*Cum*
		1	*4.82*	*0.40*	*0.37*	*0.71*	*Cum*
	Return wall	*2*	*2.00*	*1.68*	*0.20*	*1.35*	*Cum*
		2	*2.00*	*1.48*	*0.80*	*4.74*	*Cum*
		2	*2.00*	*0.74*	*2.27*	*6.73*	*Cum*
		2	*2.00*	*0.40*	*0.15*	*0.24*	*Cum*
	Left abutment	*1*	*4.82*	*2.00*	*0.20*	*1.93*	*Cum*
		1	*4.82*	*1.80*	*0.80*	*6.94*	*Cum*
		1	*4.82*	*1.11*	*1.93*	*10.33*	*Cum*
		1	*4.82*	*0.82*	*0.20*	*0.79*	*Cum*
		1	*4.82*	*0.40*	*0.37*	*0.71*	*Cum*
	Return wall	*2*	*2.00*	*1.68*	*0.20*	*1.35*	*Cum*
		2	*2.00*	*1.48*	*0.80*	*4.74*	*Cum*
		2	*2.00*	*0.74*	*2.27*	*6.73*	*Cum*
		2	*2.00*	*0.40*	*0.15*	*0.24*	*Cum*
	TOTAL					**67.53**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
5	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Slab	1	9.70	5.50	0.70	*37.24*	*Cum*
	Approch Slab	*2*	*3.50*	*5.50*	*0.30*	*11.55*	*Cum*
	Wearing coat	*1*	*16.70*	*4.50*	*0.08*	*5.64*	*Cum*
	Parapet	*2*	*16.70*	*0.44*	*0.18*	*2.60*	*Cum*
		2	*16.70*	*0.35*	*0.25*	*2.93*	*Cum*
		2	*16.70*	*0.22*	*0.55*	*4.02*	*Cum*
	TOTAL					**63.98**	**Cum**
6	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Dia of Bars	***No.***	***Length***		***Weight per m***	**Quantity**	**Unit**
	SLAB						
a1	*16*	*42*	*10.74*		*1.578*	*711.9*	*Kg*
a2	*12*	*74*	*6.50*		*0.888*	*427.0*	*Kg*
a3	*10*	*2*	*5.40*		*0.616*	*6.7*	*Kg*
a4	*10*	*42*	*10.66*		*0.616*	*276.0*	*Kg*
a5	*10*	*74*	*6.35*		*0.616*	*289.7*	*Kg*
	APPROACH SLAB						
c1	*12*	*72*	*3.70*		*0.888*	*236.5*	*Kg*
c2	*12*	*46*	*5.65*		*0.888*	*230.7*	*Kg*
c3	*12*	*72*	*3.70*		*0.888*	*236.5*	*Kg*
c4	*12*	*46*	*5.70*		*0.888*	*232.8*	*Kg*
	CRASH BARRIER FOR MAIN SLAB						
x1	*12*	*160*	*2.72*		*0.888*	*386.5*	*Kg*
x2	*16*	*160*	*1.61*		*1.578*	*407.5*	*Kg*
x3	*10*	*24*	*9.58*		*0.616*	*141.7*	*Kg*
	CRASH BARRIER FOR APPROACH SLAB						
y1	*12*	*116*	*2.32*		*0.888*	*239.0*	*Kg*
y2	*16*	*116*	*1.27*		*1.578*	*233.2*	*Kg*
y3	*12*	*48*	*9.58*		*0.888*	*408.2*	*Kg*
	RCC M-20 (Providing Skin Reinforcement @0.25%)	*67.5*	*0.0025*	*0.169*	*7850.00*	*1325.19*	*Kg*
	Total Reinforcement Steel (in kg)					*5789.0*	*Kg*
	Total Weight in Metric Tonne					**5.79**	**MT**
7	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Right abutment	*2*	*4.82*		*0.20*	*1.93*	*Sqm*
		2		*2.00*	*0.20*	*0.80*	*Sqm*
		2	*4.82*		*0.80*	*7.71*	*Sqm*
		2		*1.80*	*0.80*	*2.88*	*Sqm*
		2	*4.82*		*1.93*	*18.62*	*Sqm*
		2		*1.11*	*1.93*	*4.29*	*Sqm*
		2	*4.82*		*0.20*	*1.93*	*Sqm*
		2		*0.82*	*0.20*	*0.33*	*Sqm*
	Return wall	*2*	*2.00*		*0.20*	*0.80*	*Sqm*
		2		*1.68*	*0.20*	*0.67*	*Sqm*
		2	*2.00*		*0.80*	*3.20*	*Sqm*
		2		*1.48*	*0.80*	*2.37*	*Sqm*
		2	*2.00*		*2.27*	*9.09*	*Sqm*
		2		*0.74*	*2.27*	*3.37*	*Sqm*
		2	*2.00*		*0.15*	*0.60*	*Sqm*
		2		*0.40*	*0.15*	*0.12*	*Sqm*
	Left abutment	*2*	*4.82*		*0.20*	*1.93*	*Sqm*
		2		*2.00*	*0.20*	*0.80*	*Sqm*
		2	*4.82*		*0.80*	*7.71*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2		*1.80*	*0.80*	*2.88*	*Sqm*
		2	*4.82*		*1.93*	*18.62*	*Sqm*
		2		*1.11*	*1.93*	*4.29*	*Sqm*
		2	*4.82*		*0.20*	*1.93*	*Sqm*
		2		*0.82*	*0.20*	*0.33*	*Sqm*
	Return wall	*2*	*2.00*		*0.20*	*0.80*	*Sqm*
		2		*1.68*	*0.20*	*0.67*	*Sqm*
		2	*2.00*		*0.80*	*3.20*	*Sqm*
		2		*1.48*	*0.80*	*2.37*	*Sqm*
		2	*2.00*		*2.27*	*9.09*	*Sqm*
		2		*0.74*	*2.27*	*3.37*	*Sqm*
		2	*2.00*		*0.15*	*0.60*	*Sqm*
		2		*0.40*	*0.15*	*0.12*	*Sqm*
	Slab	*2*	*9.70*		*0.70*	*13.54*	*Sqm*
		1	*9.70*	5.50		*53.35*	*Sqm*
		2		*5.50*	0.70	*7.68*	*Sqm*
	Approch Slab	*4*	*3.50*		*0.30*	*4.20*	*Sqm*
		2	*3.50*	5.50		*38.50*	*Sqm*
		4		*5.50*	0.30	*6.60*	*Sqm*
	Parapet	*4*	*16.70*		*0.18*	*11.69*	*Sqm*
		4		*0.44*	0.18	*0.31*	*Sqm*
		4	*16.70*		*0.25*	*16.70*	*Sqm*
		4		*0.35*	0.25	*0.35*	*Sqm*
		4	*16.70*		*0.55*	*36.74*	*Sqm*
		4		*0.22*	*0.55*	*0.48*	*Sqm*
	TOTAL					**307.54**	**Sqm**
8	Providing weepholes in brick masonry/stone masonry, plain/reinforced concrete abutment, wing wall, return wall with 90 mm dia PVC pipe extending through the full width of the structures with slope of 1(V):20(H) towards drawing face complete as per drawing	8				**8.00**	**No.**
9	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications. **(PWD NH SOR Chattisgarh, Ch-14, Sl.No. 14.17, Pg. 60)**						
		2	*5.50*	*0.40*		*4.40*	*Sqm*
	TOTAL					**4.40**	**Sqm**
10	Providing and laying modular strip/box seal expansion joint including anchorage catering to a horizontal movement beyond 70 mm and upto 140 mm assembly comprising of edge beams, central beam, 2modules chloroprene seal, anchorage elements, support and control system. (RCD M-126)	*2*	*5.50*			*11.00*	*RM*
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.(RCD 14.09)	2				2.00	Nos
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Right and left abutment	2	4.82	2.17		*20.89*	*Cum*
	Right and left Return wall	4	2.10	3.18		*26.73*	*Cum*
	Extra slope	*2*	*6.918*	*0.6*	*1.2*	*9.96*	*Cum*
		2	*4.818*	*0.6*	*1.2*	*6.94*	*Cum*
	TOTAL					**64.52**	**Cum**

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	BILL OF QUANTITIES FOR CONSTRUCTION OF SLAB BRIDGE AT - KM 11.730						
1	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	*1*	*70.00*			**70.00**	**Sqm**
2	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.						
	Right abutment	*2*	*2.33*	*2.65*	*1.20*	*14.80*	*Cum*
		1	*4.37*	*2.33*	*1.20*	*12.23*	*Cum*
	Extra for Slope (0.5:1)	*2*	*6.69*	*0.60*	*1.20*	*9.64*	*Cum*
	Left abutment	*2*	*2.33*	*2.65*	*1.20*	*14.80*	*Cum*
		1	*4.37*	*2.33*	*1.20*	*12.23*	*Cum*
	Extra for Slope (0.5:1)	*2*	*4.37*	*0.60*	*1.20*	*6.29*	*Cum*
	TOTAL					**69.97**	**Cum**
3	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.						
	Right abutment	*2*	*2.33*	*2.65*	*0.20*	*2.47*	*Cum*
		1	*4.37*	*2.33*	*0.20*	*2.04*	*Cum*
	Left abutment	*2*	*2.33*	*2.65*	*0.20*	*2.47*	*Cum*
		1	*4.37*	*2.33*	*0.20*	*2.04*	*Cum*
	Levelling course	*2*	*5.50*	*3.50*	*0.08*	*3.08*	*Cum*
	TOTAL					**12.09**	**Cum**
4	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
	Right abutment	*1*	*4.37*	*2.45*	*0.20*	*2.14*	*Cum*
		1	*4.37*	*2.25*	*0.80*	*7.86*	*Cum*
		1	*4.37*	*1.34*	*3.44*	*20.03*	*Cum*
		1	*4.37*	*0.82*	*0.20*	*0.72*	*Cum*
		1	*4.37*	*0.40*	*0.37*	*0.65*	*Cum*
	Return wall	*2*	*2.23*	*2.13*	*0.20*	*1.90*	*Cum*
		2	*2.23*	*1.93*	*0.80*	*6.88*	*Cum*
		2	*2.23*	*0.97*	*3.78*	*16.24*	*Cum*
		2	*2.23*	*0.40*	*0.15*	*0.27*	*Cum*
	Left abutment	*1*	*4.37*	*2.45*	*0.20*	*2.14*	*Cum*
		1	*4.37*	*2.25*	*0.80*	*7.86*	*Cum*
		1	*4.37*	*1.34*	*3.44*	*20.03*	*Cum*
		1	*4.37*	*0.82*	*0.20*	*0.72*	*Cum*
		1	*4.37*	*0.40*	*0.37*	*0.65*	*Cum*
	Return wall	*2*	*2.23*	*2.13*	*0.20*	*1.90*	*Cum*
		2	*2.23*	*1.93*	*0.80*	*6.88*	*Cum*
		2	*2.23*	*0.97*	*3.78*	*16.24*	*Cum*
		2	*2.23*	*0.40*	*0.15*	*0.27*	*Cum*
	TOTAL					**113.38**	**Cum**
5	Providing & laying P.C.C. or **R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
	Slab	1	9.68	5.50	0.70	*37.16*	*Cum*
	Approch Slab	*2*	*3.50*	*5.50*	*0.30*	*11.55*	*Cum*
	Wearing coat	*1*	*16.68*	*4.50*	*0.08*	*5.63*	*Cum*
	Parapet	*2*	*16.68*	*0.44*	*0.18*	*2.59*	*Cum*
		2	*16.68*	*0.35*	*0.25*	*2.93*	*Cum*
		2	*16.68*	*0.22*	*0.55*	*4.02*	*Cum*
	TOTAL					**63.88**	**Cum**
6	Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	Dia of Bars	***No.***	***Length***		***Weight per m***	**Quantity**	**Unit**
	SLAB						
a1	*16*	*42*	*10.74*		*1.578*	*711.9*	*Kg*
a2	*12*	*74*	*6.50*		*0.888*	*427.0*	*Kg*
a3	*10*	*2*	*5.40*		*0.616*	*6.7*	*Kg*
a4	*10*	*42*	*10.66*		*0.616*	*276.0*	*Kg*
a5	*10*	*74*	*6.35*		*0.616*	*289.7*	*Kg*
	APPROACH SLAB						
c1	*12*	*72*	*3.70*		*0.888*	*236.5*	*Kg*
c2	*12*	*46*	*5.65*		*0.888*	*230.7*	*Kg*
c3	*12*	*72*	*3.70*		*0.888*	*236.5*	*Kg*
c4	*12*	*46*	*5.70*		*0.888*	*232.8*	*Kg*
	CRASH BARRIER FOR MAIN SLAB						
x1	*12*	*160*	*2.72*		*0.888*	*386.5*	*Kg*
x2	*16*	*160*	*1.61*		*1.578*	*407.5*	*Kg*
x3	*10*	*24*	*9.58*		*0.616*	*141.7*	*Kg*
	CRASH BARRIER FOR APPROACH SLAB						
y1	*12*	*116*	*2.32*		*0.888*	*239.0*	*Kg*
y2	*16*	*116*	*1.27*		*1.578*	*233.2*	*Kg*
y3	*12*	*48*	*9.58*		*0.888*	*408.2*	*Kg*
	RCC M-20 (Providing Skin Reinforcement @0.25%)	*####*	*0.0025*	*0.283*	*7850.00*	*#######*	*Kg*
	Total Reinforcement Steel (in kg)					*6688.8*	*Kg*
	Total Weight in Metric Tonne					**6.69**	**MT**
7	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.						
	Right abutment	*2*	*4.37*		*0.20*	*1.75*	*Sqm*
		2		*2.45*	*0.20*	*0.98*	*Sqm*
		2	*4.37*		*0.80*	*6.99*	*Sqm*
		2		*2.25*	*0.80*	*3.60*	*Sqm*
		2	*4.37*		*3.44*	*30.00*	*Sqm*
		2		*1.34*	*3.44*	*9.17*	*Sqm*
		2	*4.37*		*0.20*	*1.75*	*Sqm*
		2		*0.82*	*0.20*	*0.33*	*Sqm*
	Return wall	*2*	*2.23*		*0.20*	*0.89*	*Sqm*
		2		*2.13*	*0.20*	*0.85*	*Sqm*
		2	*2.23*		*0.80*	*3.56*	*Sqm*
		2		*1.93*	*0.80*	*3.09*	*Sqm*
		2	*2.23*		*3.78*	*16.80*	*Sqm*
		2		*0.97*	*3.78*	*7.30*	*Sqm*
		2	*2.23*		*0.15*	*0.67*	*Sqm*
		2		*0.40*	*0.15*	*0.12*	*Sqm*
	Left abutment	*2*	*4.37*		*0.20*	*1.75*	*Sqm*
		2		*2.45*	*0.20*	*0.98*	*Sqm*
		2	*4.37*		*0.80*	*6.99*	*Sqm*
		2		*2.25*	*0.80*	*3.60*	*Sqm*
		2	*4.37*		*3.44*	*30.00*	*Sqm*
		2		*1.34*	*3.44*	*9.17*	*Sqm*
		2	*4.37*		*0.20*	*1.75*	*Sqm*
		2		*0.82*	*0.20*	*0.33*	*Sqm*
	Return wall	*2*	*2.23*		*0.20*	*0.89*	*Sqm*
		2		*2.13*	*0.20*	*0.85*	*Sqm*
		2	*2.23*		*0.80*	*3.56*	*Sqm*
		2		*1.93*	*0.80*	*3.09*	*Sqm*

S.No.	Items	No.	Length	Width	Height	Quantity	Unit
		2	*2.23*		*3.78*	*16.80*	*Sqm*
		2		*0.97*	*3.78*	*7.30*	*Sqm*
		2	*2.23*		*0.15*	*0.67*	*Sqm*
		2		*0.40*	*0.15*	*0.12*	*Sqm*
	Slab	*2*	*9.68*		*0.70*	*13.51*	*Sqm*
		1	*9.68*	5.50		*53.24*	*Sqm*
		2		*5.50*	0.70	*7.68*	*Sqm*
	Approch Slab	*4*	*3.50*		*0.30*	*4.20*	*Sqm*
		2	*3.50*	5.50		*38.50*	*Sqm*
		4		*5.50*	0.30	*6.60*	*Sqm*
	Parapet	*4*	*16.68*		*0.18*	*11.68*	*Sqm*
		4		*0.44*	0.18	*0.31*	*Sqm*
		4	*16.68*		*0.25*	*16.68*	*Sqm*
		4		*0.35*	0.25	*0.35*	*Sqm*
		4	*16.68*		*0.55*	*36.70*	*Sqm*
		4		*0.22*	*0.55*	*0.48*	*Sqm*
	TOTAL					**365.63**	**Sqm**
8	Providing weepholes in brick masonry/stone masonry, plain/reinforced concrete abutment, wing wall, return wall with 90 mm dia PVC pipe extending through the full width of the structures with slope of 1(V):20(H) towards drawing face complete as per drawing	8				**8.00**	**No.**
9	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications. **(PWD NH SOR Chattisgarh, Ch-14, Sl.No. 14.17, Pg. 60)**						
		2	*5.50*	*0.40*		*4.40*	*Sqm*
	TOTAL					**4.40**	**Sqm**
10	Providing and laying modular strip/box seal expansion joint including anchorage catering to a horizontal movement beyond 70 mm and upto 140 mm assembly comprising of edge beams, central beam, 2modules chloroprene seal, anchorage elements, support and control system. (RCD M-126)	*2*	*5.50*			*11.00*	*RM*
11	Providing Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.(RCD 14.09)	2				2.00	Nos
12	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I						
	Right and left abutment	2	4.37	4.73		*41.31*	*Cum*
	Right and left Return wall	4	2.33	5.81		*54.08*	*Cum*
	Extra slope	*2*	*6.69*	*0.6*	*1.2*	*9.64*	*Cum*
		2	*4.37*	*0.6*	*1.2*	*6.29*	*Cum*
	TOTAL					**111.32**	**Cum**

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND

DETAILED ESTIMATE FOR REPAIR STRUCTURES WORK OF KOTWARA DISTRIBUTARY

Sl. No.	Structure Type	Chainage In Km	Amount (In Rs.)
1	BRIDGE	0.005	₹ 39,105.18
2	HR FOR GAMHARI MR.	0.005	₹ 21,399.73
3	BRIDGE	0.345	₹ 1,69,166.05
4	CROSS DRAINAGE	0.640	₹ 54,912.41
5	BRIDGE	0.875	₹ 0.00
6	HR FOR NAGWA MR.	1.140	₹ 20,110.88
7	CULVERT	1.840	₹ 39,472.08
8	BRIDGE	3.450	₹ 0.00
9	BRIDGE	3.775	₹ 1,35,332.84
10	BRIDGE	4.405	₹ 1,39,085.10
11	CROSS DRAINAGE	4.670	₹ 0.00
12	CROSS DRAINAGE	5.025	₹ 0.00
13	HR FOR PAWAI MR.	5.120	₹ 22,598.29
14	BRIDGE	5.225	₹ 52,394.92
15	CROSS DRAINAGE	5.475	₹ 21,074.52
16	FALL (0.457 M) (NEW)	5.500	₹ 0.00
17	CROSS DRAINAGE	5.610	₹ 1,03,508.40
18	FALL (2.0 M)	5.950	₹ 2,87,402.04
19	CROSS DRAINAGE	6.100	₹ 1,80,568.16
20	CROSS DRAINAGE	6.270	₹ 1,64,152.88
21	BRIDGE	6.330	₹ 72,003.08
22	FALL (1.520 M)	6.500	₹ 81,787.67
23	FALL (1.520 M)	6.750	₹ 1,46,434.09
24	FALL (1.830 M)	6.940	₹ 1,58,587.91
25	CROSS DRAINAGE	7.390	₹ 0.00
26	CROSS DRAINAGE	8.025	₹ 1,43,633.77
27	FALL (1.220 M)	8.345	₹ 57,593.65
28	CROSS DRAINAGE	8.605	₹ 3,05,855.70
29	CROSS DRAINAGE	8.850	₹ 3,52,976.43
30	CROSS DRAINAGE	9.045	₹ 0.00
31	CROSS DRAINAGE	9.160	₹ 2,04,519.09
32	CROSS DRAINAGE	9.460	₹ 0.00
33	FALL (2.135 M)	9.795	₹ 2,47,743.24
34	HR FOR BHUTAILI MR.	9.875	₹ 48,420.39
35	FALL (NEW)	10.300	₹ 0.00
36	CROSS DRAINAGE	10.440	₹ 0.00
37	FALL (1.220 M)	10.500	₹ 0.00
38	HR FOR SALOPURA MR.	10.660	₹ 8,707.32
39	CROSS DRAINAGE	10.860	₹ 1,12,750.92
40	BRIDGE	10.925	₹ 50,474.75
41	BRIDGE	11.730	₹ 58,326.37
42	CROSS DRAINAGE	11.860	₹ 1,36,838.57
43	BRIDGE	12.020	₹ 1,12,777.37
44	CROSS DRAINAGE	12.440	₹ 1,36,307.37
45	CR / HR FOR SINGHI SUB DY.	13.020	₹ 47,262.33
46	CROSS DRAINAGE	13.480	₹ 0.00

Sl. No.	Structure Type	Chainage In Km	Amount (In Rs.)
47	BRIDGE	13.605	₹ 0.00
48	CROSS DRAINAGE	14.240	₹ 1,49,272.16
49	BRIDGE	14.370	₹ 90,221.89
50	BRIDGE	15.150	₹ 0.00
51	BRIDGE	15.860	₹ 78,944.16
52	BRIDGE	16.130	₹ 90,221.89
53	HR FOR SAHOKARMA MR.	16.200	₹ 23,233.19
54	FALL (2.380 M)	16.500	₹ 0.00
55	HR FOR DHAMNI MR.	17.300	₹ 24,534.50
56	FALL (1.220 M)	17.350	₹ 2,89,745.65
57	BRIDGE/FALL(0.914)	17.665	₹ 0.00
58	BRIDGE	18.400	₹ 70,936.77
59	FALL (0.914 M) / BRIDGE	19.100	₹ 1,19,250.39
60	FALL (1.220 M)	20.660	₹ 0.00
61	FALL (1.220 M) / BRIDGE	21.450	₹ 0.00
62	BRIDGE	21.980	₹ 0.00
63	FALL (1.070)	22.350	₹ 47,335.59
64	FALL (1.220 M) / BRIDGE	22.750	₹ 0.00
65	BRIDGE	23.025	₹ 0.00
66	BRIDGE	23.150	₹ 72,516.10
67	CROSS DRAINAGE	23.520	₹ 0.00
68	HR FOR NAWAKHAP MINOR	23.830	₹ 0.00
69	FALL (0.915 M) / BRIDGE	24.200	₹ 0.00
70	BRIDGE	24.430	₹ 36,258.05
71	FALL (0.610 M)	25.150	₹ 0.00
72	FALL (0.610 M) / BRIDGE	25.950	₹ 99,984.85
73	BRIDGE	26.365	₹ 0.00
74	FALL (0.915 M) / BRIDGE	26.730	₹ 50,761.27
75	HR FOR BHADWA MR.	27.075	₹ 25,955.27
76	FALL (1.520)	27.250	₹ 0.00
77	FALL (1.520)	27.595	₹ 47,335.59
78	PIPE CULVERT	28.740	₹ 0.00
79	PIPE CULVERT	28.830	₹ 0.00
80	RAILWAY LINE	28.910	₹ 0.00
81	FALL (1.670 M)	29.325	₹ 31,225.44
82	FALL (1.070 M)/ BRIDGE	29.690	₹ 69,348.64
83	FALL (0.762 M)	29.875	₹ 21,652.52
84	FALL (0.762 M)	30.000	₹ 0.00
85	FALL (1.220 M)	30.275	₹ 21,652.52
86	FALL (1.220M)	30.510	₹ 2,10,194.84
87	ROAD CROSSING	30.585	₹ 0.00
Total In Rs.			**₹ 56,03,864.79**
Total In Lakhs.			**₹ 56.04**

Sl. No.	Structure Type	Chainage In Km	Amount (In Rs.)
DETAILED ESTIMATE FOR REPAIR STRUCTURES WORK OF GAMHARIA MR. (KOTWARA DY)			
Sl. No.	**Structure Type**	**Chainage In Km**	**Amount (In Rs.)**
1	BRIDGE	0.175	₹ 0.00
2	BRIDGE	0.950	₹ 1,08,774.15
3	CROSS DRAINAGE	1.050	₹ 0.00
4	BRIDGE	2.100	₹ 1,08,774.15
5	CROSS DRAINAGE	2.455	₹ 0.00
Total In Rs.			**₹ 2,17,548.29**
Total In Lakhs.			**₹ 2.18**

Sl. No.	Structure Type	Chainage In Km	Amount (In Rs.)
DETAILED ESTIMATE FOR REPAIR STRUCTURES WORK OF NAGWA MINOR (KOTWARA DY)			
Sl. No.	**Structure Type**	**Chainage In Km**	**Amount (In Rs.)**
1	CULVERT	0.730	₹ 32,103.60
Total In Rs.			**₹ 32,103.60**
Total In Lakhs.			**₹ 0.32**

DETAILED ESTIMATE FOR REPAIR STRUCTURES WORK OF PAWAI MINOR (KOTWARA DY)			
Sl. No.	**Structure Type**	**Chainage In Km**	**Amount (In Rs.)**
1	BRIDGE	0.175	₹ 1,34,900.21
2	FALL (1.067 M)	0.200	₹ 0.00
3	FALL (0.914 M)	0.375	₹ 0.00
4	FALL (0.61 M)	0.640	₹ 1,23,474.45
5	CROSS DRAINAGE	1.050	₹ 0.00
6	FALL (1.829M)	1.100	₹ 74,459.05
7	BRIDGE	1.260	₹ 1,13,841.14
8	FALL (1.829M)	1.400	₹ 92,717.25
9	FALL (1.829 M)	1.720	₹ 54,961.39
Total In Rs.			**₹ 5,94,353.48**
Total In Lakhs.			**₹ 5.94**

DETAILED ESTIMATE FOR REPAIR STRUCTURES WORK OF BHUTAILI MINOR (KOTWARA DY)			
Sl. No.	**Structure Type**	**Chainage In Km**	**Amount (In Rs.)**
1	CROSS DRAINAGE	0.300	₹ 1,65,687.45
2	FALL (1.524 M)	0.370	₹ 1,62,332.07
3	CROSS DRAINAGE	0.530	₹ 1,41,064.52
4	FALL (1.524 M)	0.580	₹ 36,341.82
5	CULVERT	0.650	₹ 0.00
6	FALL (1.067 M)	0.740	₹ 18,320.08
7	CROSS DRAINAGE	0.855	₹ 1,47,525.55
8	FALL (1.220 M)	0.930	₹ 47,335.59
9	FALL (1.220 M)	1.120	₹ 0.00
10	FALL (0.614 M)	1.350	₹ 36,341.82
11	FALL (0.457 M)/ CULVERT	1.480	₹ 1,19,793.05
12	FALL (0.915 M)	1.625	₹ 63,044.22
13	FALL (0.915 M)	1.840	₹ 0.00
Total In Rs.			**₹ 9,37,786.15**
Total In Lakhs.			**₹ 9.38**

Sl. No.	Structure Type	Chainage In Km	Amount (In Rs.)
DETAILED ESTIMATE FOR REPAIR STRUCTURES WORK OF SALOPURA MINOR (KOTWARA DY)			
Sl. No.	**Structure Type**	**Chainage In Km**	**Amount (In Rs.)**
1	FALL (1.829 M)	0.000	₹ 9,937.51
2	FALL (0.914 M)	0.070	₹ 2,228.37
3	CROSS DRAINAGE	0.250	₹ 96,397.06
4	CULVERT/FALL(1.524)	0.300	₹ 26,620.47
5	FALL (1.220 M) (NEW)	0.487	₹ 0.00
6	CROSS DRAINAGE	0.685	₹ 1,37,251.51
7	FALL (1.067 M)	0.710	₹ 52,178.35
8	FALL (1.829 M)	0.890	₹ 8,783.80
9	FALL (2.134 M)	1.185	₹ 54,958.90
10	CROSS DRAINAGE	1.230	₹ 77,974.18
11	ROAD CROSSING	1.260	₹ 0.00
12	FALL (1.520 M)	1.450	₹ 32,437.84
13	CROSS DRAINAGE	1.630	₹ 1,38,687.30
14	FALL (1.520 M)	1.765	₹ 0.00
15	CULVERT	1.790	₹ 37,806.76
16	CROSS DRAINAGE	2.155	₹ 1,38,687.30
17	FALL (0.915 M) / CULVERT	2.170	₹ 21,754.83
18	CROSS DRAINAGE	2.610	₹ 0.00
19	FALL (1.220 M) (NEW)	2.800	₹ 0.00
Total In Rs.			**₹ 8,35,704.16**
Total In Lakhs.			**₹ 8.36**

DETAILED ESTIMATE FOR REPAIR STRUCTURES WORK OF SINGHI SUB-DY (KOTWARA DY)			
Sl. No.	**Structure Type**	**Chainage In Km**	**Amount (In Rs.)**
1	FALL (0.914 M)	0.000	₹ 1,01,491.60
2	BRIDGE	0.010	₹ 50,761.27
3	FALL (1.524 M)	0.120	₹ 5,541.04
4	FALL (1.829 M)	0.490	₹ 0.00
5	BRIDGE	0.580	₹ 70,212.55
6	FALL (1.220 M) (NEW)	0.650	₹ 0.00
7	FALL (1.220 M)	1.040	₹ 1,10,162.43
8	CROSS DRAINAGE	1.265	₹ 0.00
9	BRIDGE/FALL(1.220)	1.300	₹ 15,921.45
10	FALL (1.220 M) (NEW)	1.350	₹ 0.00
11	FALL (2.134 M) / BRIDGE	1.840	₹ 48,608.69
12	CROSS DRAINAGE	2.180	₹ 0.00
13	BRIDGE	2.200	₹ 0.00
14	FALL (1.220 M) / BRIDGE	2.640	₹ 74,737.75
15	FALL (0.305 M) (NEW)	2.740	₹ 0.00
16	CROSS DRAINAGE	2.960	₹ 1,56,129.71
17	CULVERT	3.120	₹ 0.00
18	BRIDGE	3.230	₹ 32,843.70
19	FALL (0.614 M)	3.565	₹ 56,405.95
20	BRIDGE	3.765	₹ 0.00
21	FALL (0.762 M) (NEW)	3.850	₹ 0.00
22	CROSS DRAINAGE	3.935	₹ 1,27,768.77

Sl. No.	Structure Type	Chainage In Km	Amount (In Rs.)
23	BRIDGE	4.060	₹ 36,949.16
24	FALL (1.830 M)	4.190	₹ 0.00
25	CROSS DRAINAGE	4.440	₹ 76,657.94
26	FALL (1.524 M)	4.455	₹ 48,468.72
27	HR FOR PROP MR -1	4.584	₹ 0.00
28	SUPER PASSAGE	5.050	₹ 0.00
29	CROSS DRAINAGE	5.250	₹ 70,528.17
30	BRIDGE	5.380	₹ 0.00
31	SUPER PASSAGE	5.660	₹ 5,09,194.91
32	SUPER PASSAGE	6.040	₹ 6,06,801.78
33	BRIDGE	6.470	₹ 18,819.11
34	SUPER PASSAGE	6.630	₹ 0.00
35	SUPER PASSAGE	6.925	₹ 0.00
36	SUPER PASSAGE	7.370	₹ 0.00
37	BRIDGE	7.445	₹ 0.00
38	SUPER PASSAGE	7.590	₹ 1,652.61
39	SUPER PASSAGE	7.755	₹ 1,652.61
40	BRIDGE	7.950	₹ 0.00
41	SUPER PASSAGE	8.290	₹ 4,07,566.54
42	SUPER PASSAGE	8.825	₹ 0.00
43	SUPER PASSAGE	9.660	₹ 5,57,200.39
44	BRIDGE	9.715	₹ 16,939.68
45	BRIDGE	10.520	₹ 0.00
46	SUPER PASSAGE	10.895	₹ 1,70,433.67
47	SUPER PASSAGE	11.230	₹ 0.00
48	BRIDGE	11.740	₹ 0.00
49	BRIDGE	13.040	₹ 98,531.10
50	HR FOR PROP MR -2	13.380	₹ 0.00
51	RAILWAY LINE	13.460	₹ 0.00
52	CULVERT	14.330	₹ 0.00
53	CULVERT	14.860	₹ 0.00
54	CULVERT	15.740	₹ 44,494.58
55	ROAD CROSSING	15.930	₹ 0.00
56	FALL (0.914 M)	16.235	₹ 18,210.58
57	FALL (1.830 M)	16.885	₹ 0.00
58	FALL (1.830 M)/ CULVERT	17.520	₹ 27,809.11
59	FALL (1.220 M)	17.800	₹ 0.00
Total In Rs.			**₹ 35,62,495.60**
Total In Lakhs.			**₹ 35.62**

Sl. No.	Structure Type	Chainage In Km	Amount (In Rs.)
DETAILED ESTIMATE FOR REPAIR STRUCTURES WORK OF SAHOKARMA MINOR			
Sl. No.	**Structure Type**	**Chainage In Km**	**Amount (In Rs.)**
1	WELL TYPE FALL(2.438)	0.305	₹ 1,09,662.26
2	PIPE LINE	0.330	₹ 0.00
3	FALL (1.220 M) (NEW)	0.450	₹ 0.00
4	FALL (1.524M) / PIPE LINE	0.620	₹ 43,183.95
5	FALL (2.440 M) / PIPE LINE	0.930	₹ 1,51,413.28
6	BRIDGE	1.090	₹ 0.00
7	FALL (1.524 M)	1.400	₹ 0.00
Total In Rs.			**₹ 3,04,259.50**
Total In Lakhs.			**₹ 3.04**

DETAILED ESTIMATE FOR REPAIR STRUCTURES WORK OF DHAMNI MINOR (KOTWARA DY)			
Sl. No.	**Structure Type**	**Chainage In Km**	**Amount (In Rs.)**
1	FALL (1.067 M)	1.850	₹ 30,765.54
2	FALL (1.220 M)	2.150	₹ 20,049.78
3	FALL (1.676 M)	2.650	₹ 98,563.07
4	FALL (1.830 M)	3.050	₹ 7,405.68
5	FALL (1.220 M) (NEW)	3.300	₹ 0.00
6	FALL (0.762 M) (NEW)	4.800	₹ 0.00
Total In Rs.			**₹ 1,56,784.07**
Total In Lakhs.			**₹ 1.57**

DETAILED ESTIMATE FOR REPAIR STRUCTURES WORK OF BHADWA MINOR (KOTWARA			
Sl. No.	**Structure Type**	**Chainage In Km**	**Amount (In Rs.)**
1	BRIDGE	0.315	₹ 0.00
2	FALL (1.220 M) (NEW)	0.450	₹ 0.00
3	BRIDGE	0.935	₹ 15,523.15
4	FALL (2.440 M)	1.460	₹ 82,303.45
5	BRIDGE	1.555	₹ 28,623.27
6	FALL (2.440 M)	1.910	₹ 1,42,907.35
7	FALL (2.440 M)	2.170	₹ 0.00
8	BRIDGE	2.305	₹ 0.00
9	BRIDGE	2.440	₹ 27,809.11
10	FALL (2.135 M)	2.690	₹ 12,880.86
Total In Rs.			**₹ 3,10,047.21**
Total In Lakhs.			**₹ 3.10**

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND									
ABSTRACT OF COST OF REPAIRED STRUCTURES OF KOTWARA DISTRIBUTARY									
S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
AOC FOR BRIDGE (Ch.-0.005 Km)									
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	3.79	Cum	**5021.30**	19008.71	0.44	1.21	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	10.470	Sqm	**340.20**	3561.85	10.855	0.153	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	10.470	Sqm	**63.20**	661.70	0.02		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.364	Cum	**1075.00**	1466.58			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	11.307	MT	**742.00**	8389.78			
		Brick (15 km lead)	1892.00	No.	**3.18**	6016.56			
TOTAL (In Rs.)						**39105.18**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.36	Cum	**584.64**	797.60	79.76		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**79.76**		
AOC FOR HR OF GAMHARI MR (Ch.-0.005 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	150.00	Cum	**11.80**	1770.66			
2	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	7.875	Sqm	**2492.58**	19629.07			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		Brick (15 km lead)	0.00	No.	**3.18**	0.00			
TOTAL (In Rs.)						**21399.73**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
AOC FOR BRIDGE (Ch.-0.345 Km)									
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	12.42	Cum	**5021.30**	62364.55	1.43	3.97	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	68.700	Sqm	**340.20**	23371.74	71.228	1.003	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	68.700	Sqm	**63.20**	4341.84	0.10		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	4.977	Cum	**1075.00**	5350.73			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	72.762	MT	**742.00**	53989.40			
		Brick (15 km lead)	6210.00	No.	**3.18**	19747.80			
TOTAL (In Rs.)						**169166.05**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	4.98	Cum	**584.64**	2910.00	291.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		Total					**291.00**		
		AOC FOR CD WORK (Ch.-0.640 Km)							
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	4.725	Cum	**6914.20**	32669.60	1.95	2.03	4.06
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	22.350	Sqm	**578.60**	12931.71			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	2.032	Cum	**1075.00**	2184.13			
		Coarse Aggregates (100 Km lead)	4.064	Cum	**1398.00**	5680.77			
		Cement (30 km lead)	1.949	MT	**742.00**	1446.20			
		Brick (15 km lead)	0.00	No.	**3.18**	0.00			
		TOTAL (In Rs.)				**54912.41**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	2.03	Cum	**584.64**	1187.84	118.78		
		Coarse Aggregate	4.06	Cum	**944.26**	3837.00	383.70		
		Total					**502.48**		
		AOC FOR BRIDGE (Ch.-0.875 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR HR OF NAGWA MINOR (Ch.-1.140 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	120.000	Sqm	**11.80**	1416.53			
2	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	7.500	Sqm	**2492.58**	18694.35			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		Brick (15 km lead)	0.00	No.	**3.18**	0.00			
		TOTAL (In Rs.)				**20110.88**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
		AOC FOR CULVERT (Ch.-1.840 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	2.90	Cum	**5021.30**	14551.73	0.33	0.93	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	16.030	Sqm	**340.20**	5453.41	16.620	0.234	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	16.030	Sqm	**63.20**	1013.10	0.02		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.161	Cum	**1075.00**	1248.50			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	16.978	MT	**742.00**	12597.53			
		Brick (15 km lead)	1449.00	No.	3.18	4607.82			
		TOTAL (In Rs.)				**39472.08**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.16	Cum	**584.64**	679.00	67.90		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		Total					**67.90**		
		AOC FOR BRIDGE (Ch.-3.450 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR BRIDGE (Ch.-3.775 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	9.94	Cum	**5021.30**	49891.64	1.14	3.18	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	54.960	Sqm	**340.20**	18697.39	56.983	0.802	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	54.960	Sqm	**63.20**	3473.47	0.08		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	3.982	Cum	**1075.00**	4280.58			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	58.210	MT	**742.00**	43191.52			
		Brick (15 km lead)	4968.00	No.	**3.18**	15798.24			
		TOTAL (In Rs.)				**135332.84**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	3.98	Cum	**584.64**	2328.00	232.80		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**232.80**		
		AOC FOR BRIDGE (Ch.-4.405 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	150.000	Sqm	**11.80**	1770.66			
2	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	0.795	Cum	**2492.58**	1981.60			
3	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	9.94	Cum	**5021.30**	49891.64	1.14	3.18	
4	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	54.960	Sqm	**340.20**	18697.39	56.983	0.802	
5	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	54.960	Sqm	**63.20**	3473.47	0.08		
6		**Carriage of materials**							
		Coarse Sand (60 Km lead)	3.982	Cum	**1075.00**	4280.58			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	58.210	MT	**742.00**	43191.52			
		Brick (15 km lead)	4968.00	No.	**3.18**	15798.24			
		TOTAL (In Rs.)				**139085.10**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	3.98	Cum	**584.64**	2328.00	232.80		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**232.80**		
		AOC FOR CD WORK (Ch.-4.670 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR CD WORK (Ch.-5.025 Km)							
1	**Structure is in good condition and does not requir any repair works.**								

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
AOC FOR HR OF PAWAI MR (Ch.-5.120 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	90.000	Sqm	**11.80**	1062.40			
2	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	8.640	Sqm	**2492.58**	21535.89			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		Brick (15 km lead)	0.00	No.	**3.18**	0.00			
TOTAL (In Rs.)						**22598.29**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
AOC FOR BRIDGE (Ch.-5.225 Km)									
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	0.660	Cum	**2492.58**	1645.10			
2	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	3.73	Cum	**5021.30**	18709.36	0.43	1.19	
3	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	20.610	Sqm	**340.20**	7011.52	21.368	0.301	
4	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	20.610	Sqm	**63.20**	1302.55	0.03		
5		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.493	Cum	**1075.00**	1605.22			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	21.829	MT	**742.00**	16196.82			
		Brick (15 km lead)	1863.00	No.	**3.18**	5924.34			
TOTAL (In Rs.)						**52394.92**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.49	Cum	**584.64**	873.00	87.30		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**87.30**		
AOC FOR CD WORK (Ch.-5.475 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	160.000	Sqm	**11.80**	1888.70			
2	5.3.4	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	2.70	Cum	**6381.70**	17230.59	0.87	1.22	2.43
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.215	Cum	**1075.00**	1306.13			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.875	MT	**742.00**	649.10			
TOTAL (In Rs.)						**21074.52**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.22	Cum	**584.64**	710.34	71.03		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**71.03**		

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
AOC FOR CD WORK (Ch.-5.610 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	0.270	Sqm	**11.80**	3.19			
2	5.3.4	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	12.38	Cum	**6381.70**	78973.54	4.01	5.57	11.14
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	5.569	Cum	**1075.00**	5986.41			
		Coarse Aggregates (100 Km lead)	11.138	Cum	**1398.00**	15570.23			
		Cement (30 km lead)	4.010	MT	**742.00**	2975.05			
TOTAL (In Rs.)						**103508.40**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	5.57	Cum	**584.64**	3255.71	325.57		
		Coarse Aggregate	11.14	Cum	**944.26**	10516.70	1051.67		
		Total					**1377.24**		
AOC FOR FALL (Ch.-5.950 Km)									
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	26.820	Cum	**6914.20**	185438.84	11.06	11.53	23.07
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	84.880	Sqm	**578.60**	49111.57			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	11.533	Cum	**1075.00**	12397.55			
		Coarse Aggregates (100 Km lead)	23.065	Cum	**1398.00**	32245.15			
		Cement (30 km lead)	11.063	MT	**742.00**	8208.93			
		Brick (15 km lead)	0.00	No.	**3.18**	0.00			
TOTAL (In Rs.)						**287402.04**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	11.53	Cum	**584.64**	6742.42	674.24		
		Coarse Aggregate	23.07	Cum	**944.26**	21779.55	2177.95		
		Total					**2852.20**		

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		AOC FOR CD WORKS (Ch.-6.100 Km)							
1	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	151.800	Sqm	**340.20**	51642.36	157.386	2.216	
2	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	151.800	Sqm	**63.20**	9593.76	0.23		
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	2.216	Cum	**1075.00**	2382.50			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	157.614	MT	**742.00**	116949.54			
		TOTAL (In Rs.)				**180568.16**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	2.22	Cum	**584.64**	1295.73	129.57		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**129.57**		
		AOC FOR CD WORKS (Ch.-6.270 Km)							
1	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	138.000	Sqm	**340.20**	46947.60	143.078	2.015	
2	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	138.000	Sqm	**63.20**	8721.60	0.21		
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	2.015	Cum	**1075.00**	2165.91			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	143.285	MT	**742.00**	106317.77			
		TOTAL (In Rs.)				**164152.88**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	2.01	Cum	**584.64**	1177.93	117.79		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**117.79**		
		AOC FOR BRIDGE (Ch.-6.330 Km)							
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	2.295	Cum	**6914.20**	15868.09	0.95	0.99	1.97
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	11.730	Sqm	**578.60**	6786.98			
3	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	3.73	Cum	**5021.30**	18709.36	0.43	1.19	
4	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	20.610	Sqm	**340.20**	7011.52	21.368	0.301	
5	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	20.610	Sqm	**63.20**	1302.55	0.03		
6		**Carriage of materials**							
		Coarse Sand (60 Km lead)	2.480	Cum	**1075.00**	2666.08			
		Coarse Aggregates (100 Km lead)	1.974	Cum	**1398.00**	2759.23			
		Cement (30 km lead)	22.775	MT	**742.00**	16899.26			
		TOTAL (In Rs.)				**72003.08**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	2.48	Cum	**584.64**	1449.95	145.00		
		Coarse Aggregate	1.97	Cum	**944.26**	1863.69	186.37		
		Total					**331.36**		

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		AOC FOR FALL (Ch.-6.500 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	130.000	Sqm	**11.80**	1534.57			
2	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	7.800	Cum	**6914.20**	53930.76	3.22	3.35	6.71
3	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	21.580	Sqm	**578.60**	12486.19			
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	3.354	Cum	**1075.00**	3605.55			
		Coarse Aggregates (100 Km lead)	6.708	Cum	**1398.00**	9377.78			
		Cement (30 km lead)	3.218	MT	**742.00**	2387.39			
		TOTAL (In Rs.)				**81787.67**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	3.35	Cum	**584.64**	1960.88	196.09		
		Coarse Aggregate	6.71	Cum	**944.26**	6334.10	633.41		
		Total					**829.50**		
		AOC FOR FALL (Ch.-6.750 Km)							
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	58.748	Cum	**2492.58**	146434.09			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		TOTAL (In Rs.)				**146434.09**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
		New fall has been proposed.							
		AOC FOR FALL (Ch.-6.940 Km)							
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	63.624	Cum	**2492.58**	158587.91			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		TOTAL (In Rs.)				**158587.91**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
		New fall has been proposed.							
		AOC FOR CD WORKS (Ch.-7.390 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR CD WORKS (Ch.-8.025 Km)							
1	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	120.750	Sqm	**340.20**	41079.15	125.194	1.763	
2	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	120.750	Sqm	**63.20**	7631.40	0.18		
3		**Carriage of materials**							

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		Coarse Sand (60 Km lead)	1.763	Cum	**1075.00**	1895.17			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	125.375	MT	**742.00**	93028.05			
		TOTAL (In Rs.)				**143633.77**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.76	Cum	**584.64**	1030.69	103.07		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**103.07**		

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		AOC FOR FALL (Ch.-8.345 Km)							
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	23.106	Cum	**2492.58**	57593.65			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		TOTAL (In Rs.)				**57593.65**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
		The fall has been eliminated as per regime section.							
		AOC FOR CD WORKS (Ch.-8.605 Km)							
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	1.620	Cum	**6914.20**	11201.00	0.67	0.70	1.39
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	8.820	Sqm	**578.60**	5103.25			
3	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	180.000	Sqm	**11.80**	2124.79			
4	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	238.950	Sqm	**340.20**	81290.79	247.743	3.489	
5	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	238.950	Sqm	**63.20**	15101.64	0.36		
6		**Carriage of materials**							
		Coarse Sand (60 Km lead)	4.185	Cum	**1075.00**	4499.17			
		Coarse Aggregates (100 Km lead)	1.393	Cum	**1398.00**	1947.69			
		Cement (30 km lead)	248.770	MT	**742.00**	184587.37			
		TOTAL (In Rs.)				**305855.70**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	4.19	Cum	**584.64**	2446.88	244.69		
		Coarse Aggregate	1.39	Cum	**944.26**	1315.54	131.55		
		Total					**376.24**		
		AOC FOR CD WORKS (Ch.-8.850 Km)							
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	9.900	Cum	**6914.20**	68450.58	4.08	4.26	8.51
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	47.600	Sqm	**578.60**	27541.36			
3	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	120.000	Sqm	**11.80**	1416.53			
4	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	198.450	Sqm	**340.20**	67512.69	205.753	2.897	
5	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	198.450	Sqm	**63.20**	12542.04	0.30		
6		**Carriage of materials**							

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		Coarse Sand (60 Km lead)	7.154	Cum	**1075.00**	7690.95			
		Coarse Aggregates (100 Km lead)	8.514	Cum	**1398.00**	11902.57			
		Cement (30 km lead)	210.134	MT	**742.00**	155919.71			
		TOTAL (In Rs.)				**352976.43**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	7.15	Cum	**584.64**	4182.73	418.27		
		Coarse Aggregate	8.51	Cum	**944.26**	8039.43	803.94		
		Total					**1222.22**		
		AOC FOR CD WORKS (Ch.-9.045 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR CD WORKS (Ch.-9.160 Km)							
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	8.550	Cum	**6914.20**	59116.41	3.53	3.68	7.35
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	41.600	Sqm	**578.60**	24069.76			
3	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	160.000	Sqm	**11.80**	1888.70			
4	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	86.250	Sqm	**340.20**	29342.25	89.424	1.259	
5	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	86.250	Sqm	**63.20**	5451.00	0.13		
6		**Carriage of materials**							
		Coarse Sand (60 Km lead)	4.936	Cum	**1075.00**	5305.93			
		Coarse Aggregates (100 Km lead)	7.353	Cum	**1398.00**	10279.49			
		Cement (30 km lead)	93.080	MT	**742.00**	69065.55			
		TOTAL (In Rs.)				**204519.09**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	4.94	Cum	**584.64**	2885.64	288.56		
		Coarse Aggregate	7.35	Cum	**944.26**	6943.14	694.31		
		Total					**982.88**		
		AOC FOR CD WORKS (Ch.-9.460 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR CD WORKS (Ch.-9.795 Km)							
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	10.800	Cum	**6914.20**	74673.36	4.46	4.64	9.29
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	43.600	Sqm	**578.60**	25226.96			
3	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	110.000	Sqm	**11.80**	1298.48	0.01	0.00	
4	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	105.300	Sqm	**340.20**	35823.06	109.175	1.537	
5	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	105.300	Sqm	**63.20**	6654.96	0.16		
6		**Carriage of materials**							
		Coarse Sand (60 Km lead)	6.181	Cum	**1075.00**	6644.98			

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		Coarse Aggregates (100 Km lead)	9.288	Cum	**1398.00**	12984.62			
		Cement (30 km lead)	113.796	MT	**742.00**	84436.81			
		TOTAL (In Rs.)				**247743.24**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	6.18	Cum	**584.64**	3613.88	361.39		
		Coarse Aggregate	9.29	Cum	**944.26**	8770.29	877.03		
		Total					**1238.42**		
		AOC FOR HR OF BHUTAILI MINOR (Ch.-9.875 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	100.000	Sqm	**11.80**	1180.44	0.01	0.00	
2	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	18.950	Sqm	**2492.58**	47234.39			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.008	MT	**742.00**	5.57			
		Brick (15 km lead)	0.00	No.	**3.18**	0.00			
		TOTAL (In Rs.)				**48420.39**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
		AOC FOR CD WORK (Ch.-10.440 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR FALL(Ch.-10.500 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR HR OF SALOPURA MINOR (Ch.-10.660 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	120.000	Sqm	**11.80**	1416.53			
2	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	2.925	Sqm	**2492.58**	7290.80			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		Brick (15 km lead)	0.00	No.	**3.18**	0.00			
		TOTAL (In Rs.)				**8707.32**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
		AOC FOR CD WORKS (Ch.-10.860 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	165.000	Sqm	**11.80**	1947.72			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	93.150	Sqm	**340.20**	31689.63	96.578	1.360	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	93.150	Sqm	**63.20**	5887.08	0.14		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.360	Cum	**1075.00**	1461.99			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	96.718	MT	**742.00**	71764.49			
		TOTAL (In Rs.)				**112750.92**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		Coarse Sand	1.36	Cum	**584.64**	795.10	79.51		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**79.51**		
AOC FOR BRIDGE (Ch.-10.925 Km)									
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	20.250	Cum	**2492.58**	50474.75			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
TOTAL (In Rs.)						**50474.75**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
		New Bridge has been proposed.							
AOC FOR BRIDGE (Ch.-11.730 Km)									
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	23.400	Cum	**2492.58**	58326.37			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
TOTAL (In Rs.)						**58326.37**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
		New Bridge has been proposed.							

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
AOC FOR CD WORKS (Ch.-11.860 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	165.000	Sqm	**11.80**	1947.72			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	113.400	Sqm	**340.20**	38578.68	117.573	1.656	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	113.400	Sqm	**63.20**	7166.88	0.17		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.656	Cum	**1075.00**	1779.81			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	117.743	MT	**742.00**	87365.47			
TOTAL (In Rs.)						**136838.57**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.66	Cum	**584.64**	967.95	96.80		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**96.80**		
AOC FOR BRIDGE (Ch.-12.020 Km)									
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	8.28	Cum	**5021.30**	41576.36	0.95	2.65	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	45.800	Sqm	**340.20**	15581.16	47.485	0.669	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	45.800	Sqm	**63.20**	2894.56	0.07		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	3.318	Cum	**1075.00**	3567.15			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	48.508	MT	**742.00**	35992.93			
		Brick (15 km lead)	4140.00	No.	3.18	13165.20			
TOTAL (In Rs.)						**112777.37**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	3.32	Cum	**584.64**	1940.00	194.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**194.00**		
AOC FOR CD WORKS (Ch.-12.440 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	120.000	Sqm	**11.80**	1416.53			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	113.400	Sqm	**340.20**	38578.68	117.573	1.656	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	113.400	Sqm	**63.20**	7166.88	0.17		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.656	Cum	**1075.00**	1779.81			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	117.743	MT	**742.00**	87365.47			
TOTAL (In Rs.)						**136307.37**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.66	Cum	**584.64**	967.95	96.80		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**96.80**		

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
AOC FOR HR+CR OF SINGHI SUB DY (Ch.-13.020 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	120.000	Sqm	**11.80**	1416.53			
2	RCD 8.09	Providing and applying two Coates of ready mix paint of approved brand on steel surface after through cleaning of surface to give an even shade.	12.600	Sqm	**91.70**	1155.42			
3	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	14.625	Sqm	**340.20**	4975.43	15.163	0.214	
4	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	14.625	Sqm	**63.20**	924.30	0.02		
5	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	10.950	Sqm	**2492.58**	27293.75			
6		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.214	Cum	**1075.00**	229.54			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	15.185	MT	**742.00**	11267.37			
TOTAL (In Rs.)						**47262.33**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.21	Cum	**584.64**	124.84	12.48		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**12.48**		
AOC FOR CD WORK (Ch.-13.480 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR BRIDGE (Ch.-13.605 Km)									
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	0.000	Cum	**2492.58**	0.00			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
TOTAL (In Rs.)						**0.00**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
		The structure requires no repair as it is not under Irrigation department.							
AOC FOR CD WORKS (Ch.-14.240 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	130.000	Sqm	**11.80**	1534.57			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	124.200	Sqm	**340.20**	42252.84	128.771	1.813	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	124.200	Sqm	**63.20**	7849.44	0.19		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.813	Cum	**1075.00**	1949.32			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	128.957	MT	**742.00**	95685.99			
TOTAL (In Rs.)						**149272.16**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.81	Cum	**584.64**	1060.14	106.01		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**106.01**		

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
AOC FOR BRIDGE (Ch.-14.370 Km)									
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	6.62	Cum	**5021.30**	33261.09	0.76	2.12	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	36.640	Sqm	**340.20**	12464.93	37.988	0.535	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	36.640	Sqm	**63.20**	2315.65	0.05		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	2.655	Cum	**1075.00**	2853.72			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	38.806	MT	**742.00**	28794.35			
		Brick (15 km lead)	3312.00	No.	**3.18**	10532.16			
TOTAL (In Rs.)						**90221.89**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	2.65	Cum	**584.64**	1552.00	155.20		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**155.20**		
AOC FOR BRIDGE (Ch.-15.150 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR BRIDGE (Ch.-15.860 Km)									
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	5.80	Cum	**5021.30**	29103.45	0.67	1.85	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	32.060	Sqm	**340.20**	10906.81	33.240	0.468	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	32.060	Sqm	**63.20**	2026.19	0.05		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	2.323	Cum	**1075.00**	2497.01			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	33.956	MT	**742.00**	25195.05			
		Brick (15 km lead)	2898.00	No.	**3.18**	9215.64			
TOTAL (In Rs.)						**78944.16**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	2.32	Cum	**584.64**	1358.00	135.80		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**135.80**		
AOC FOR BRIDGE (Ch.-16.130 Km)									
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	6.62	Cum	**5021.30**	33261.09	0.76	2.12	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	36.640	Sqm	**340.20**	12464.93	37.988	0.535	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	36.640	Sqm	**63.20**	2315.65	0.05		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	2.655	Cum	**1075.00**	2853.72			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	38.806	MT	**742.00**	28794.35			

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		Brick (15 km lead)	3312.00	No.	**3.18**	10532.16			
		TOTAL (In Rs.)				**90221.89**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	2.65	Cum	**584.64**	1552.00	155.20		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**155.20**		
		AOC FOR HR OF SAHOKARMA MR (Ch.-16.200 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	110.000	Sqm	**11.80**	1298.48			
2	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	8.800	Sqm	**2492.58**	21934.70			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		TOTAL (In Rs.)				**23233.19**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
		AOC FOR FALL(Ch.-16.500 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR HR OF DHAMNI MR (Ch.-17.300 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	140.000	Sqm	**11.80**	1652.61			
2	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	9.180	Sqm	**2492.58**	22881.88			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		TOTAL (In Rs.)				**24534.50**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
		AOC FOR FALL(Ch.-17.350 Km)							
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	25.500	Cum	**6914.20**	176312.10	10.52	10.97	21.93
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	109.200	Sqm	**578.60**	63183.12			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	10.965	Cum	**1075.00**	11787.38			
		Coarse Aggregates (100 Km lead)	21.930	Cum	**1398.00**	30658.14			
		Cement (30 km lead)	10.519	MT	**742.00**	7804.91			
		TOTAL (In Rs.)				**289745.65**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	10.97	Cum	**584.64**	6410.58	641.06		
		Coarse Aggregate	21.93	Cum	**944.26**	20707.62	2070.76		
		Total					**2711.82**		
		AOC FOR FALL/BRIDGE (Ch.-17.665 Km)							

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR BRIDGE (Ch.-18.400 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	5.21	Cum	**5021.30**	26151.53	0.60	1.67	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	28.808	Sqm	**340.20**	9800.55	29.868	0.421	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	28.808	Sqm	**63.20**	1820.68	0.04		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	2.087	Cum	**1075.00**	2243.74			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	30.512	MT	**742.00**	22639.55			
		Brick (15 km lead)	2604.00	No.	**3.18**	8280.72			
		TOTAL (In Rs.)				**70936.77**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	2.09	Cum	**584.64**	1220.26	122.03		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**122.03**		
		AOC FOR FALL/BRIDGE (Ch.-19.100 Km)							
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	9.000	Cum	**6914.20**	62227.80	3.71	3.87	7.74
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	6.600	Sqm	**578.60**	3818.76			
3	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	2.60	Cum	**5021.30**	13075.77	0.30	0.83	
4	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	14.404	Sqm	**340.20**	4900.27	14.934	0.210	
5	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	14.404	Sqm	**63.20**	910.34	0.02		
6		**Carriage of materials**							
		Coarse Sand (60 Km lead)	4.914	Cum	**1075.00**	5282.12			
		Coarse Aggregates (100 Km lead)	7.740	Cum	**1398.00**	10820.52			
		Cement (30 km lead)	18.968	MT	**742.00**	14074.45			
		Brick (15 km lead)	1302.00	No.	**3.18**	4140.36			
		TOTAL (In Rs.)				**119250.39**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	4.91	Cum	**584.64**	2872.69	287.27		
		Coarse Aggregate	7.74	Cum	**944.26**	7308.57	730.86		
		Total					**1018.13**		
		AOC FOR FALL (Ch.-20.660 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR FALL/BRIDGE (Ch.-21.450Km)							
1	**Structure is in good condition and does not requir any repair works.**								

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
AOC FOR FALL (Ch.-22.350 Km)									
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	4.050	Cum	**6914.20**	28002.51	1.67	1.74	3.48
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	19.620	Sqm	**578.60**	11352.13			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.742	Cum	**1075.00**	1872.11			
		Coarse Aggregates (100 Km lead)	3.483	Cum	**1398.00**	4869.23			
		Cement (30 km lead)	1.671	MT	**742.00**	1239.60			
TOTAL (In Rs.)						**47335.59**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.74	Cum	**584.64**	1018.15	101.82		
		Coarse Aggregate	3.48	Cum	**944.26**	3288.86	328.89		
		Total					**430.70**		
AOC FOR FALL/BRIDGE (Ch.-22.750 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR BRIDGE (Ch.-23.025 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR BRIDGE (Ch.-23.150 Km)									
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	5.40	Cum	**5021.30**	27115.02	0.62	1.73	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	29.000	Sqm	**340.20**	9865.80	30.067	0.423	

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	29.000	Sqm	**63.20**	1832.80	0.04		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	2.151	Cum	**1075.00**	2312.76			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	30.733	MT	**742.00**	22803.72			
		Brick (15 km lead)	2700.00	No.	**3.18**	8586.00			
		TOTAL (In Rs.)				**72516.10**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	2.15	Cum	**584.64**	1257.79	125.78		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**125.78**		
		AOC FOR CD WORK(Ch.-23.520 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR BRIDGE/FALL (Ch.-24.200 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR BRIDGE/FALL (Ch.-24.430 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	2.70	Cum	**5021.30**	13557.51	0.31	0.86	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	14.500	Sqm	**340.20**	4932.90	15.034	0.212	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	14.500	Sqm	**63.20**	916.40	0.02		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.076	Cum	**1075.00**	1156.38			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	15.366	MT	**742.00**	11401.86			
		Brick (15 km lead)	1350.00	No.	**3.18**	4293.00			
		TOTAL (In Rs.)				**36258.05**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.08	Cum	**584.64**	628.90	62.89		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**62.89**		
		AOC FOR FALL (Ch.-25.150 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR BRIDGE/FALL (Ch.-25.950 Km)							
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	4.050	Cum	**6914.20**	28002.51	1.67	1.74	3.48
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	10.350	Sqm	**578.60**	5988.51			
3	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	4.32	Cum	**5021.30**	21692.02	0.50	1.38	
4	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	23.200	Sqm	**340.20**	7892.64	24.054	0.339	

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
5	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	23.200	Sqm	**63.20**	1466.24	0.03		
6		**Carriage of materials**							
		Coarse Sand (60 Km lead)	3.463	Cum	**1075.00**	3722.32			
		Coarse Aggregates (100 Km lead)	3.483	Cum	**1398.00**	4869.23			
		Cement (30 km lead)	26.257	MT	**742.00**	19482.58			
		Brick (15 km lead)	2160.00	No.	**3.18**	6868.80			
		TOTAL (In Rs.)				**99984.85**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	3.46	Cum	**584.64**	2024.39	202.44		
		Coarse Aggregate	3.48	Cum	**944.26**	3288.86	328.89		
		Total					**531.32**		
		AOC FOR BRIDGE (Ch.-26.365Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR BRIDGE/FALL (Ch.-26.730 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	3.78	Cum	**5021.30**	18980.51	0.44	1.21	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	20.300	Sqm	**340.20**	6906.06	21.047	0.296	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	20.300	Sqm	**63.20**	1282.96	0.03		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.506	Cum	**1075.00**	1618.93			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	21.513	MT	**742.00**	15962.61			
		Brick (15 km lead)	1890.00	No.	**3.18**	6010.20			
		TOTAL (In Rs.)				**50761.27**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.51	Cum	**584.64**	880.46	88.05		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**88.05**		
		AOC FOR HR OF BHADWA MINOR (Ch.-27.075 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	140.000	Sqm	**11.80**	1652.61			
2	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	9.750	Sqm	**2492.58**	24302.66			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		TOTAL (In Rs.)				**25955.27**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
		AOC FOR FALL (Ch.-27.250 Km)							
1	**Structure is in good condition and does not requir any repair works.**								

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
AOC FOR FALL (Ch.-27.595 Km)									
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	4.050	Cum	**6914.20**	28002.51	1.67	1.74	3.48
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	19.620	Sqm	**578.60**	11352.13			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.742	Cum	**1075.00**	1872.11			
		Coarse Aggregates (100 Km lead)	3.483	Cum	**1398.00**	4869.23			
		Cement (30 km lead)	1.671	MT	**742.00**	1239.60			
TOTAL (In Rs.)						**47335.59**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.74	Cum	**584.64**	1018.15	101.82		
		Coarse Aggregate	3.48	Cum	**944.26**	3288.86	328.89		
		Total					**430.70**		
AOC FOR PIPE CULVERT (Ch.-28.740 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR PIPE CULVERT (Ch.-28.830 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR RAILWAY LINE (Ch.-28.910 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR WELL TYPE FALL (Ch.-29.325 Km)									
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	2.410	Cum	**6914.20**	16663.22	0.99	1.04	2.07
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	16.960	Sqm	**578.60**	9813.06			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.036	Cum	**1075.00**	1114.02			
		Coarse Aggregates (100 Km lead)	2.073	Cum	**1398.00**	2897.49			
		Cement (30 km lead)	0.994	MT	**742.00**	737.64			
TOTAL (In Rs.)						**31225.44**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.04	Cum	**584.64**	605.86	60.59		
		Coarse Aggregate	2.07	Cum	**944.26**	1957.07	195.71		
		Total					**256.29**		
AOC FOR BRIDGE/FALL (Ch.-29.690 Km)									
1	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	58.300	Sqm	**340.20**	19833.66	60.445	0.851	
2	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	58.300	Sqm	**63.20**	3684.56	0.09		
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.851	Cum	**1075.00**	915.02			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	60.533	MT	**742.00**	44915.40			
TOTAL (In Rs.)						**69348.64**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.85	Cum	**584.64**	497.63	49.76		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**49.76**		

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
AOC FOR WELL TYPE FALL (Ch.-30.275 Km)									
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	1.890	Cum	**6914.20**	13067.84	0.78	0.81	1.63
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	8.400	Sqm	**578.60**	4860.24			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.813	Cum	**1075.00**	873.65			
		Coarse Aggregates (100 Km lead)	1.625	Cum	**1398.00**	2272.31			
		Cement (30 km lead)	0.780	MT	**742.00**	578.48			
TOTAL (In Rs.)						**21652.52**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.81	Cum	**584.64**	475.14	47.51		
		Coarse Aggregate	1.63	Cum	**944.26**	1534.80	153.48		
		Total					**200.99**		
AOC FOR FALL (Ch.-30.510 Km)									
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	22.440	Cum	**6914.20**	155154.65	9.26	9.65	19.30
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	18.700	Sqm	**578.60**	10819.82			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	9.649	Cum	**1075.00**	10372.89			
		Coarse Aggregates (100 Km lead)	19.298	Cum	**1398.00**	26979.16			
		Cement (30 km lead)	9.257	MT	**742.00**	6868.32			
TOTAL (In Rs.)						**210194.84**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	9.65	Cum	**584.64**	5641.31	564.13		
		Coarse Aggregate	19.30	Cum	**944.26**	18222.71	1822.27		
		Total					**2386.40**		
AOC FOR ROAD CROSSING (Ch.-30.585 Km)									
1	**Structure is in good condition and does not requir any repair works.**								

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST OF REPAIRED STRUCTURES OF GAMHARIYA MR									
AOC FOR BRIDGE (Ch.-0.175 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR BRIDGE (Ch.-0.950 Km)									
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	8.10	Cum	**5021.30**	40672.53	0.93	2.59	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	43.500	Sqm	**340.20**	14798.70	45.101	0.635	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	43.500	Sqm	**63.20**	2749.20	0.07		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	3.227	Cum	**1075.00**	3469.13			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	46.099	MT	**742.00**	34205.58			
		Brick (15 km lead)	4050.00	No.	**3.18**	12879.00			
TOTAL (In Rs.)						**108774.15**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	3.23	Cum	**584.64**	1886.69	188.67		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**188.67**		
AOC FOR CD WORKS (Ch.-1.050 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR BRIDGE (Ch.-2.100 Km)									
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	8.10	Cum	**5021.30**	40672.53	0.93	2.59	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	43.500	Sqm	**340.20**	14798.70	45.101	0.635	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	43.500	Sqm	**63.20**	2749.20	0.07		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	3.227	Cum	**1075.00**	3469.13			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	46.099	MT	**742.00**	34205.58			
		Brick (15 km lead)	4050.00	No.	**3.18**	12879.00			
TOTAL (In Rs.)						**108774.15**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	3.23	Cum	**584.64**	1886.69	188.67		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**188.67**		
AOC FOR CD WORKS (Ch.-2.455 Km)									
1	**Structure is in good condition and does not requir any repair works.**								

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST OF REPAIRED STRUCTURES OF NAGWA MINOR									
AOC FOR CULVERT (Ch.-0.730 Km)									
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	1.62	Cum	**5021.30**	8134.51	0.19	0.52	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	17.400	Sqm	**340.20**	5919.48	18.040	0.254	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	17.400	Sqm	**63.20**	1099.68	0.03		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.772	Cum	**1075.00**	830.37			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	18.253	MT	**742.00**	13543.76			
		Brick (15 km lead)	810.00	No.	3.18	2575.80			
TOTAL (In Rs.)						**32103.60**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.77	Cum	**584.64**	451.60	45.16		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**45.16**		

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST OF REPAIRED STRUCTURES OF PAWAI MINOR									
AOC FOR BRIDGE (Ch.-0.175 Km)									
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	3.24	Cum	**5021.30**	16269.01	0.37	1.04	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	95.400	Sqm	**340.20**	32455.08	98.911	1.393	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	95.400	Sqm	**63.20**	6029.28	0.14		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.393	Cum	**1075.00**	1497.30			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	99.054	MT	**742.00**	73497.93			
		Brick (15 km lead)	1620.00	No.	**3.18**	5151.60			
TOTAL (In Rs.)						**134900.21**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.39	Cum	**584.64**	814.31	81.43		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**81.43**		
AOC FOR FALL (Ch.-0.640 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	130.000	Sqm	**11.80**	1534.57			
2	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	12.796	Cum	**6914.20**	88474.10	5.28	5.50	11.00
3	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	14.258	Sqm	**578.60**	8249.91			
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	5.502	Cum	**1075.00**	5914.95			
		Coarse Aggregates (100 Km lead)	11.005	Cum	**1398.00**	15384.37			
		Cement (30 km lead)	5.278	MT	**742.00**	3916.54			
TOTAL (In Rs.)						**123474.45**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	5.50	Cum	**584.64**	3216.85	321.69		
		Coarse Aggregate	11.00	Cum	**944.26**	10391.17	1039.12		
		Total					**1360.80**		
AOC FOR CD WORKS (Ch.-1.050 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR FALL (Ch.-1.100 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	110.000	Sqm	**11.80**	1298.48			
2	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	7.638	Cum	**6914.20**	52807.20	3.15	3.28	6.57
3	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	9.165	Sqm	**578.60**	5302.87			
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	3.284	Cum	**1075.00**	3530.43			

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		Coarse Aggregates (100 Km lead)	6.568	Cum	**1398.00**	9182.41			
		Cement (30 km lead)	3.150	MT	**742.00**	2337.65			
		TOTAL (In Rs.)				**74459.05**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	3.28	Cum	**584.64**	1920.03	192.00		
		Coarse Aggregate	6.57	Cum	**944.26**	6202.14	620.21		
		Total					**812.22**		
		AOC FOR BRIDGE (Ch.-1.260Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	1.62	Cum	**5021.30**	8134.51	0.19	0.52	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	86.700	Sqm	**340.20**	29495.34	89.891	1.266	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	86.700	Sqm	**63.20**	5479.44	0.13		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.266	Cum	**1075.00**	1360.76			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	90.021	MT	**742.00**	66795.29			
		Brick (15 km lead)	810.00	No.	**3.18**	2575.80			
		TOTAL (In Rs.)				**113841.14**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.27	Cum	**584.64**	740.05	74.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**74.00**		
		AOC FOR FALL (Ch.-1.400 Km)							
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	7.638	Cum	**6914.20**	52807.20	3.15	3.28	6.57
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	42.965	Sqm	**578.60**	24859.55			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	3.284	Cum	**1075.00**	3530.43			
		Coarse Aggregates (100 Km lead)	6.568	Cum	**1398.00**	9182.41			
		Cement (30 km lead)	3.150	MT	**742.00**	2337.65			
		TOTAL (In Rs.)				**92717.25**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	3.28	Cum	**584.64**	1920.03	192.00		
		Coarse Aggregate	6.57	Cum	**944.26**	6202.14	620.21		
		Total					**812.22**		
		AOC FOR FALL (Ch.-1.720Km)							
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	22.050	Sqm	**2492.58**	54961.39			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		TOTAL (In Rs.)				**54961.39**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST OF REPAIRED STRUCTURES OF BHUTAILI MINOR									
AOC FOR CD WORK (Ch.-0.300 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	130.000	Sqm	**11.80**	1534.57			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	138.000	Sqm	**340.20**	46947.60	143.078	2.015	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	138.000	Sqm	**63.20**	8721.60	0.21		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	2.015	Cum	**1075.00**	2165.91			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	143.285	MT	**742.00**	106317.77			
		Brick (15 km lead)	0.00	No.	3.18	0.00			
		TOTAL (In Rs.)				**165687.45**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	2.01	Cum	**584.64**	1177.93	117.79		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**117.79**		
AOC FOR FALL (Ch.-0.370 Km)									
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	14.613	Cum	**6914.20**	101033.75	6.03	6.28	12.57
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	56.175	Sqm	**578.60**	32502.86			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	6.283	Cum	**1075.00**	6754.63			
		Coarse Aggregates (100 Km lead)	12.567	Cum	**1398.00**	17568.32			
		Cement (30 km lead)	6.028	MT	**742.00**	4472.52			
		TOTAL (In Rs.)				**162332.07**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	6.28	Cum	**584.64**	3673.51	367.35		
		Coarse Aggregate	12.57	Cum	**944.26**	11866.28	1186.63		
		Total					**1553.98**		
AOC FOR CD WORK (Ch.-0.530 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	130.000	Sqm	**11.80**	1534.57			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	117.300	Sqm	**340.20**	39905.46	121.617	1.713	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	117.300	Sqm	**63.20**	7413.36	0.18		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.713	Cum	**1075.00**	1841.02			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	121.793	MT	**742.00**	90370.10			
		TOTAL (In Rs.)				**141064.52**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.71	Cum	**584.64**	1001.24	100.12		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**100.12**		
AOC FOR FALL (Ch.-0.580 Km)									

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	14.580	Cum	**2492.58**	36341.82			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		TOTAL (In Rs.)				**36341.82**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
		AOC FOR CULVERT (Ch.-0.650 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR FALL (Ch.-0.740 Km)							
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	1.913	Cum	**6914.20**	13223.41	0.79	0.82	1.64
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	2.295	Sqm	**578.60**	1327.89			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.822	Cum	**1075.00**	884.05			
		Coarse Aggregates (100 Km lead)	1.645	Cum	**1398.00**	2299.36			
		Cement (30 km lead)	0.789	MT	**742.00**	585.37			
		TOTAL (In Rs.)				**18320.08**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.82	Cum	**584.64**	480.79	48.08		
		Coarse Aggregate	1.64	Cum	**944.26**	1553.07	155.31		
		Total					**203.39**		
		AOC FOR CD WORK (Ch.-0.855 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	150.000	Sqm	**11.80**	1770.66			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	112.125	Sqm	**340.20**	38144.93	116.251	1.637	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	112.125	Sqm	**63.20**	7086.30	0.17		
4	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	1.013	Cum	**6914.20**	7000.63	0.42	0.44	0.87
5	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	5.850	Sqm	**578.60**	3384.81			
6		**Carriage of materials**							
		Coarse Sand (60 Km lead)	2.072	Cum	**1075.00**	2227.83			
		Coarse Aggregates (100 Km lead)	0.871	Cum	**1398.00**	1217.31			
		Cement (30 km lead)	116.837	MT	**742.00**	86693.09			
		TOTAL (In Rs.)				**147525.55**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	2.07	Cum	**584.64**	1211.61	121.16		
		Coarse Aggregate	0.87	Cum	**944.26**	822.21	82.22		
		Total					**203.38**		

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		AOC FOR FALL (Ch.-0.930 Km)							
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	4.050	Cum	**6914.20**	28002.51	1.67	1.74	3.48
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	19.620	Sqm	**578.60**	11352.13			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.742	Cum	**1075.00**	1872.11			
		Coarse Aggregates (100 Km lead)	3.483	Cum	**1398.00**	4869.23			
		Cement (30 km lead)	1.671	MT	**742.00**	1239.60			
		TOTAL (In Rs.)				**47335.59**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.74	Cum	**584.64**	1018.15	101.82		
		Coarse Aggregate	3.48	Cum	**944.26**	3288.86	328.89		
		Total					**430.70**		
		AOC FOR FALL (Ch.-1.120 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR FALL (Ch.-1.350 Km)							
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	14.580	Cum	**2492.58**	36341.82			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		TOTAL (In Rs.)				**36341.82**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
		AOC FOR BRIDGE/FALL (Ch.-1.480 Km)							
1	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	74.200	Sqm	**340.20**	25242.84	76.931	1.083	
2	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	74.200	Sqm	**63.20**	4689.44	0.11		
3	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	3.052	Cum	**6914.20**	21102.14	1.26	1.31	2.62
4	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	7.630	Sqm	**578.60**	4414.72			
5		**Carriage of materials**							
		Coarse Sand (60 Km lead)	2.396	Cum	**1075.00**	2575.36			
		Coarse Aggregates (100 Km lead)	2.625	Cum	**1398.00**	3669.36			
		Cement (30 km lead)	78.301	MT	**742.00**	58099.20			
		TOTAL (In Rs.)				**119793.05**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	2.40	Cum	**584.64**	1400.61	140.06		
		Coarse Aggregate	2.62	Cum	**944.26**	2478.42	247.84		
		Total					**387.90**		

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
AOC FOR FALL (Ch.-1.625 Km)									
1	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	53.000	Sqm	**340.20**	18030.60	54.950	0.774	
2	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	53.000	Sqm	**63.20**	3349.60	0.08		
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.774	Cum	**1075.00**	831.84			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	55.030	MT	**742.00**	40832.19			
TOTAL (In Rs.)						**63044.22**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.77	Cum	**584.64**	452.39	45.24		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**45.24**		
AOC FOR FALL (Ch.-1.840 Km)									
1	**Structure is in good condition and does not requir any repair works.**								

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST OF REPAIRED STRUCTURES OF SALOPURA MINOR									
AOC FOR FALL (Ch.-0.000 Km)									
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	1.231	Cum	**6914.20**	8512.76	0.51	0.53	1.06
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	2.462	Sqm	**578.60**	1424.74			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
TOTAL (In Rs.)						**9937.51**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
AOC FOR FALL (Ch.-0.070 Km)									
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	0.894	Cum	**2492.58**	2228.37			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
TOTAL (In Rs.)						**2228.37**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
AOC FOR CD WORK (Ch.-0.250 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	150.000	Sqm	**11.80**	1770.66			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	79.625	Sqm	**340.20**	27088.43	82.555	1.163	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	79.625	Sqm	**63.20**	5032.30	0.12		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.163	Cum	**1075.00**	1249.71			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	82.555	MT	**742.00**	61255.96			
TOTAL (In Rs.)						**96397.06**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.16	Cum	**584.64**	679.66	67.97		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**67.97**		
AOC FOR CULVERT/FALL (Ch.-0.300 Km)									
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	2.618	Cum	**6914.20**	18101.38	1.08	1.13	2.25

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	5.807	Sqm	**578.60**	3360.05			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.126	Cum	**1075.00**	1210.17			
		Coarse Aggregates (100 Km lead)	2.251	Cum	**1398.00**	3147.57			
		Cement (30 km lead)	1.080	MT	**742.00**	801.30			
		TOTAL (In Rs.)				**26620.47**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.13	Cum	**584.64**	658.15	65.82		
		Coarse Aggregate	2.25	Cum	**944.26**	2125.98	212.60		
		Total					**278.41**		
		AOC FOR CD WORK (Ch.-0.685 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	110.000	Sqm	**11.80**	1298.48			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	114.400	Sqm	**340.20**	38918.88	118.610	1.670	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	114.400	Sqm	**63.20**	7230.08	0.17		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.670	Cum	**1075.00**	1795.51			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	118.610	MT	**742.00**	88008.56			
		TOTAL (In Rs.)				**137251.51**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.67	Cum	**584.64**	976.49	97.65		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**97.65**		
		AOC FOR FALL (Ch.-0.710 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	130.000	Sqm	**11.80**	1534.57			
2	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	5.132	Cum	**6914.20**	35480.22	2.12	2.21	4.41
3	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	11.383	Sqm	**578.60**	6585.97			
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	2.207	Cum	**1075.00**	2372.04			
		Coarse Aggregates (100 Km lead)	4.413	Cum	**1398.00**	6169.50			
		Cement (30 km lead)	2.117	MT	**742.00**	1570.62			
		TOTAL (In Rs.)				**52178.35**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	2.21	Cum	**584.64**	1290.03	129.00		
		Coarse Aggregate	4.41	Cum	**944.26**	4167.10	416.71		
		Total					**545.71**		
		AOC FOR FALL (Ch.-0.890 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	130.000	Sqm	**11.80**	1534.57			

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
2	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.855	Cum	**6914.20**	5911.64	0.35	0.37	0.74
3	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	2.052	Sqm	**578.60**	1187.29			
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.368	Cum	**1075.00**	395.22			
		Coarse Aggregates (100 Km lead)	0.735	Cum	**1398.00**	1027.95			
		Cement (30 km lead)	0.353	MT	**742.00**	261.69			
		TOTAL (In Rs.)				**8783.80**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.37	Cum	**584.64**	214.94	21.49		
		Coarse Aggregate	0.74	Cum	**944.26**	694.31	69.43		
		Total					**90.93**		
		AOC FOR FALL (Ch.-1.185 Km)							
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	22.049	Cum	**2492.58**	54958.90			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		TOTAL (In Rs.)				**54958.90**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
		AOC FOR CD WORK (Ch.-1.230 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	145.000	Sqm	**11.80**	1711.64			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	119.600	Sqm	**340.20**	40687.92	1.794	2.392	
2	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	119.600	Sqm	**63.20**	7558.72	0.18		
3	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	2.025	Cum	**6914.20**	14001.26	0.84	0.87	1.74
4	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	10.350	Sqm	**578.60**	5988.51			
5		**Carriage of materials**							
		Coarse Sand (60 Km lead)	3.263	Cum	**1075.00**	3507.46			
		Coarse Aggregates (100 Km lead)	1.742	Cum	**1398.00**	2434.62			
		Cement (30 km lead)	2.809	MT	**742.00**	2084.06			
		TOTAL (In Rs.)				**77974.18**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	3.26	Cum	**584.64**	1907.53	190.75		
		Coarse Aggregate	1.74	Cum	**944.26**	1644.43	164.44		
		Total					**355.20**		
		AOC FOR ROAD CROSSING (Ch.-1.260 Km)							
1	**Structure is in good condition and does not requir any repair works.**								

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		AOC FOR FALL (Ch.-1.450 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	120.000	Sqm	**11.80**	1416.53			
2	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	2.756	Cum	**6914.20**	19058.30	1.14	1.19	2.37
3	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	11.288	Sqm	**578.60**	6531.24			
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.185	Cum	**1075.00**	1274.15			
		Coarse Aggregates (100 Km lead)	2.371	Cum	**1398.00**	3313.96			
		Cement (30 km lead)	1.137	MT	**742.00**	843.67			
		TOTAL (In Rs.)				**32437.84**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.19	Cum	**584.64**	692.95	69.29		
		Coarse Aggregate	2.37	Cum	**944.26**	2238.37	223.84		
		Total					**293.13**		
		AOC FOR CD WORK (Ch.-1.630 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	110.000	Sqm	**11.80**	1298.48			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	115.500	Sqm	**340.20**	39293.10	119.750	1.686	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	115.500	Sqm	**63.20**	7299.60	0.17		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.686	Cum	**1075.00**	1812.77			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	119.924	MT	**742.00**	88983.35			
		TOTAL (In Rs.)				**138687.30**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.69	Cum	**584.64**	985.88	98.59		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**98.59**		
		AOC FOR FALL (Ch.-1.765 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR CULVERT (Ch.-1.790 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	2.90	Cum	**5021.30**	14551.73	0.33	0.93	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	14.630	Sqm	**340.20**	4977.13	15.168	0.214	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	14.630	Sqm	**63.20**	924.62	0.02		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.141	Cum	**1075.00**	1226.53			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	15.524	MT	**742.00**	11518.94			
		Brick (15 km lead)	1449.00	No.	**3.18**	4607.82			
		TOTAL (In Rs.)				**37806.76**			

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.14	Cum	**584.64**	667.05	66.70		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**66.70**		
		AOC FOR CD WORK (Ch.-2.155 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	110.000	Sqm	**11.80**	1298.48			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	115.500	Sqm	**340.20**	39293.10	119.750	1.686	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	115.500	Sqm	**63.20**	7299.60	0.17		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.686	Cum	**1075.00**	1812.77			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	119.924	MT	**742.00**	88983.35			
		TOTAL (In Rs.)				**138687.30**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.69	Cum	**584.64**	985.88	98.59		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**98.59**		
		AOC FOR CULVERT/FALL (Ch.-2.170 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	1.62	Cum	**5021.30**	8134.51	0.19	0.52	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	8.700	Sqm	**340.20**	2959.74	9.020	0.127	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	8.700	Sqm	**63.20**	549.84	0.01		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.645	Cum	**1075.00**	693.83			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	9.220	MT	**742.00**	6841.12			
		Brick (15 km lead)	810.00	No.	**3.18**	2575.80			
		TOTAL (In Rs.)				**21754.83**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.65	Cum	**584.64**	377.34	37.73		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**37.73**		
		AOC FOR CD WORK (Ch.-2.610 Km)							
1	**Structure is in good condition and does not requir any repair works.**								

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST OF REPAIRED STRUCTURES OF SINGHI SUB DY									
AOC FOR FALL (Ch.-0.000 Km)									
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	9.150	Cum	**6914.20**	63264.93	3.77	3.93	7.87
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	9.760	Sqm	**578.60**	5647.14			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	3.935	Cum	**1075.00**	4229.59			
		Coarse Aggregates (100 Km lead)	7.869	Cum	**1398.00**	11000.86			
		Cement (30 km lead)	3.774	MT	**742.00**	2800.59			
		Brick (15 km lead)	4575.00	No.	3.18	14548.50			
TOTAL (In Rs.)						**101491.60**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	3.93	Cum	**584.64**	2300.27	230.03		
		Coarse Aggregate	7.87	Cum	**944.26**	7430.38	743.04		
		Total					**973.06**		
AOC FOR BRIDGE (Ch.-0.010 Km)									
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	3.78	Cum	**5021.30**	18980.51	0.44	1.21	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	20.300	Sqm	**340.20**	6906.06	21.047	0.296	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	20.300	Sqm	**63.20**	1282.96	0.03		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.506	Cum	**1075.00**	1618.93			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	21.513	MT	**742.00**	15962.61			
		Brick (15 km lead)	1890.00	No.	3.18	6010.20			
TOTAL (In Rs.)						**50761.27**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.51	Cum	**584.64**	880.46	88.05		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**88.05**		
AOC FOR FALL (Ch.-0.120 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	140.000	Sqm	**11.80**	1652.61			
2	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	1.560	Cum	**2492.58**	3888.42			
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
TOTAL (In Rs.)						**5541.04**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
AOC FOR FALL (Ch.-0.490 Km)									
1	**Structure is in good condition and does not requir any repair works.**								

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
AOC FOR BRIDGE (Ch.-0.580 Km)									
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	5.38	Cum	**5021.30**	27024.64	0.62	1.72	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	27.170	Sqm	**340.20**	9243.23	28.170	0.397	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	27.170	Sqm	**63.20**	1717.14	0.04		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	2.119	Cum	**1075.00**	2277.84			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	28.831	MT	**742.00**	21392.32			
		Brick (15 km lead)	2691.00	No.	3.18	8557.38			
TOTAL (In Rs.)						**70212.55**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	2.12	Cum	**584.64**	1238.81	123.88		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**123.88**		
AOC FOR OF FALL (Ch.-1.040 Km)									
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	11.529	Cum	**6914.20**	79713.81	4.76	4.96	9.91
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	13.359	Sqm	**578.60**	7729.52			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	4.957	Cum	**1075.00**	5329.28			
		Coarse Aggregates (100 Km lead)	9.915	Cum	**1398.00**	13861.09			
		Cement (30 km lead)	4.756	MT	**742.00**	3528.74			
TOTAL (In Rs.)						**110162.43**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	4.96	Cum	**584.64**	2898.34	289.83		
		Coarse Aggregate	9.91	Cum	**944.26**	9362.28	936.23		
		Total					**1226.06**		
AOC FOR CD WORK (Ch.-1.265 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR BRIDGE/FALL (Ch.-1.300 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	150.000	Sqm	**11.80**	1770.66			
2	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	0.54	Cum	**5021.30**	2711.50	0.06	0.17	
3	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	8.700	Sqm	**340.20**	2959.74	9.020	0.127	
4	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	8.700	Sqm	**63.20**	549.84	0.01		
5		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.300	Cum	**1075.00**	322.31			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	9.095	MT	**742.00**	6748.80			

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		Brick (15 km lead)	270.00	No.	**3.18**	858.60			
		TOTAL (In Rs.)				**15921.45**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.30	Cum	**584.64**	175.29	17.53		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**17.53**		
		AOC FOR BRIDGE /FALL (Ch.-1.840 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	3.73	Cum	**5021.30**	18709.36	0.43	1.19	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	18.810	Sqm	**340.20**	6399.16	19.502	0.275	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	18.810	Sqm	**63.20**	1188.79	0.03		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.467	Cum	**1075.00**	1576.97			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	19.960	MT	**742.00**	14810.07			
		Brick (15 km lead)	1863.00	No.	**3.18**	5924.34			
		TOTAL (In Rs.)				**48608.69**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.47	Cum	**584.64**	857.64	85.76		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**85.76**		
		AOC FOR CD WORK (Ch.-2.180 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR BRIDGE (Ch.-2.200 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR BRIDGE (Ch.-2.640 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	120.000	Sqm	**11.80**	1416.53			
2	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	7.673	Cum	**6914.20**	53055.42	3.17	3.30	6.60
3	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	8.891	Sqm	**578.60**	5144.56			
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	3.300	Cum	**1075.00**	3547.03			
		Coarse Aggregates (100 Km lead)	6.599	Cum	**1398.00**	9225.58			
		Cement (30 km lead)	3.165	MT	**742.00**	2348.64			
		TOTAL (In Rs.)				**74737.75**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	3.30	Cum	**584.64**	1929.06	192.91		
		Coarse Aggregate	6.60	Cum	**944.26**	6231.29	623.13		
		Total					**816.03**		
		AOC FOR CD WORKS (Ch.-2.960 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	130.000	Sqm	**11.80**	1534.57			

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	129.965	Sqm	**340.20**	44214.09	134.748	1.897	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	129.965	Sqm	**63.20**	8213.79	0.19		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.897	Cum	**1075.00**	2039.80			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	134.943	MT	**742.00**	100127.45			
		TOTAL (In Rs.)				**156129.71**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.90	Cum	**584.64**	1109.35	110.93		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**110.93**		
		AOC FOR CULVERT (Ch.-3.120 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR BRIDGE (Ch.-3.230 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	1.84	Cum	**5021.30**	9239.19	0.21	0.59	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	16.720	Sqm	**340.20**	5688.14	17.335	0.244	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	16.720	Sqm	**63.20**	1056.70	0.03		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.833	Cum	**1075.00**	895.38			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	17.572	MT	**742.00**	13038.68			
		Brick (15 km lead)	920.00	No.	**3.18**	2925.60			
		TOTAL (In Rs.)				**32843.70**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.83	Cum	**584.64**	486.95	48.70		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**48.70**		
		AOC FOR FALL (Ch.-3.565 Km)							
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	5.856	Cum	**6914.20**	40489.56	2.42	2.52	5.04
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	7.564	Sqm	**578.60**	4376.53			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	2.518	Cum	**1075.00**	2706.94			
		Coarse Aggregates (100 Km lead)	5.036	Cum	**1398.00**	7040.55			
		Cement (30 km lead)	2.416	MT	**742.00**	1792.38			
		TOTAL (In Rs.)				**56405.95**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	2.52	Cum	**584.64**	1472.17	147.22		
		Coarse Aggregate	5.04	Cum	**944.26**	4755.44	475.54		
		Total					**622.76**		
		AOC FOR BRIDGE (Ch.-3.765 Km)							
1	**Structure is in good condition and does not requir any repair works.**								

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
AOC FOR CD WORKS (Ch.-3.935 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	110.000	Sqm	**11.80**	1298.48			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	103.150	Sqm	**340.20**	35091.63	106.946	1.506	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	161.800	Sqm	**63.20**	10225.76	0.24		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.506	Cum	**1075.00**	1618.94			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	107.189	MT	**742.00**	79533.96			
TOTAL (In Rs.)						**127768.77**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.51	Cum	**584.64**	880.46	88.05		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**88.05**		
AOC FOR BRIDGE (Ch.-4.060 Km)									
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	2.07	Cum	**5021.30**	10394.09	0.24	0.66	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	18.810	Sqm	**340.20**	6399.16	19.502	0.275	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	18.810	Sqm	**63.20**	1188.79	0.03		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.937	Cum	**1075.00**	1007.30			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	19.769	MT	**742.00**	14668.51			
		Brick (15 km lead)	1035.00	No.	**3.18**	3291.30			
TOTAL (In Rs.)						**36949.16**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.94	Cum	**584.64**	547.82	54.78		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**54.78**		
AOC FOR FALL (Ch.-4.190Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR CD WORKS (Ch.-4.440 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	110.000	Sqm	**11.80**	1298.48			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	61.350	Sqm	**340.20**	20871.27	63.608	0.896	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	98.400	Sqm	**63.20**	6218.88	0.15		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.896	Cum	**1075.00**	962.89			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	63.755	MT	**742.00**	47306.42			
TOTAL (In Rs.)						**76657.94**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.90	Cum	**584.64**	523.67	52.37		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**52.37**		

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		AOC FOR FALL (Ch.-4.455 Km)							
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	19.445	Cum	**2492.58**	48468.72			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
		TOTAL (In Rs.)				**48468.72**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
		AOC SUPER PASAGE(Ch.-5.050 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR CD WORKS (Ch.-5.250 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	110.000	Sqm	**11.80**	1298.48			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	58.200	Sqm	**340.20**	19799.64	60.342	0.850	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	58.200	Sqm	**63.20**	3678.24	0.09		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.850	Cum	**1075.00**	913.45			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	60.429	MT	**742.00**	44838.36			
		TOTAL (In Rs.)				**70528.17**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.85	Cum	**584.64**	496.78	49.68		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**49.68**		
		AOC BRIDGE(Ch.-5.380Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR SUPER PASSAGE (Ch.-5.660Km)							
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	27.300	Cum	**6914.20**	188757.66	11.26	11.74	23.48
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	52.070	Sqm	**578.60**	30127.70			
3	5.3.22	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	3.21	MT	**73574.90**	236512.03			
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	11.739	Cum	**1075.00**	12619.43			
		Coarse Aggregates (100 Km lead)	23.478	Cum	**1398.00**	32822.24			
		Cement (30 km lead)	11.261	MT	**742.00**	8355.85			
		TOTAL (In Rs.)				**509194.91**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	11.74	Cum	**584.64**	6863.09	686.31		
		Coarse Aggregate	23.48	Cum	**944.26**	22169.34	2216.93		
		Total					**2903.24**		
		AOC FOR SUPER PASSAGE (Ch.-6.040 Km)							

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	32.850	Cum	**6914.20**	227131.47	13.55	14.13	28.25
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	52.440	Sqm	**578.60**	30341.78			
3	5.3.22	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	3.87	MT	**73574.90**	284594.15			
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	14.126	Cum	**1075.00**	15184.91			
		Coarse Aggregates (100 Km lead)	28.251	Cum	**1398.00**	39494.90			
		Cement (30 km lead)	13.551	MT	**742.00**	10054.56			
		TOTAL (In Rs.)				**606801.78**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	14.13	Cum	**584.64**	8258.33	825.83		
		Coarse Aggregate	28.25	Cum	**944.26**	26676.29	2667.63		
		Total					**3493.46**		
		AOC FOR CD WORKS (Ch.-6.470 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	120.000	Sqm	**11.80**	1416.53			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	14.630	Sqm	**340.20**	4977.13	15.168	0.214	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	14.630	Sqm	**63.20**	924.62	0.02		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.214	Cum	**1075.00**	229.62			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	15.190	MT	**742.00**	11271.22			
		TOTAL (In Rs.)				**18819.11**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.21	Cum	**584.64**	124.88	12.49		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**12.49**		
		AOC SUPER PASSAGE (Ch.-6.630Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC SUPER PASSAGE (Ch.-6.925Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC SUPER PASSAGE (Ch.-7.370Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC BRIDGE (Ch.-7.445Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC SUPER PASSAGE (Ch.-7.590Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	140.000	Sqm	**11.80**	1652.61			
		TOTAL (In Rs.)				**1652.61**			
		AOC SUPER PASSAGE (Ch.-7.755 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	140.000	Sqm	**11.80**	1652.61			
		TOTAL (In Rs.)				**1652.61**			
		AOC BRIDGE (Ch.-7.950 Km)							

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR SUPER PASSAGE (Ch.-8.290Km)							
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	21.840	Cum	**6914.20**	151006.13	9.01	9.39	18.78
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	42.020	Sqm	**578.60**	24312.77			
3	5.3.22	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	2.57	MT	**73574.90**	189209.63			
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	9.391	Cum	**1075.00**	10095.54			
		Coarse Aggregates (100 Km lead)	18.782	Cum	**1398.00**	26257.80			
		Cement (30 km lead)	9.009	MT	**742.00**	6684.68			
		TOTAL (In Rs.)				**407566.54**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	9.39	Cum	**584.64**	5490.47	549.05		
		Coarse Aggregate	18.78	Cum	**944.26**	17735.47	1773.55		
		Total					**2322.59**		
		AOC SUPER PASSAGE (Ch.-8.825 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR SUPER PASSAGE (Ch.-9.660 Km)							
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	29.880	Cum	**6914.20**	206596.30	12.33	12.85	25.70
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	56.790	Sqm	**578.60**	32858.69			
3	5.3.22	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	3.52	MT	**73574.90**	258863.72			
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	12.848	Cum	**1075.00**	13812.03			
		Coarse Aggregates (100 Km lead)	25.697	Cum	**1398.00**	35924.13			
		Cement (30 km lead)	12.326	MT	**742.00**	9145.52			
		TOTAL (In Rs.)				**557200.39**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	12.85	Cum	**584.64**	7511.69	751.17		
		Coarse Aggregate	25.70	Cum	**944.26**	24264.46	2426.45		
		Total					**3177.61**		
		AOC FOR BRIDGE (Ch.-9.715 Km)							
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	120.000	Sqm	**11.80**	1416.53			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	13.050	Sqm	**340.20**	4439.61	13.530	0.191	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	13.050	Sqm	**63.20**	824.76	0.02		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.191	Cum	**1075.00**	204.82			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		Cement (30 km lead)	13.550	MT	**742.00**	10053.96			
		TOTAL (In Rs.)				**16939.68**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.19	Cum	**584.64**	111.39	11.14		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**11.14**		
		AOC BRIDGE (Ch.-10.520 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR SUPER PASSAGE (Ch.-10.895 Km)							
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	9.100	Cum	**6914.20**	62919.22	3.75	3.91	7.83
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	18.570	Sqm	**578.60**	10744.60			
3	5.3.22	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.	1.07	MT	**73574.90**	78837.34			
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	3.913	Cum	**1075.00**	4206.48			
		Coarse Aggregates (100 Km lead)	7.826	Cum	**1398.00**	10940.75			
		Cement (30 km lead)	3.754	MT	**742.00**	2785.28			
		TOTAL (In Rs.)				**170433.67**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	3.91	Cum	**584.64**	2287.70	228.77		
		Coarse Aggregate	7.83	Cum	**944.26**	7389.78	738.98		
		Total					**967.75**		
		AOC SUPER PASSAGE (Ch.-11.230Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC BRIDGE (Ch.-11.740 Km)							
1	**Structure is in good condition and does not requir any repair works.**								
		AOC FOR BRIDGE (Ch.-13.040 Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	5.52	Cum	**5021.30**	27717.58	0.64	1.77	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	50.160	Sqm	**340.20**	17064.43	52.006	0.732	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	50.160	Sqm	**63.20**	3170.11	0.08		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	2.499	Cum	**1075.00**	2686.14			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	52.717	MT	**742.00**	39116.04			
		Brick (15 km lead)	2760.00	No.	**3.18**	8776.80			
		TOTAL (In Rs.)				**98531.10**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	2.50	Cum	**584.64**	1460.86	146.09		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**146.09**		
		AOC RAILWAY LINE (Ch.-13.460 Km)							
1	**Structure is in good condition and does not requir any repair works.**								

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
AOC FOR BRIDGE (Ch.-15.740 Km)									
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	2.40	Cum	**5021.30**	12051.12	0.28	0.77	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	23.200	Sqm	**340.20**	7892.64	24.054	0.339	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	23.200	Sqm	**63.20**	1466.24	0.03		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.107	Cum	**1075.00**	1189.72			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	24.365	MT	**742.00**	18078.86			
		Brick (15 km lead)	1200.00	No.	**3.18**	3816.00			
TOTAL (In Rs.)						**44494.58**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.11	Cum	**584.64**	647.03	64.70		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**64.70**		
AOC ROAD CROSSING (Ch.-15.930 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR FALL (Ch.-16.235 Km)									
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	1.708	Cum	**6914.20**	11809.45	0.70	0.73	1.47
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	5.246	Sqm	**578.60**	3035.34			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.734	Cum	**1075.00**	789.52			
		Coarse Aggregates (100 Km lead)	1.469	Cum	**1398.00**	2053.49			
		Cement (30 km lead)	0.705	MT	**742.00**	522.78			
TOTAL (In Rs.)						**18210.58**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.73	Cum	**584.64**	429.38	42.94		
		Coarse Aggregate	1.47	Cum	**944.26**	1387.00	138.70		
		Total					**181.64**		
AOC FALL (Ch.-16.885 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR CULVERT (Ch.-17.520 Km)									
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	1.50	Cum	**5021.30**	7531.95	0.17	0.48	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	14.500	Sqm	**340.20**	4932.90	15.034	0.212	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	14.500	Sqm	**63.20**	916.40	0.02		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.692	Cum	**1075.00**	743.58			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	15.228	MT	**742.00**	11299.29			

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
		Brick (15 km lead)	750.00	No.	**3.18**	2385.00			
		TOTAL (In Rs.)				**27809.11**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.69	Cum	**584.64**	404.40	40.44		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**40.44**		
		AOC FALL (Ch.-17.800 Km)							
1	**Structure is in good condition and does not requir any repair works.**								

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST OF REPAIRED STRUCTURES OF SAHOKARMA MINOR									
AOC FOR FALL (Ch.-0.305 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	120.000	Sqm	**11.80**	1416.53			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	91.000	Sqm	**340.20**	30958.20	94.349	1.329	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	91.000	Sqm	**63.20**	5751.20	0.14		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.329	Cum	**1075.00**	1428.25			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	94.485	MT	**742.00**	70108.09			
		Brick (15 km lead)	0.00	No.	3.18	0.00			
TOTAL (In Rs.)						**109662.26**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.33	Cum	**584.64**	776.75	77.68		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**77.68**		
AOC PIPE CULVERT(Ch.-0.330 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR WELL TYPE FALL (Ch.-0.620 Km)									
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.	17.325	Cum	**2492.58**	43183.95			
2		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.000	Cum	**1075.00**	0.00			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	0.000	MT	**742.00**	0.00			
TOTAL (In Rs.)						**43183.95**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.00	Cum	**584.64**	0.00	0.00		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**0.00**		
AOC FOR FALL (Ch.-0.930Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	130.000	Sqm	**11.80**	1534.57			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	126.000	Sqm	**340.20**	42865.20	130.637	1.840	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	126.000	Sqm	**63.20**	7963.20	0.19		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.840	Cum	**1075.00**	1977.57			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	130.826	MT	**742.00**	97072.74			
		Brick (15 km lead)	0.00	No.	3.18	0.00			
TOTAL (In Rs.)						**151413.28**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.84	Cum	**584.64**	1075.50	107.55		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**107.55**		

AOC BRIDGE (Ch.-1.090Km)									
1	**Structure is in good condition and does not requir any repair works.**								

AOC FALL(Ch.-1.400Km)									
1	**Structure is in good condition and does not requir any repair works.**								

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST OF REPAIRED STRUCTURES OF DHAMINI MINOR									
AOC FOR FALL (Ch.-1.850Km)									
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	3.085	Cum	**6914.20**	21328.58	1.27	1.33	2.65
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	5.804	Sqm	**578.60**	3358.14			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.326	Cum	**1075.00**	1425.93			
		Coarse Aggregates (100 Km lead)	2.653	Cum	**1398.00**	3708.73			
		Cement (30 km lead)	1.272	MT	**742.00**	944.16			
TOTAL (In Rs.)						**30765.54**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.33	Cum	**584.64**	775.49	77.55		
		Coarse Aggregate	2.65	Cum	**944.26**	2505.01	250.50		
		Total					**328.05**		
AOC FOR FALL (Ch.-2.150Km)									
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	2.006	Cum	**6914.20**	13872.65	0.83	0.86	1.73
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	3.843	Sqm	**578.60**	2223.31			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.863	Cum	**1075.00**	927.46			
		Coarse Aggregates (100 Km lead)	1.726	Cum	**1398.00**	2412.25			
		Cement (30 km lead)	0.828	MT	**742.00**	614.11			
TOTAL (In Rs.)						**20049.78**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.86	Cum	**584.64**	504.40	50.44		
		Coarse Aggregate	1.73	Cum	**944.26**	1629.32	162.93		
		Total					**213.37**		
AOC FOR FALL (Ch.-2.650 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	120.000	Sqm	**11.80**	1416.53			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	80.750	Sqm	**340.20**	27471.15	83.722	1.179	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	97.750	Sqm	**63.20**	6177.80	0.15		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.179	Cum	**1075.00**	1267.37			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	83.868	MT	**742.00**	62230.22			
TOTAL (In Rs.)						**98563.07**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.18	Cum	**584.64**	689.26	68.93		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**68.93**		
AOC FOR FALL (Ch.-3.050 Km)									

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	0.723	Cum	**6914.20**	4998.45	0.30	0.31	0.62
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	1.698	Sqm	**578.60**	982.64			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.311	Cum	**1075.00**	334.17			
		Coarse Aggregates (100 Km lead)	0.622	Cum	**1398.00**	869.16			
		Cement (30 km lead)	0.298	MT	**742.00**	221.27			
		TOTAL (In Rs.)				**7405.68**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.31	Cum	**584.64**	181.74	18.17		
		Coarse Aggregate	0.62	Cum	**944.26**	587.06	58.71		
		Total					**76.88**		

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
ABSTRACT OF COST OF REPAIRED STRUCTURES OF BHADWA MINOR									
AOC FOR BRIDGE (Ch.-0.315 Km)									
1	**Structure is in good condition and does not requir any repair works.**								
AOC FOR BRIDGE (Ch.-0.935 Km)									
1	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	13.050	Sqm	**340.20**	4439.61	13.530	0.191	
2	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	13.050	Sqm	**63.20**	824.76	0.02		
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.191	Cum	**1075.00**	204.82			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	13.550	MT	**742.00**	10053.96			
TOTAL (In Rs.)						**15523.15**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.19	Cum	**584.64**	111.39	11.14		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**11.14**		
AOC FOR FALL (Ch.-1.460 Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	120.000	Sqm	**11.80**	1416.53			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	68.000	Sqm	**340.20**	23133.60	70.502	0.993	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	68.000	Sqm	**63.20**	4297.60	0.10		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.993	Cum	**1075.00**	1067.26			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	70.604	MT	**742.00**	52388.46			
TOTAL (In Rs.)						**82303.45**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.99	Cum	**584.64**	580.43	58.04		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**58.04**		

AOC FOR BRIDGE(Ch.-1.550 Km)									
1	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	25.080	Sqm	**340.20**	8532.22	26.003	0.366	
2	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	6.270	Sqm	**63.20**	396.26	0.01		
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.366	Cum	**1075.00**	393.63			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	26.012	MT	**742.00**	19301.16			
TOTAL (In Rs.)						**28623.27**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.37	Cum	**584.64**	214.08	21.41		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**21.41**		

AOC FOR FALL (Ch.-1.910Km)									
1	5.1.3	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	140.000	Sqm	**11.80**	1652.61			
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	118.750	Sqm	**340.20**	40398.75	123.120	1.734	

S. No.	Ref	Item of Works	Qty.	Unit	Rate (As per WRD SOR 2025 & PL 2025)	Amount (Rs)	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	118.750	Sqm	**63.20**	7505.00	0.18		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	1.734	Cum	**1075.00**	1863.78			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	123.298	MT	**742.00**	91487.21			
		TOTAL (In Rs.)				**142907.35**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	1.73	Cum	**584.64**	1013.62	101.36		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**101.36**		

		AOC FOR FALL (Ch.-2.170 Km)							
1		**Structure is in good condition and does not requir any repair works.**							

		AOC FOR BRIDGE (Ch.-2.305Km)							
1		**Structure is in good condition and does not requir any repair works.**							

		AOC FOR BRIDGE (Ch.-2.440Km)							
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.	1.50	Cum	**5021.30**	7531.95	0.17	0.48	
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	14.500	Sqm	**340.20**	4932.90	15.034	0.212	
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.	14.500	Sqm	**63.20**	916.40	0.02		
4		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.692	Cum	**1075.00**	743.58			
		Coarse Aggregates (100 Km lead)	0.000	Cum	**1398.00**	0.00			
		Cement (30 km lead)	15.228	MT	**742.00**	11299.29			
		Brick (15 km lead)	750.00	No.	**3.18**	2385.00			
		TOTAL (In Rs.)				**27809.11**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.69	Cum	**584.64**	404.40	40.44		
		Coarse Aggregate	0.00	Cum	**944.26**	0.00	0.00		
		Total					**40.44**		

		AOC FOR FALL (Ch.-2.690 Km)							
1	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	1.235	Cum	**6914.20**	8540.77	0.51	0.53	1.06
2	5.3.18	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.	3.294	Sqm	**578.60**	1905.91			
3		**Carriage of materials**							
		Coarse Sand (60 Km lead)	0.531	Cum	**1075.00**	570.99			
		Coarse Aggregates (100 Km lead)	1.062	Cum	**1398.00**	1485.12			
		Cement (30 km lead)	0.510	MT	**742.00**	378.08			
		TOTAL (In Rs.)				**12880.86**			
		Seigniorage @10%			**Rate**	**Amount in Rs.**	**10%**		
		Coarse Sand	0.53	Cum	**584.64**	310.54	31.05		
		Coarse Aggregate	1.06	Cum	**944.26**	1003.10	100.31		
		Total					**131.36**		

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND

DETAILS OF QUANTITIES OF REPAIRED STRUCTURES OF KOTWARA DISTRIBUTARY

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
QUANTITIES OF REPAIRING WORK FOR BRIDGE(Ch.-0.005 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	4.572	0.45	0.92	*3.79*	*Cum*
		TOTAL					**3.79**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	1	4.57		2.29	*10.47*	*Sqm*
		TOTAL					**10.47**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	1	4.57		2.29	*10.47*	*Sqm*
		TOTAL					**10.47**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR HR OF GAMHARI MR (Ch.-0.005 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**150.00**	**Sqm**
2	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Side wall	2	1.50	0.50	1.50	*2.25*	*Cum*
		HR Gate Top	1	3.00	1.25	1.50	*5.63*	*Cum*
		TOTAL					**7.88**	***Cum***
	New HR to be constructed, the estimate of HR's of distributary will be provided seperately.							
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-0.345 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	15	0.45	0.92	*12.42*	*Cum*
		TOTAL					**12.42**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	15.00		2.29	*68.70*	*Sqm*
		TOTAL					**68.70**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
		Parapet Wall	2	15.00		2.29	*68.70*	*Sqm*
		TOTAL					**68.70**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CD WORK (Ch.-0.640 Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		Abutment D/S	1	7.00	0.45	1.5	*4.73*	*Cum*
		TOTAL					***4.73***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		Abutment D/S	2	7.00		1.5	*21.00*	Sqm
			2		0.45	1.5	*1.35*	Sqm
		TOTAL					**22.35**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-0.875 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR HR OF NAGWA MINOR (Ch.-1.140 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**120.00**	**Sqm**
2	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Side wall	2	2.00	0.50	1.50	*3.00*	*Cum*
		HR Gate Top	1	3.00	1.00	1.50	*4.50*	*Cum*
		TOTAL					**7.50**	***Cum***
	New HR to be constructed, the estimate of HR's of distributary will be provided seperately.							
QUANTITIES OF REPAIRING WORK FOR CULVERT (Ch.-1.840 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	1	7	0.45	0.92	*2.90*	*Cum*
		TOTAL					**2.90**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	1	7.00		2.29	*16.03*	*Sqm*
		TOTAL					**16.03**	***Sqm***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
3	5.5.10	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	1	7.00		2.29	*16.03*	*Sqm*
		TOTAL					**16.03**	***Sqm***
		QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-3.450 Km)						
1		**Structure requires no repair work.**						
		QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-3.775 Km)						
1	5.4.6	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	12	0.45	0.92	*9.94*	*Cum*
		TOTAL					**9.94**	**Cum**
2	5.5.5	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	12.00		2.29	*54.96*	*Sqm*
		TOTAL					**54.96**	***Sqm***
3	5.5.10	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	12.00		2.29	*54.96*	*Sqm*
		TOTAL					**54.96**	***Sqm***
		QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-4.405 Km)						
1	5.1.3	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**150.00**	**Sqm**
2	5.8.9	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Hand Rail	*8*	*2.00*	*0.20*	*0.15*	*0.48*	*Cum*
		Post	*7*	*0.30*	*0.30*	*0.50*	*0.32*	*Cum*
		TOTAL					***0.80***	***Cum***
3	5.4.6	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	12	0.45	0.92	*9.94*	*Cum*
		TOTAL					**9.94**	**Cum**
4	5.5.5	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	12.00		2.29	*54.96*	*Sqm*
		TOTAL					**54.96**	***Sqm***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
5	5.5.10	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	12.00		2.29	*54.96*	*Sqm*
		TOTAL					**54.96**	***Sqm***
		QUANTITIES OF REPAIRING WORK FOR CD WORK (Ch.-4.670 Km)						
1		**Structure requires no repair work.**						
		QUANTITIES OF REPAIRING WORK FOR CD WORK (Ch.-5.025 Km)						
1		**Structure requires no repair work.**						
		QUANTITIES OF REPAIRING WORK FOR HR OF PAWAI MR (Ch.-5.120 Km)						
1	5.1.3	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**90.00**	**Sqm**
2	5.8.9	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Side wall	2	1.80	0.50	1.80	*3.24*	*Cum*
		HR Gate Top	1	3.00	1.00	1.80	*5.40*	*Cum*
		TOTAL					***8.64***	***Cum***
	New HR to be constructed, the estimate of HR's of distributary will be provided seperately.							
		QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-5.225 Km)						
1	5.8.9	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Hand Rail	*8*	*2.00*	*0.20*	*0.15*	*0.48*	*Cum*
		Post	*4*	*0.30*	*0.30*	*0.50*	*0.18*	*Cum*
		TOTAL					***0.66***	***Cum***
2	5.4.6	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	1	9	0.45	0.92	*3.73*	*Cum*
		TOTAL					**3.73**	**Cum**
3	5.5.5	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	1	9.00		2.29	*20.61*	*Sqm*
		TOTAL					**20.61**	***Sqm***
4	5.5.10	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	1	9.00		2.29	*20.61*	*Sqm*
		TOTAL					**20.61**	***Sqm***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
QUANTITIES OF REPAIRING WORK FOR CD WORK (Ch.-5.475 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**160.00**	**Sqm**
2	**5.3.4**	**Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.**						
		Wing wall Top	*4*	*2.00*	*0.45*	*0.15*	*0.54*	*Cum*
		Abutment Side wall Top	*4*	*7.00*	*0.45*	*0.15*	*1.89*	*Cum*
		Abutment Side wall Top	*2*	*2.00*	*0.45*	*0.15*	*0.27*	*Cum*
		TOTAL					***2.70***	***Cum***
QUANTITIES OF REPAIRING WORK FOR CD WORK (Ch.-5.610 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**140.00**	**Sqm**
2	**5.3.4**	**Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.**						
		Wing wall Top	*4*	*2.00*	*0.45*	*0.15*	*0.54*	*Cum*
		Abutment Side wall Top	*4*	*7.00*	*0.45*	*0.15*	*1.89*	*Cum*
		Abutment Side wall Top	*2*	*2.00*	*0.45*	*0.15*	*0.27*	*Cum*
		TOTAL					***2.70***	***Cum***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-5.950 Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		Abutment D/S	1	11.00	0.45	2.5	*12.38*	*Cum*
		Wing wall U/S	1	3.00	0.45	2.5	*3.38*	*Cum*
		D/S Floor	1	3.00	7.38	0.5	*11.07*	*Cum*
		TOTAL					***26.82***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		Abutment D/S	2	11.00		2.5	*55.00*	Sqm
			2		0.45	2.5	*2.25*	Sqm
		Wing wall U/S	2	3.00		2.5	*15.00*	Sqm
			2		0.45	2.5	*2.25*	Sqm

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
		D/S Floor	2	3.00		0.5	*3.00*	Sqm
			2		7.38	0.5	*7.38*	Sqm
		TOTAL					**84.88**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-6.100 Km)								
1	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	4	3.00		3.45	*41.40*	*Sqm*
		Abutment Side wall	4	7.00		3.45	*96.60*	*Sqm*
		Abutment	2	2.00		3.45	*13.80*	*Sqm*
		TOTAL					**151.80**	***Sqm***
2	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	4	3.00		3.45	*41.40*	*Sqm*
		Abutment Side wall	4	7.00		3.45	*96.60*	*Sqm*
		Abutment	2	2.00		3.45	*13.80*	*Sqm*
		TOTAL					**151.80**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-6.270 Km)								
1	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	4	3.00		3.45	*41.40*	*Sqm*
		Abutment Side wall	4	6.00		3.45	*82.80*	*Sqm*
		Abutment	2	2.00		3.45	*13.80*	*Sqm*
		TOTAL					**138.00**	***Sqm***
2	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	4	3.00		3.45	*41.40*	*Sqm*
		Abutment Side wall	4	6.00		3.45	*82.80*	*Sqm*
		Abutment	2	2.00		3.45	*13.80*	*Sqm*
		TOTAL					**138.00**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-6.330 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	1	9	0.45	0.92	*3.73*	*Cum*
		TOTAL					**3.73**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	1	9.00		2.29	*20.61*	*Sqm*
		TOTAL					**20.61**	***Sqm***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	1	9.00		2.29	*20.61*	*Sqm*
		TOTAL					**20.61**	***Sqm***
4	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		U/S Wing wall	1	3.00	0.45	1.7	*2.30*	*Cum*
		TOTAL					***2.30***	***Cum***
5	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		U/S Wing wall	2	3.00		1.7	*10.20*	Sqm
			2		0.45	1.7	*1.53*	Sqm
		TOTAL					**11.73**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-6.500 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**130.00**	**Sqm**
2	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		Crest	1	7.50	0.80	1.3	*7.80*	*Cum*
		TOTAL					***7.80***	***Cum***
3	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		Crest	2	7.50		1.3	*19.50*	Sqm
			2		0.80	1.3	*2.08*	Sqm
		TOTAL					**21.58**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-6.750 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Wing Wall	*4*	*3.00*	*0.30*	*2.00*	*7.20*	*Cum*
		Abutment	*2*	*18.00*	*0.30*	*2.00*	*21.60*	*Cum*
		Crest	*1*	*7.00*	*0.70*	*1.52*	*7.45*	*Cum*
		Floor	*1*	*7.50*	*6.00*	*0.50*	*22.50*	*Cum*
		TOTAL					***58.75***	***Cum***
		New Fall has been Proposed.						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
		QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-6.940 Km)						
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Wing Wall	*4*	*3.00*	*0.30*	*2.00*	*7.20*	*Cum*
		Abutment	*2*	*16.00*	*0.30*	*2.00*	*19.20*	*Cum*
		Crest	*1*	*7.50*	*0.80*	*1.83*	*10.97*	*Cum*
		Floor	*1*	*7.00*	*7.50*	*0.50*	*26.25*	*Cum*
		TOTAL					***63.62***	***Cum***
		New Fall has been Proposed.						
		QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-7.390 Km)						
1		**Structure requires no repair work.**						
		QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-8.025 Km)						
1	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	4	2.00		3.45	*27.60*	*Sqm*
		Abutment Side wall	4	4.50		3.45	*62.10*	*Sqm*
		Abutment	2	4.50		3.45	*31.05*	*Sqm*
		TOTAL					**120.75**	***Sqm***
2	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	4	2.00		3.45	*27.60*	*Sqm*
		Abutment Side wall	4	4.50		3.45	*62.10*	*Sqm*
		Abutment	2	4.50		3.45	*31.05*	*Sqm*
		TOTAL					**120.75**	***Sqm***
		QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-8.345 Km)						
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Abutment	*2*	*12.00*	*0.30*	*2.00*	*14.40*	*Cum*
		Crest	*1*	*6.80*	*0.70*	*1.83*	*8.71*	*Cum*
		TOTAL					***23.11***	***Cum***
		The fall has been eliminated as per regime section.						
		QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-8.605 Km)						
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**180.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
		Wing wall	4	2.00		4.05	*32.40*	*Sqm*
		Abutment Side wall	4	10.50		4.05	*170.10*	*Sqm*
		Abutment	2	4.50		4.05	*36.45*	*Sqm*
		TOTAL					**238.95**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	4	2.00		4.05	*32.40*	*Sqm*
		Abutment Side wall	4	10.50		4.05	*170.10*	*Sqm*
		Abutment	2	4.50		4.05	*36.45*	*Sqm*
		TOTAL					**238.95**	***Sqm***
4	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		Wing Wall D/S	1	2.00	0.45	1.8	*1.62*	*Cum*
		TOTAL					***1.62***	***Cum***
5	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		Wing Wall D/S	2	2.00		1.8	*7.20*	Sqm
			2		0.45	1.8	*1.62*	Sqm
		TOTAL					**8.82**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-8.850 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**120.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	4	2.00		4.05	*32.40*	*Sqm*
		Abutment Side wall	4	9.00		4.05	*145.80*	*Sqm*
		Abutment	2	2.50		4.05	*20.25*	*Sqm*
		TOTAL					**198.45**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	4	2.00		4.05	*32.40*	*Sqm*
		Abutment Side wall	4	9.00		4.05	*145.80*	*Sqm*
		Abutment	2	2.50		4.05	*20.25*	*Sqm*
		TOTAL					**198.45**	***Sqm***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
4	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		Wing Wall D/S	1	2.00	0.45	2	*1.80*	*Cum*
		Abutment Wall D/S	1	9.00	0.45	2	*8.10*	*Cum*
		TOTAL					***9.90***	***Cum***
5	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		Wing Wall D/S	2	2.00		2	*8.00*	Sqm
			2		0.45	2	*1.80*	Sqm
		Abutment Wall D/S	2	9.00		2	*36.00*	Sqm
			2		0.45	2	*1.80*	Sqm
		TOTAL					**47.60**	**Sqm**
		QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-9.045 Km)						
1		**Structure requires no repair work.**						
		QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-9.160 Km)						
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**160.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	2	2.00		3.45	*13.80*	*Sqm*
		Abutment Side wall	2	7.50		3.45	*51.75*	*Sqm*
		Abutment	2	3.00		3.45	*20.70*	*Sqm*
		TOTAL					**86.25**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	2	2.00		3.45	*13.80*	*Sqm*
		Abutment Side wall	2	7.50		3.45	*51.75*	*Sqm*
		Abutment	2	3.00		3.45	*20.70*	*Sqm*
		TOTAL					**86.25**	***Sqm***
4	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		Wing Wall D/S	1	2.00	0.45	2	*1.80*	*Cum*
		Abutment Wall D/S	1	7.50	0.45	2	*6.75*	*Cum*
		TOTAL					***8.55***	***Cum***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
5	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		Wing Wall D/S	2	2.00		2	*8.00*	Sqm
			2		0.45	2	*1.80*	Sqm
		Abutment Wall D/S	2	7.50		2	*30.00*	Sqm
			2		0.45	2	*1.80*	Sqm
		TOTAL					**41.60**	**Sqm**
		QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-9.460 Km)						
1		**Structure requires no repair work.**						
		QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-9.795 Km)						
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**110.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	2	2.00		4.05	*16.20*	*Sqm*
		Abutment Side wall	2	8.00		4.05	*64.80*	*Sqm*
		Abutment	2	3.00		4.05	*24.30*	*Sqm*
		TOTAL					**105.30**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	2	2.00		4.05	*16.20*	*Sqm*
		Abutment Side wall	2	8.00		4.05	*64.80*	*Sqm*
		Abutment	2	3.00		4.05	*24.30*	*Sqm*
		TOTAL					**105.30**	***Sqm***
4	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		Wing Wall	2	2.00	0.45	2	*3.60*	*Cum*
		Abutment Wall D/S	1	8.00	0.45	2	*7.20*	*Cum*
		TOTAL					***10.80***	***Cum***
5	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		Wing Wall	2	2.00		2	*8.00*	Sqm
			2		0.45	2	*1.80*	Sqm
		Abutment Wall D/S	2	8.00		2	*32.00*	Sqm
			2		0.45	2	*1.80*	Sqm
		TOTAL					**43.60**	**Sqm**

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
QUANTITIES OF REPAIRING WORK FOR HR OF BHUTAILI MINOR (Ch.-9.875 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**100.00**	**Sqm**
2	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Side wall	1	2.00	0.50	2.00	*2.00*	*Cum*
		HR Gate Top	1	3.00	1.20	2.00	*7.20*	*Cum*
		D/S abutment	1	5.00	0.50	1.50	*3.75*	*Cum*
		Rectangular well Walls	4	2.00	0.50	1.50	*6.00*	*Cum*
		TOTAL					**18.95**	***Cum***
	New HR to be constructed, the estimate of HR's of distributary will be provided seperately.							
QUANTITIES OF REPAIRING WORK FOR CD WORK (Ch.-10.440 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR FALL(Ch.-10.500 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR HR OF SALOPURA MINOR (Ch.-10.660 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**120.00**	**Sqm**
2	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Side wall	1	1.50	0.30	1.50	*0.68*	*Cum*
		HR Gate Top	1	2.00	0.75	1.50	*2.25*	*Cum*
		TOTAL					**2.93**	***Cum***
	New HR to be constructed, the estimate of HR's of distributary will be provided seperately.							
QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-10.860 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**165.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	2	2.50		4.05	*20.25*	*Sqm*
		Abutment Side wall	2	5.50		4.05	*44.55*	*Sqm*
		Abutment	2	3.50		4.05	*28.35*	*Sqm*
		TOTAL					**93.15**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	2	2.50		4.05	*20.25*	*Sqm*

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
		Abutment Side wall	2	5.50		4.05	*44.55*	*Sqm*
		Abutment	2	3.50		4.05	*28.35*	*Sqm*
		TOTAL					**93.15**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-10.925 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Abutment	*1*	*10.00*	*0.45*	*2.50*	*11.25*	*Cum*
		Wing Wall	*2*	*4.00*	*0.45*	*2.50*	*9.00*	*Cum*
		TOTAL					***20.25***	***Cum***
		New Bridge has been Proposed.						
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-11.730 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Abutment	*2*	*6.00*	*0.45*	*2.00*	*10.80*	*Cum*
		Wing Wall	*4*	*3.50*	*0.45*	*2.00*	*12.60*	*Cum*
		TOTAL					***23.40***	***Cum***
		New Bridge has been Proposed.						
QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-11.860 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**165.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	2	2.00		4.05	*16.20*	*Sqm*
		Abutment Side wall	2	8.00		4.05	*64.80*	*Sqm*
		Abutment	2	4.00		4.05	*32.40*	*Sqm*
		TOTAL					**113.40**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	2	2.00		4.05	*16.20*	*Sqm*
		Abutment Side wall	2	8.00		4.05	*64.80*	*Sqm*
		Abutment	2	4.00		4.05	*32.40*	*Sqm*
		TOTAL					**113.40**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-12.020 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	10	0.45	0.92	*8.28*	*Cum*
		TOTAL					**8.28**	**Cum**

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	10.00		2.29	*45.80*	*Sqm*
		TOTAL					**45.80**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	10.00		2.29	*45.80*	*Sqm*
		TOTAL					**45.80**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-12.440 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**120.00**	**Sqm**

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	2	2.00		4.05	*16.20*	*Sqm*
		Abutment Side wall	2	8.00		4.05	*64.80*	*Sqm*
		Abutment	2	4.00		4.05	*32.40*	*Sqm*
		TOTAL					**113.40**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	2	2.00		4.05	*16.20*	*Sqm*
		Abutment Side wall	2	8.00		4.05	*64.80*	*Sqm*
		Abutment	2	4.00		4.05	*32.40*	*Sqm*
		TOTAL					**113.40**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR HR+CR OF SINGHI SUB DY (Ch.-13.020 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**120.00**	**Sqm**
2	**RCD 8.09**	**Painting on Steel Surfaces (Providing and applying two coats of ready mix paint of approved brand on steel surface after through cleaning of surface to give an even shade).**						
		HR GATE-1	*2*	*1.50*		*1.20*	*3.60*	*Sqm*
		CR GATE-1	*2*	*3.00*		*1.50*	*9.00*	*Sqm*

		TOTAL					**12.60**	**Sqm**
3	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Gate Abutment Top CR	1	4.50		2.45	*11.03*	*Sqm*
		Side Face	1	1.20		3	*3.60*	*Sqm*
		TOTAL					**14.63**	***Sqm***
4	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Gate Abutment Top	1	4.50		2.45	*11.03*	*Sqm*
		Side Face	1	1.20		3	*3.60*	*Sqm*
		TOTAL					**14.63**	***Sqm***
5	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Side wall	1	1.50	0.50	1.80	*1.35*	*Cum*
		HR Gate Top	1	2.00	1.00	1.80	*3.60*	*Cum*
		Abutment D/S Portion	*2*	*3.50*	0.50	1.50	*5.25*	*Cum*
		Wing Wall D/S Portion	*2*	*0.50*	0.50	1.50	*0.75*	*Cum*
		TOTAL					**10.95**	***Cum***
	New HR to be constructed, the estimate of HR's of distributary will be provided seperately.							

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
QUANTITIES OF REPAIRING WORK FOR CD WORK (Ch.-13.480 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-13.605 Km)								
		The structure requires no repair as it is not under Irrigation department.						
QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-14.240 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**130.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	2	2.50		3.45	*17.25*	*Sqm*
		Abutment Side wall	2	6.50		3.45	*44.85*	*Sqm*
		Abutment	2	9.00		3.45	*62.10*	*Sqm*
		TOTAL					**124.20**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	2	2.50		3.45	*17.25*	*Sqm*
		Abutment Side wall	2	6.50		3.45	*44.85*	*Sqm*
		Abutment	2	9.00		3.45	*62.10*	*Sqm*
		TOTAL					**124.20**	***Sqm***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-14.370 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	8	0.45	0.92	*6.62*	*Cum*
		TOTAL					**6.62**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	8.00		2.29	*36.64*	*Sqm*
		TOTAL					**36.64**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	8.00		2.29	*36.64*	*Sqm*
		TOTAL					**36.64**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-15.150 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-15.860 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	7	0.45	0.92	*5.80*	*Cum*
		TOTAL					**5.80**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	7.00		2.29	*32.06*	*Sqm*
		TOTAL					**32.06**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	7.00		2.29	*32.06*	*Sqm*
		TOTAL					**32.06**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-16.130 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	8	0.45	0.92	*6.62*	*Cum*
		TOTAL					**6.62**	**Cum**

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
2	5.5.5	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	8.00		2.29	*36.64*	*Sqm*
		TOTAL					**36.64**	***Sqm***
3	5.5.10	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	8.00		2.29	*36.64*	*Sqm*
		TOTAL					**36.64**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR HR OF SAHOKARMA MR (Ch.-16.200 Km)								
1	5.1.3	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**110.00**	**Sqm**
2	5.8.9	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Side wall	2	1.50	0.50	1.80	*2.70*	*Cum*
		HR Gate Top	1	2.00	1.00	1.80	*3.60*	*Cum*
		Abutment D/S Portion	2	2.00	0.50	1.00	*2.00*	*Cum*
		Wing wall D/S Portion	2	0.50	0.50	1.00	*0.50*	*Cum*
		TOTAL					**8.80**	***Cum***
	New HR to be constructed, the estimate of HR's of distributary will be provided seperately.							
QUANTITIES OF REPAIRING WORK FOR FALL(Ch.-16.500 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR HR OF DHAMNI MR (Ch.-17.300 Km)								
1	5.1.3	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**140.00**	**Sqm**
2	5.8.9	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Side wall	2	1.50	0.50	1.80	*2.70*	*Cum*
		HR Gate Top	1	3.00	1.20	1.80	*6.48*	*Cum*
		TOTAL					**9.18**	**Cum**
	New HR to be constructed, the estimate of HR's of distributary will be provided seperately.							
QUANTITIES OF REPAIRING WORK FOR FALL(Ch.-17.350 Km)								
1	5.3.5	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
		D/S Abutment Wall	2	7.00	0.45	2	*12.60*	*Cum*
		Wing Wall	2	3.00	0.45	2	*5.40*	*Cum*
		D/S Floor	1	5.00	5.00	0.3	*7.50*	*Cum*
		TOTAL					***25.50***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Abutment Wall	4	7.00		2.00	*56.00*	Sqm
			4		0.45	2.00	*3.60*	Sqm
		Wing Wall	4	5.00		2.00	*40.00*	Sqm
			4		0.45	2.00	*3.60*	Sqm
		D/S Floor	2	5.00		0.30	*3.00*	Sqm
			2		5.00	0.30	*3.00*	Sqm
		TOTAL					**109.20**	**Sqm**
		QUANTITIES OF REPAIRING WORK FOR FALL/BRIDGE (Ch.-17.665 Km)						
1		**Structure requires no repair work.**						
		QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-18.400 Km)						
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	6.29	0.45	0.92	*5.21*	*Cum*
		TOTAL					**5.21**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	6.29		2.29	*28.81*	*Sqm*
		TOTAL					**28.81**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	6.29		2.29	*28.81*	*Sqm*
		TOTAL					**28.81**	***Sqm***
		QUANTITIES OF REPAIRING WORK FOR FALL/BRIDGE (Ch.-19.100 Km)						
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	1	6.29	0.45	0.92	*2.60*	*Cum*
		TOTAL					**2.60**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
		Parapet Wall	1	6.29		2.29	*14.40*	*Sqm*
		TOTAL					**14.40**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	1	6.29		2.29	*14.40*	*Sqm*
		TOTAL					**14.40**	***Sqm***
4	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Floor	1	5.00	6.00	0.3	*9.00*	*Cum*
		TOTAL					***9.00***	***Cum***
5	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Abutment Wall	2	5.00		0.30	*3.00*	Sqm
			2		6.00	0.30	*3.60*	Sqm
		TOTAL					**6.60**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-20.660 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR FALL/BRIDGE (Ch.-21.450Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-22.350 Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Abutment	1	5.00	0.45	1.8	*4.05*	*Cum*
		TOTAL					***4.05***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Abutment Wall	2	5.00		1.80	*18.00*	Sqm
			2		0.45	1.80	*1.62*	Sqm
		TOTAL					**19.62**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR FALL/BRIDGE (Ch.-22.750 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-23.025 Km)								

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
1		Structure requires no repair work.						
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-23.150 Km)								
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.						
		Parapet Wall	2	10	0.45	0.6	*5.40*	*Cum*
		TOTAL					**5.40**	**Cum**
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.						
		Parapet Wall	2	10.00		1.45	*29.00*	*Sqm*
		TOTAL					**29.00**	***Sqm***
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.						
		Parapet Wall	2	10.00		1.45	*29.00*	*Sqm*
		TOTAL					**29.00**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CD WORK(Ch.-23.520 Km)								
1		Structure requires no repair work.						
QUANTITIES OF REPAIRING WORK FOR BRIDGE/FALL (Ch.-24.200 Km)								
1		Structure requires no repair work.						
QUANTITIES OF REPAIRING WORK FOR BRIDGE/FALL (Ch.-24.430 Km)								
1	5.4.6	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.						
		Parapet Wall	2	5	0.45	0.6	*2.70*	*Cum*
		TOTAL					**2.70**	**Cum**
2	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.						
		Parapet Wall	2	5.00		1.45	*14.50*	*Sqm*
		TOTAL					**14.50**	***Sqm***
3	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.						
		Parapet Wall	2	5.00		1.45	*14.50*	*Sqm*
		TOTAL					**14.50**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-25.150 Km)								
1		Structure requires no repair work.						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
QUANTITIES OF REPAIRING WORK FOR BRIDGE/FALL (Ch.-25.950 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	8	0.45	0.6	*4.32*	*Cum*
		TOTAL					**4.32**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	8.00		1.45	*23.20*	*Sqm*
		TOTAL					**23.20**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	8.00		1.45	*23.20*	*Sqm*
		TOTAL					**23.20**	***Sqm***
4	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		Wing wall D/S	2	3.00	0.45	1.5	*4.05*	*Cum*
		TOTAL					***4.05***	***Cum***
5	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		Wing wall D/S	2	3.00		1.50	*9.00*	Sqm
			2		0.45	1.50	*1.35*	Sqm
		TOTAL					**10.35**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-26.365Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR BRIDGE/FALL (Ch.-26.730 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	7	0.45	0.6	*3.78*	*Cum*
		TOTAL					**3.78**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	7.00		1.45	*20.30*	*Sqm*
		TOTAL					**20.30**	***Sqm***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	7.00		1.45	*20.30*	*Sqm*
		TOTAL					**20.30**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR HR OF BHADWA MINOR (Ch.-27.075 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**140.00**	**Sqm**
5	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter**						
		Side wall	1	1.50	0.50	1.80	*1.35*	*Cum*
		HR Gate Top	1	2.00	1.00	1.80	*3.60*	*Cum*
		Abutment D/S Portion	2	3.50	0.50	1.20	*4.20*	*Cum*
		Wing wall D/S Portion	2	0.50	0.50	1.20	*0.60*	*Cum*
		TOTAL					**9.75**	***Cum***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-27.250 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-27.595 Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Abutment	1	5.00	0.45	1.8	*4.05*	*Cum*
		TOTAL					***4.05***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Abutment Wall	2	5.00		1.80	*18.00*	Sqm
			2		0.45	1.80	*1.62*	Sqm
		TOTAL					**19.62**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-28.740 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT (Ch.-28.830 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR RAILWAY LINE (Ch.-28.910 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR WELL TYPE FALL (Ch.-29.325 Km)								

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Abutment	1	4.00	0.45	1.2	*2.16*	*Cum*
		Well portion	1	6.28		0.5	*0.25*	*Cum*
		TOTAL					***2.41***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Abutment	2	4.00		1.20	*9.60*	Sqm
			2		0.45	1.20	*1.08*	Sqm
		Well portion	2	6.28		0.50	*6.28*	Sqm
		TOTAL					**16.96**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR BRIDGE/FALL (Ch.-29.690 Km)								
1	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Abutment wall	2	8.00		2.65	*42.40*	*Sqm*
		Wing wall	2	3.00		2.65	*15.90*	*Sqm*
		TOTAL					**58.30**	***Sqm***
2	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Abutment wall	2	8.00		2.65	*42.40*	*Sqm*
		Wing wall	2	3.00		2.65	*15.90*	*Sqm*
		TOTAL					**58.30**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR WELL TYPE FALL (Ch.-30.275 Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		U/S Abutment	1	3.50	0.45	1.2	*1.89*	*Cum*
		TOTAL					***1.89***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Abutment	2	3.50		1.20	*8.40*	Sqm
		TOTAL					**8.40**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-30.510 Km)								

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Floor	1	6.00	4.00	0.935	*22.44*	*Cum*
		TOTAL					***22.44***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	6.00		0.94	*11.22*	Sqm
			2		4.00	0.94	*7.48*	Sqm
		TOTAL					**18.70**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR ROAD CROSSING (Ch.-30.585 Km)								
1		**Structure requires no repair work.**						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
DETAILS OF QUANTITIES OF REPAIRED STRUCTURES OF GAMHARIA MR.								
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-0.175 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-0.950 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	15	0.45	0.6	*8.10*	*Cum*
		TOTAL					**8.10**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	15.00		1.45	*43.50*	*Sqm*
		TOTAL					**43.50**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	15.00		1.45	*43.50*	*Sqm*
		TOTAL					**43.50**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-1.050 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-2.100 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	15	0.45	0.6	*8.10*	*Cum*
		TOTAL					**8.10**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	15.00		1.45	*43.50*	*Sqm*
		TOTAL					**43.50**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	15.00		1.45	*43.50*	*Sqm*
		TOTAL					**43.50**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-2.455 Km)								
1		**Structure requires no repair work.**						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
DETAILS OF QUANTITIES OF REPAIRED STRUCTURES OF NAGWA MR.								
QUANTITIES OF REPAIRING WORK FOR CULVERT (Ch.-0.730 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	1	6	0.45	0.6	*1.62*	*Cum*
		TOTAL					**1.62**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	6.00		1.45	*17.40*	*Sqm*
		TOTAL					**17.40**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	6.00		1.45	*17.40*	*Sqm*
		TOTAL					**17.40**	***Sqm***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
DETAILS OF QUANTITIES OF REPAIRED STRUCTURES OF PAWAI MR.								
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-0.175 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	6	0.45	0.6	*3.24*	*Cum*
		TOTAL					**3.24**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	6.00		1.45	*17.40*	*Sqm*
		Wing wall	4	1.50		3.25	*19.50*	*Sqm*
		Abutment	4	4.50		3.25	*58.50*	*Sqm*
		TOTAL					**95.40**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	6.00		1.45	*17.40*	*Sqm*
		Wing wall	4	1.50		3.25	*19.50*	*Sqm*
		Abutment	4	4.50		3.25	*58.50*	*Sqm*
		TOTAL					**95.40**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-0.640 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**130.00**	**Sqm**
2	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Floor	1	5.00	2.80	0.914	*12.80*	*Cum*
		TOTAL					***12.80***	***Cum***
3	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	5.00		0.91	*9.14*	Sqm
			2		2.80	0.91	*5.12*	Sqm
		TOTAL					**14.26**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-1.050 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-1.100 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**110.00**	**Sqm**

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
2	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Floor	1	5.00	2.50	0.611	*7.64*	*Cum*
		TOTAL					***7.64***	***Cum***
3	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	5.00		0.61	*6.11*	Sqm
			2		2.50	0.61	*3.06*	Sqm
		TOTAL					**9.17**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-1.260Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	3	0.45	0.6	*1.62*	*Cum*
		TOTAL					**1.62**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	3.00		1.45	*8.70*	*Sqm*
		Wing wall	4	1.50		3.25	*19.50*	*Sqm*
		Abutment	4	4.50		3.25	*58.50*	*Sqm*
		TOTAL					**86.70**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	3.00		1.45	*8.70*	*Sqm*
		Wing wall	4	1.50		3.25	*19.50*	*Sqm*
		Abutment	4	4.50		3.25	*58.50*	*Sqm*
		TOTAL					**86.70**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-1.400 Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Floor	1	5.00	2.50	0.611	*7.64*	*Cum*
		Left Side Abutment wall	1	8.00	0.45	2	*7.20*	*Cum*
		TOTAL					***7.64***	***Cum***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	5.00		0.61	*6.11*	Sqm
			2		2.50	0.61	*3.06*	Sqm
		Left Side Abutment wall	2	8.00		2.00	*32.00*	Sqm
			2		0.45	2.00	*1.80*	Sqm
		TOTAL					**42.97**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-1.720Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Wing wall	4	3.00	0.50	1.50	*9.00*	*Cum*
		Side wall	2	9.00	0.50	1.20	*10.80*	*Cum*
		Crest	1	2.50	0.60	1.50	*2.25*	*Cum*
		TOTAL					**22.05**	**Cum**
	New Fall to be constructed, the estimate of Fall of distributary will be provided seperately.							

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
DETAILS OF QUANTITIES OF REPAIRED STRUCTURES OF BHUTAILI MR.								
QUANTITIES OF REPAIRING WORK FOR CD WORK (Ch.-0.300 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**130.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	4	2.50		3.45	*34.50*	*Sqm*
		Abutment Side wall	4	4.50		3.45	*62.10*	*Sqm*
		Abutment	2	6.00		3.45	*41.40*	*Sqm*
		TOTAL					**138.00**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	4	2.50		3.45	*34.50*	*Sqm*
		Abutment Side wall	4	4.50		3.45	*62.10*	*Sqm*
		Abutment	2	6.00		3.45	*41.40*	*Sqm*
		TOTAL					**138.00**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-0.370 Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Floor	1	5.00	2.50	0.305	*3.81*	*Cum*
		Right Side Abutment wall	1	9.00	0.45	2	*8.10*	*Cum*
		Right Side wing wall	1	3.00	0.45	2	*2.70*	*Cum*
		TOTAL					***14.61***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	5.00		0.31	*3.05*	Sqm
			2		2.50	0.31	*1.53*	Sqm
		Right Side Abutment wall	2	9.00		2.00	*36.00*	Sqm
			2		0.45	2.00	*1.80*	Sqm
		Right Side wing wall	2	3.00		2.00	*12.00*	Sqm
			2		0.45	2.00	*1.80*	Sqm
		TOTAL					**56.18**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR CD WORK (Ch.-0.530 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**130.00**	**Sqm**

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	4	1.50		3.45	*20.70*	*Sqm*
		Abutment Side wall	4	4.00		3.45	*55.20*	*Sqm*
		Abutment	2	6.00		3.45	*41.40*	*Sqm*
		TOTAL					**117.30**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	4	1.50		3.45	*20.70*	*Sqm*
		Abutment Side wall	4	4.00		3.45	*55.20*	*Sqm*
		Abutment	2	6.00		3.45	*41.40*	*Sqm*
		TOTAL					**117.30**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-0.580 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Abutment	*2*	*6.00*	*0.45*	*1.80*	*9.72*	*Cum*
		Wing Wall	*2*	*3.00*	*0.45*	*1.80*	*4.86*	*Cum*
		TOTAL					***14.58***	***Cum***
		New Fall has been Proposed.						
QUANTITIES OF REPAIRING WORK FOR CULVERT (Ch.-0.650 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-0.740 Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Floor	1	5.00	2.50	0.153	*1.91*	*Cum*
		TOTAL					***1.91***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	5.00		0.15	*1.53*	Sqm
			2		2.50	0.15	*0.77*	Sqm
		TOTAL					**2.30**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR CD WORK (Ch.-0.855 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**150.00**	**Sqm**

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	3	1.50		3.45	*15.53*	*Sqm*
		Abutment Side wall	4	4.00		3.45	*55.20*	*Sqm*
		Abutment	2	6.00		3.45	*41.40*	*Sqm*
		TOTAL					**112.13**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	3	1.50		3.45	*15.53*	*Sqm*
		Abutment Side wall	4	4.00		3.45	*55.20*	*Sqm*
		Abutment	2	6.00		3.45	*41.40*	*Sqm*
		TOTAL					**112.13**	***Sqm***
4	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Wing wall	1	1.50	0.45	1.5	*1.01*	*Cum*
		TOTAL					***1.01***	***Cum***
5	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Wing wall	2	1.50		1.50	*4.50*	Sqm
			2		0.45	1.50	*1.35*	Sqm
		TOTAL					**5.85**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-0.930 Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		Left Side Abutment wall	1	5.00	0.45	1.8	*4.05*	*Cum*
		TOTAL					***4.05***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		Left Side Abutment wall	2	5.00		1.80	*18.00*	Sqm
			2		0.45	1.80	*1.62*	Sqm
		TOTAL					**19.62**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-1.120 Km)								

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
1		Structure requires no repair work.						
		QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-1.350 Km)						
1	5.8.9	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.						
		Abutment	*2*	*6.00*	*0.45*	*1.80*	*9.72*	*Cum*
		Wing Wall	*2*	*3.00*	*0.45*	*1.80*	*4.86*	*Cum*
		TOTAL					***14.58***	***Cum***
		New Fall has been Proposed.						
		QUANTITIES OF REPAIRING WORK FOR BRIDGE/FALL (Ch.-1.480 Km)						
1	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.						
		Abutment wall	2	8.00		2.65	*42.40*	*Sqm*
		Wing wall	4	3.00		2.65	*31.80*	*Sqm*
		TOTAL					**74.20**	***Sqm***
2	5.5.10	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.						
		Abutment wall	2	8.00		2.65	*42.40*	*Sqm*
		Wing wall	4	3.00		2.65	*31.80*	*Sqm*
		TOTAL					**74.20**	***Sqm***
3	5.3.5	Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.						
		D/S Floor	1	4.00	1.00	0.763	*3.05*	*Cum*
		TOTAL					***3.05***	***Cum***
4	5.3.19	Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.						
		D/S Floor	2	4.00		0.76	*6.10*	Sqm
			2		1.00	0.76	*1.53*	Sqm
		TOTAL					**7.63**	**Sqm**
		QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-1.625 Km)						
1	5.5.5	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.						
		Abutment wall	2	6.00		2.65	*31.80*	*Sqm*
		Wing wall	4	2.00		2.65	*21.20*	*Sqm*
		TOTAL					**53.00**	***Sqm***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
2	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Abutment wall	2	6.00		2.65	*31.80*	*Sqm*
		Wing wall	4	2.00		2.65	*21.20*	*Sqm*
		TOTAL					**53.00**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-1.840 Km)								
1		**Structure requires no repair work.**						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
DETAILS OF QUANTITIES OF REPAIRED STRUCTURES OF SALOPURA MINOR								
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-0.000 Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Floor	1	6.00	1.20	0.171	*1.23*	*Cum*
		TOTAL					***1.23***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	6.00		0.17	*2.05*	Sqm
			2		1.20	0.17	*0.41*	Sqm
		TOTAL					**2.46**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-0.070 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		D/S Floor	*1*	*5.00*	*1.20*	*0.15*	*0.89*	*Cum*
		TOTAL					***0.89***	***Cum***
QUANTITIES OF REPAIRING WORK FOR CD WORK (Ch.-0.250 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**150.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	3	1.50		3.25	*14.63*	*Sqm*
		Abutment Side wall	4	4.00		3.25	*52.00*	*Sqm*
		Abutment	2	2.00		3.25	*13.00*	*Sqm*
		TOTAL					**79.63**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	3	1.50		3.25	*14.63*	*Sqm*
		Abutment Side wall	4	4.00		3.25	*52.00*	*Sqm*
		Abutment	2	2.00		3.25	*13.00*	*Sqm*
		TOTAL					**79.63**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CULVERT/FALL (Ch.-0.300 Km)								

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
1	5.3.5	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Floor	1	5.00	1.10	0.476	*2.62*	*Cum*
		TOTAL					***2.62***	***Cum***
2	5.3.19	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	5.00		0.48	*4.76*	Sqm
			2		1.10	0.48	*1.05*	Sqm
		TOTAL					**5.81**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR CD WORK (Ch.-0.685 Km)								
1	5.1.3	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**110.00**	**Sqm**
2	5.5.5	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	3	1.00		3.25	*9.75*	*Sqm*
		Abutment Side wall	4	5.30		3.25	*68.90*	*Sqm*
		Abutment	2	5.50		3.25	*35.75*	*Sqm*
		TOTAL					**114.40**	***Sqm***
3	5.5.10	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	3	1.00		3.25	*9.75*	*Sqm*
		Abutment Side wall	4	5.30		3.25	*68.90*	*Sqm*
		Abutment	2	5.50		3.25	*35.75*	*Sqm*
		TOTAL					**114.40**	***Sqm***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-0.710Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**130.00**	**Sqm**
2	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Floor	1	5.00	1.10	0.933	*5.13*	*Cum*
		TOTAL					***5.13***	***Cum***
3	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	5.00		0.93	*9.33*	Sqm
			2		1.10	0.93	*2.05*	Sqm
		TOTAL					**11.38**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-0.890 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**130.00**	**Sqm**
2	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Floor	1	5.00	1.00	0.171	*0.86*	*Cum*
		TOTAL					***0.86***	***Cum***
3	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	5.00		0.17	*1.71*	Sqm
			2		1.00	0.17	*0.34*	Sqm
		TOTAL					**2.05**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-1.185 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Abutment	*2*	*6.00*	*0.45*	*1.80*	*9.72*	*Cum*
		Wing Wall	*2*	*3.00*	*0.45*	*1.80*	*4.86*	*Cum*
		Crest	*1*	*5.00*	*0.70*	*2.13*	*7.47*	*Cum*
		TOTAL					***22.05***	***Cum***
		New Fall has been Proposed.						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
QUANTITIES OF REPAIRING WORK FOR CD WORK (Ch.-1.230 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**145.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	4	1.00		3.25	*13.00*	*Sqm*
		Abutment Side wall	4	5.30		3.25	*68.90*	*Sqm*
		Abutment	2	5.80		3.25	*37.70*	*Sqm*
		TOTAL					**119.60**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	4	1.00		3.25	*13.00*	*Sqm*
		Abutment Side wall	4	5.30		3.25	*68.90*	*Sqm*
		Abutment	2	5.80		3.25	*37.70*	*Sqm*
		TOTAL					**119.60**	***Sqm***
4	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Abutment	1	3.00	0.45	1.5	*2.03*	*Cum*
		TOTAL					***2.03***	***Cum***
5	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Abutment	2	3.00		1.50	*9.00*	Sqm
			2		0.45	1.50	*1.35*	Sqm
		TOTAL					**10.35**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR ROAD CROSSING (Ch.-1.260 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-1.450 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**120.00**	**Sqm**

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
2	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		U/S Abutment	1	3.50	0.45	1.2	*1.89*	*Cum*
		Crest	1	0.95	0.60	1.52	*0.87*	*Cum*
		TOTAL					***2.76***	***Cum***
3	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Abutment	2	3.50		1.20	*8.40*	Sqm
		D/S Abutment	2	0.95		1.52	*2.89*	Sqm
		TOTAL					**11.29**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR CD WORK (Ch.-1.630 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**110.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	3	1.00		3.85	*11.55*	*Sqm*
		Abutment Side wall	4	5.00		3.85	*77.00*	*Sqm*
		Abutment	2	3.50		3.85	*26.95*	*Sqm*
		TOTAL					**115.50**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	3	1.00		3.85	*11.55*	*Sqm*
		Abutment Side wall	4	5.00		3.85	*77.00*	*Sqm*
		Abutment	2	3.50		3.85	*26.95*	*Sqm*
		TOTAL					**115.50**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-1.765 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR CULVERT (Ch.-1.790 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	3.5	0.45	0.92	*2.90*	*Cum*
		TOTAL					**2.90**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
		Parapet Wall	2	3.50		2.09	*14.63*	*Sqm*
		TOTAL					**14.63**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	3.50		2.09	*14.63*	*Sqm*
		TOTAL					**14.63**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CD WORK (Ch.-2.155 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**110.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	3	1.00		3.85	*11.55*	*Sqm*
		Abutment Side wall	4	5.00		3.85	*77.00*	*Sqm*
		Abutment	2	3.50		3.85	*26.95*	*Sqm*
		TOTAL					**115.50**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	3	1.00		3.85	*11.55*	*Sqm*
		Abutment Side wall	4	5.00		3.85	*77.00*	*Sqm*
		Abutment	2	3.50		3.85	*26.95*	*Sqm*
		TOTAL					**115.50**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CULVERT/FALL (Ch.-2.170 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	3	0.45	0.6	*1.62*	*Cum*
		TOTAL					**1.62**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	3.00		1.45	*8.70*	*Sqm*
		TOTAL					**8.70**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	3.00		1.45	*8.70*	*Sqm*
		TOTAL					**8.70**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CD WORK (Ch.-2.610 Km)								
1		**Structure requires no repair work.**						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
DETAILS OF QUANTITIES OF REPAIRED STRUCTURES OF SINGHI SUB DY								
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-0.000 Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Floor	1	5.00	3.00	0.61	*9.15*	*Cum*
		TOTAL					***9.15***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	5.00		0.61	*6.10*	Sqm
			2		3.00	0.61	*3.66*	Sqm
		TOTAL					**9.76**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-0.010 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	7	0.45	0.6	*3.78*	*Cum*
		TOTAL					**3.78**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	7.00		1.45	*20.30*	*Sqm*
		TOTAL					**20.30**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	7.00		1.45	*20.30*	*Sqm*
		TOTAL					**20.30**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-0.120 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**140.00**	**Sqm**
2	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		D/S Floor	*1*	*5.00*	*3.00*	*0.10*	*1.56*	*Cum*
		TOTAL					***1.56***	***Cum***

QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-0.490 Km)			
1		**Structure requires no repair work.**	

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-0.580 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	6.5	0.45	0.92	*5.38*	*Cum*
		TOTAL					**5.38**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	6.50		2.09	*27.17*	*Sqm*
		TOTAL					**27.17**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	6.50		2.09	*27.17*	*Sqm*
		TOTAL					**27.17**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-1.040 Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Floor	1	4.50	2.80	0.915	*11.53*	*Cum*
		TOTAL					***11.53***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	4.50		0.92	*8.24*	Sqm
			2		2.80	0.92	*5.12*	Sqm
		TOTAL					**13.36**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR CD WORK (Ch.-1.265 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR BRIDGE/FALL (Ch.-1.300 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**150.00**	**Sqm**
2	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	1	3	0.3	0.6	*0.54*	*Cum*
		TOTAL					**0.54**	**Cum**

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
3	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	3.00		1.45	*8.70*	*Sqm*
		TOTAL					**8.70**	***Sqm***
4	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	3.00		1.45	*8.70*	*Sqm*
		TOTAL					**8.70**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR BRIDGE /FALL (Ch.-1.840 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	4.5	0.45	0.92	*3.73*	*Cum*
		TOTAL					**3.73**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	4.50		2.09	*18.81*	*Sqm*
		TOTAL					**18.81**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	4.50		2.09	*18.81*	*Sqm*
		TOTAL					**18.81**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CD WORK (Ch.-2.180 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-2.200 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-2.640 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**120.00**	**Sqm**
2	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Floor	1	4.50	2.80	0.609	*7.67*	*Cum*
		TOTAL					***7.67***	***Cum***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
3	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	4.50		0.61	*5.48*	Sqm
			2		2.80	0.61	*3.41*	Sqm
		TOTAL					**8.89**	**Sqm**

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-2.960 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**130.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	2	1.50		3.45	*10.35*	*Sqm*
		Abutment Side wall	2	8.50		3.45	*58.65*	*Sqm*
		Abutment	2	6.85		4.45	*60.97*	*Sqm*
		TOTAL					**129.97**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	2	1.50		3.45	*10.35*	*Sqm*
		Abutment Side wall	2	8.50		3.45	*58.65*	*Sqm*
		Abutment	2	6.85		4.45	*60.97*	*Sqm*
		TOTAL					**129.97**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR CULVERT (Ch.-3.120 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-3.230 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	4	0.25	0.92	*1.84*	*Cum*
		TOTAL					**1.84**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	4.00		2.09	*16.72*	*Sqm*
		TOTAL					**16.72**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	4.00		2.09	*16.72*	*Sqm*
		TOTAL					**16.72**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-3.565 Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Floor	1	3.00	3.20	0.61	*5.86*	*Cum*

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
		TOTAL					***5.86***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	3.00		0.61	*3.66*	Sqm
			2		3.20	0.61	*3.90*	Sqm
		TOTAL					**7.56**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-3.765 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-3.935 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**110.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	2	1.50		3.45	*10.35*	*Sqm*
		Abutment Side wall	2	7.00		3.45	*48.30*	*Sqm*
		Abutment	2	5.00		4.45	*44.50*	*Sqm*
		TOTAL					**103.15**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	4	1.50		3.45	*20.70*	*Sqm*
		Abutment Side wall	4	7.00		3.45	*96.60*	*Sqm*
		Abutment	2	5.00		4.45	*44.50*	*Sqm*
		TOTAL					**161.80**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-4.060 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	4.5	0.25	0.92	*2.07*	*Cum*
		TOTAL					**2.07**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	4.50		2.09	*18.81*	*Sqm*
		TOTAL					**18.81**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	4.50		2.09	*18.81*	*Sqm*
		TOTAL					**18.81**	***Sqm***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-4.190Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-4.440 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**110.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	2	1.50		2.85	*8.55*	*Sqm*
		Abutment Side wall	2	5.00		2.85	*28.50*	*Sqm*
		Abutment	2	3.00		4.05	*24.30*	*Sqm*
		TOTAL					**61.35**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	4	1.50		2.85	*17.10*	*Sqm*
		Abutment Side wall	4	5.00		2.85	*57.00*	*Sqm*
		Abutment	2	3.00		4.05	*24.30*	*Sqm*
		TOTAL					**98.40**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-4.455 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Abutment	*2*	*7.00*	*0.45*	*1.80*	*11.34*	*Cum*
		Wing Wall	*2*	*3.00*	*0.45*	*1.80*	*4.86*	*Cum*
		Crest	*1*	*3.80*	*0.70*	*1.22*	*3.25*	*Cum*
		TOTAL					***19.45***	***Cum***
		New Fall has been Proposed.						
QUANTITIES OF REPAIRING WORK FOR SUPER PASAGE(Ch.-5.050 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-5.250 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**110.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall	2	2.50		3.45	*17.25*	*Sqm*
		Abutment Side wall	2	3.00		3.45	*20.70*	*Sqm*
		Abutment	2	2.50		4.05	*20.25*	*Sqm*
		TOTAL					**58.20**	***Sqm***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall	2	2.50		3.45	*17.25*	*Sqm*
		Abutment Side wall	2	3.00		3.45	*20.70*	*Sqm*
		Abutment	2	2.50		4.05	*20.25*	*Sqm*
		TOTAL					**58.20**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR BRIDGE(Ch.-5.380Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR SUPER PASSAGE (Ch.-5.660Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		Trough Side wall	2	15.00	0.35	1.5	*15.75*	*Cum*
		Trough Base Slab	1	15.00	2.20	0.35	*11.55*	*Cum*
		TOTAL					***27.30***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		Trough Side wall	2	15.00		1.50	*45.00*	Sqm
			2		0.35	1.50	*1.05*	Sqm
		Trough Base Slab	1	15.00		0.35	*5.25*	Sqm
			1		2.20	0.35	*0.77*	Sqm
		TOTAL					**52.07**	**Sqm**
3	**5.3.22**	**Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.**						
			Quantity	Percent		Density		
	1.5 % Skin Reinforcement for Transition walls		*27.30*	*1.50%*	*0.41*	*7850*	*3214.58*	*Kg*
		TOTAL Weight of steel (in kg)					3214.58	Kg
		TOTAL Weight of Steel (in Tonne)					**3.21**	**MT**
QUANTITIES OF REPAIRING WORK FOR SUPER PASSAGE (Ch.-6.040 Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		Trough Side wall	2	15.00	0.45	1.5	*20.25*	*Cum*
		Trough Base Slab	1	15.00	2.40	0.35	*12.60*	*Cum*
		TOTAL					***32.85***	***Cum***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		Trough Side wall	2	15.00		1.50	*45.00*	Sqm
			2		0.45	1.50	*1.35*	Sqm
		Trough Base Slab	1	15.00		0.35	*5.25*	Sqm
			1		2.40	0.35	*0.84*	Sqm
		TOTAL					**52.44**	**Sqm**
3	**5.3.22**	**Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.**						
			Quantity	Percent		Density		
	1.5 % Skin Reinforcement for Transition walls		*32.85*	*1.50%*	*0.49*	*7850*	*3868.09*	*Kg*
		TOTAL Weight of steel (in kg)					3868.09	Kg
		TOTAL Weight of Steel (in Tonne)					**3.87**	**MT**
QUANTITIES OF REPAIRING WORK FOR CD WORKS (Ch.-6.470 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**120.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	3.50		2.09	*14.63*	*Sqm*
		TOTAL					**14.63**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	3.50		2.09	*14.63*	*Sqm*
		TOTAL					**14.63**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR SUPER PASSAGE (Ch.-6.630Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR SUPER PASSAGE (Ch.-6.925Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR SUPER PASSAGE (Ch.-7.370Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-7.445Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR SUPER PASSAGE (Ch.-7.590Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**140.00**	**Sqm**

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
QUANTITIES OF REPAIRING WORK FOR SUPER PASSAGE (Ch.-7.755 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**140.00**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-7.950 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR SUPER PASSAGE (Ch.-8.290Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		Trough Side wall	2	12.00	0.35	1.5	*12.60*	*Cum*
		Trough Base Slab	1	12.00	2.20	0.35	*9.24*	*Cum*
		TOTAL					***21.84***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		Trough Side wall	2	12.00		1.50	*36.00*	Sqm
			2		0.35	1.50	*1.05*	Sqm
		Trough Base Slab	1	12.00		0.35	*4.20*	Sqm
			1		2.20	0.35	*0.77*	Sqm
		TOTAL					**42.02**	**Sqm**
3	**5.3.22**	**Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.**						
		Quantity		Percent		Density		
	1.5 % Skin Reinforcement for Transition walls		*21.84*	*1.50%*	*0.33*	*7850*	*2571.66*	*Kg*
		TOTAL Weight of steel (in kg)					2571.66	Kg
		TOTAL Weight of Steel (in Tonne)					**2.57**	**MT**
QUANTITIES OF REPAIRING WORK FOR SUPER PASSAGE (Ch.-8.825Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR SUPER PASSAGE (Ch.-9.660 Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		Trough Side wall	2	12.00	0.45	1.5	*16.20*	*Cum*
		Trough Base Slab	1	12.00	2.40	0.35	*10.08*	*Cum*
		Abutment	1	3.00	0.60	2	*3.60*	*Cum*

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
		TOTAL					***29.88***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		Trough Side wall	2	12.00		1.50	*36.00*	Sqm
			2		0.45	1.50	*1.35*	Sqm
		Trough Base Slab	1	12.00		0.35	*4.20*	Sqm
			1		2.40	0.35	*0.84*	Sqm
		Abutment	2	3.00		2.00	*12.00*	Sqm
			2		0.60	2.00	*2.40*	Sqm
		TOTAL					**56.79**	**Sqm**
3	**5.3.22**	**Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.**						
			Quantity	Percent		Density		
	1.5 % Skin Reinforcement for Transition walls		*29.88*	*1.50%*	*0.45*	*7850*	*3518.37*	*Kg*
		TOTAL Weight of steel (in kg)					3518.37	Kg
		TOTAL Weight of Steel (in Tonne)					**3.52**	**MT**
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-9.715 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**120.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	4.50		1.45	*13.05*	*Sqm*
		TOTAL					**13.05**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	4.50		1.45	*13.05*	*Sqm*
		TOTAL					**13.05**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-10.520 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR SUPER PASSAGE (Ch.-10.895 Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		Trough Side wall	2	5.00	0.35	1.5	*5.25*	*Cum*
		Trough Base Slab	1	5.00	2.20	0.35	*3.85*	*Cum*
		TOTAL					***9.10***	***Cum***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		Trough Side wall	2	5.00		1.50	*15.00*	Sqm
			2		0.35	1.50	*1.05*	Sqm
		Trough Base Slab	1	5.00		0.35	*1.75*	Sqm
			1		2.20	0.35	*0.77*	Sqm
		TOTAL					**18.57**	**Sqm**
3	**5.3.22**	**Providing M.S. reinforcement as per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.**						
			Quantity	Percent		Density		
	1.5 % Skin Reinforcement for Transition walls		*9.10*	*1.50%*	*0.14*	*7850*	*1071.53*	*Kg*
		TOTAL Weight of steel (in kg)					1071.53	Kg
		TOTAL Weight of Steel (in Tonne)					**1.07**	**MT**
QUANTITIES OF REPAIRING WORK FOR SUPER PASAGE (Ch.-11.230Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-11.740 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-13.040 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	12	0.25	0.92	*5.52*	*Cum*
		TOTAL					**5.52**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	12.00		2.09	*50.16*	*Sqm*
		TOTAL					**50.16**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	12.00		2.09	*50.16*	*Sqm*
		TOTAL					**50.16**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR RAILWAY LINE (Ch.-13.460 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-15.740 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
		Parapet Wall	2	8	0.25	0.6	*2.40*	*Cum*
		TOTAL					**2.40**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	8.00		1.45	*23.20*	*Sqm*
		TOTAL					**23.20**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	8.00		1.45	*23.20*	*Sqm*
		TOTAL					**23.20**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR ROAD CROSSING (Ch.-15.930 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-16.235 Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Floor	1	3.50	0.80	0.61	*1.71*	*Cum*
		TOTAL					***1.71***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	3.50		0.61	*4.27*	Sqm
			2		0.80	0.61	*0.98*	Sqm
		TOTAL					**5.25**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-16.885 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR CULVERT (Ch.-17.520 Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	5	0.25	0.6	*1.50*	*Cum*
		TOTAL					**1.50**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	5.00		1.45	*14.50*	*Sqm*
		TOTAL					**14.50**	***Sqm***

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	5.00		1.45	*14.50*	*Sqm*
		TOTAL					**14.50**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-17.800 Km)								
1		**Structure requires no repair work.**						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
DETAILS OF QUANTITIES OF REPAIRED STRUCTURES OF SAHOKARMA MINOR								
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-0.305 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**120.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall U/S	2	1.50		3.25	*9.75*	*Sqm*
		Abutment Side wall	2	6.00		3.25	*39.00*	*Sqm*
		Abutment Side wall	1	2.00		3.25	*6.50*	*Sqm*
		D/S abutmnet	1	5.00		3.25	*16.25*	*Sqm*
		Wing wall D/S	2	3.00		3.25	*19.50*	*Sqm*
		TOTAL					**91.00**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall U/S	2	1.50		3.25	*9.75*	*Sqm*
		Abutment Side wall	2	6.00		3.25	*39.00*	*Sqm*
		Abutment Side wall	1	2.00		3.25	*6.50*	*Sqm*
		D/S abutmnet	1	5.00		3.25	*16.25*	*Sqm*
		Wing wall D/S	2	3.00		3.25	*19.50*	*Sqm*
		TOTAL					**91.00**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR PIPE CULVERT(Ch.-0.330 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR WELL TYPE FALL (Ch.-0.620 Km)								
1	**5.8.9**	**Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.**						
		Wing wall U/S	1	1.50	0.45	2.2	*1.49*	*Cum*
		Abutment Side wall	1	6.00	0.45	2.2	*5.94*	*Cum*
		Abutment Side wall	1	2.00	0.45	2.2	*1.98*	*Cum*
		D/S abutmnet	1	5.00	0.45	2.2	*4.95*	*Cum*
		Wing wall D/S	1	3.00	0.45	2.2	*2.97*	*Cum*
		TOTAL					**17.33**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-0.930Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**130.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall U/S	2	1.50		5.25	*15.75*	*Sqm*
		Abutment Side wall	2	5.00		5.25	*52.50*	*Sqm*
		Abutment Side wall	1	2.00		5.25	*10.50*	*Sqm*
		D/S abutmnet	1	4.00		5.25	*21.00*	*Sqm*
		Wing wall D/S	2	2.50		5.25	*26.25*	*Sqm*

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
		TOTAL					**126.00**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall U/S	2	1.50		5.25	*15.75*	*Sqm*
		Abutment Side wall	2	5.00		5.25	*52.50*	*Sqm*
		Abutment Side wall	1	2.00		5.25	*10.50*	*Sqm*
		D/S abutmnet	1	4.00		5.25	*21.00*	*Sqm*
		Wing wall D/S	2	2.50		5.25	*26.25*	*Sqm*
		TOTAL					**126.00**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-1.090Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR FALL(Ch.-1.400Km)								
1		**Structure requires no repair work.**						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
DETAILS OF QUANTITIES OF REPAIRED STRUCTURES OF DHAMNI MINOR								
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-1.850Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Floor	1	5.00	1.35	0.457	*3.08*	*Cum*
		TOTAL					***3.08***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	5.00		0.46	*4.57*	Sqm
			2		1.35	0.46	*1.23*	Sqm
		TOTAL					**5.80**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-2.150Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Floor	1	5.00	1.32	0.304	*2.01*	*Cum*
		TOTAL					***2.01***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	5.00		0.30	*3.04*	Sqm
			2		1.32	0.30	*0.80*	Sqm
		TOTAL					**3.84**	**Sqm**
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-2.650 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**120.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall U/S	2	1.50		4.25	*12.75*	*Sqm*
		Abutment Side wall	2	5.00		4.25	*42.50*	*Sqm*
		Abutment Side wall	1	2.00		4.25	*8.50*	*Sqm*
		Wing wall D/S	2	2.00		4.25	*17.00*	*Sqm*
		TOTAL					**80.75**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
		Wing wall U/S	2	1.50		4.25	*12.75*	*Sqm*
		Abutment Side wall	2	7.00		4.25	*59.50*	*Sqm*
		Abutment Side wall d/s	1	2.00		4.25	*8.50*	*Sqm*
		Wing wall D/S	2	2.00		4.25	*17.00*	*Sqm*
		TOTAL					**97.75**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-3.050 Km)								
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Floor	1	4.50	1.05	0.153	*0.72*	*Cum*
		TOTAL					***0.72***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	4.50		0.15	*1.38*	Sqm
			2		1.05	0.15	*0.32*	Sqm
		TOTAL					**1.70**	**Sqm**

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
DETAILS OF QUANTITIES OF REPAIRED STRUCTURES OF BHADWA MINOR								
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-0.315 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-0.935 Km)								
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	4.50		1.45	*13.05*	*Sqm*
		TOTAL					**13.05**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	4.50		1.45	*13.05*	*Sqm*
		TOTAL					**13.05**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-1.460 Km)								
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**120.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall U/S	2	1.50		4.25	*12.75*	*Sqm*
		Abutment Side wall U/S	2	4.00		4.25	*34.00*	*Sqm*
		Abutment Side wall D/S	1	2.00		4.25	*8.50*	*Sqm*
		Wing wall D/S	2	1.50		4.25	*12.75*	*Sqm*
		TOTAL					**68.00**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall U/S	2	1.50		4.25	*12.75*	*Sqm*
		Abutment Side wall U/S	2	4.00		4.25	*34.00*	*Sqm*
		Abutment Side wall D/S	1	2.00		4.25	*8.50*	*Sqm*
		Wing wall D/S	2	1.50		4.25	*12.75*	*Sqm*
		TOTAL					**68.00**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR BRIDGE(Ch.-1.550 Km)								
1	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	6.00		2.09	*25.08*	*Sqm*
		TOTAL					**25.08**	***Sqm***
2	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall U/S	2	1.50		2.09	*6.27*	*Sqm*
		TOTAL					**6.27**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-1.910Km)								

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
1	**5.1.3**	**Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.**						
			1				**140.00**	**Sqm**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Wing wall U/S	2	1.50		6.25	*18.75*	*Sqm*
		Abutment Side wall U/S	2	5.00		6.25	*62.50*	*Sqm*
		Abutment Side wall D/S	1	2.00		6.25	*12.50*	*Sqm*
		Wing wall D/S	2	2.00		6.25	*25.00*	*Sqm*
		TOTAL					**118.75**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Wing wall U/S	2	1.50		6.25	*18.75*	*Sqm*
		Abutment Side wall U/S	2	5.00		6.25	*62.50*	*Sqm*
		Abutment Side wall D/S	1	2.00		6.25	*12.50*	*Sqm*
		Wing wall D/S	2	2.00		6.25	*25.00*	*Sqm*
		TOTAL					**118.75**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-2.170 Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-2.305Km)								
1		**Structure requires no repair work.**						
QUANTITIES OF REPAIRING WORK FOR BRIDGE (Ch.-2.440Km)								
1	**5.4.6**	**Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.**						
		Parapet Wall	2	5	0.25	0.6	*1.50*	*Cum*
		TOTAL					**1.50**	**Cum**
2	**5.5.5**	**Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.**						
		Parapet Wall	2	5.00		1.45	*14.50*	*Sqm*
		TOTAL					**14.50**	***Sqm***
3	**5.5.10**	**Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.**						
		Parapet Wall	2	5.00		1.45	*14.50*	*Sqm*
		TOTAL					**14.50**	***Sqm***
QUANTITIES OF REPAIRING WORK FOR FALL (Ch.-2.690 Km)								

S.No.	Reference Clause	Items	No.	Length	Width	Height	Quantity	Unit
1	**5.3.5**	**Providing & laying P.C.C. or R.C.C. M-200 with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.**						
		D/S Floor	1	4.50	0.90	0.305	*1.24*	*Cum*
		TOTAL					***1.24***	***Cum***
2	**5.3.19**	**Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.**						
		D/S Floor	2	4.50		0.31	*2.75*	Sqm
			2		0.90	0.31	*0.55*	Sqm
		TOTAL					**3.29**	**Sqm**

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND ANALYSIS OF RATE OF OUTLET GATE			
1	Cost of material **(A)** (Structural Steel WRD M-181)	Rs.	55116.67
2	Wastage **5%** =	Rs.	2755.8335
3	Cost of miscellaneous material like electrodes,oxygen, acetylene nut bolt, rope as per site conditions, etc **65 % of (A)**	Rs.	35825.8355
	Total 1+2+3= ***(B)*** =	Rs.	93698.339
4	Labour charge 30%(B) =	Rs.	28109.5017
5	Overhead charge + Contractor profit **@15% A**	Rs.	8267.5005
6	Workshop and energy charge ,**12 % of (B)**	Rs.	11243.80068
7	Transportation and erection charge ,**15 % of B**	Rs.	14054.75085
	Total = B+4+5+6+7 = ***C***	Rs.	155373.8927
8	Other incidental charge , **3 % = of C**	Rs.	4661.216782
	Total C+8 = D	Rs.	**160035.1095**

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND ABSTRACT OF COST FOR CONSTRUCTION OF OUTLET										
Sl. No.	Reference	Name of Item	Qty.	Unit	Rate (As per WRD SOR 2025 & PL MARCH 2025)	Amount in Rs.	Cement (MT)	Coarse Sand (Cum)	Coarse Aggregate (Cum)	Boulders (cum)
1	**WRD 5.3.9**	Providing & laying **P.C.C. or R.C.C. M-150** with nominal mix of (1:2:4) in superstructure of various components of canal or embankment structures with approved quality of graded coarse aggregate of required grade and approved quality sand of requisite F.M. washed and screened including necessary tools and plants, vibrating, curing,royalty etc. excluding cost of form work as well reinforcement its cutting, bending. binding, and placing complete job as per specification & direction of E/I.	7.61	Cum	**6381.70**	48564.42	2.47	3.42	6.85	
2	**WRD 5.4.10**	Providing rough dressed random rubble Stone Masonary in cement Mortar (1:4) in foundation with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints, curing, scaffholding and its removal whereever required including royalty etc. all complete job as per specification and direction of E/I.	8.60	Cum	**3391.40**	29172.74	1.24	3.44		8.60
3	**M-1701**	Providing 150mm NP2 RCC Hume Pipe with collar as per I.S.S. 458-1971 including fixing and fitting NP2 hume pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .	7.50	RM	**220.00**	1650.00				
4	**WRD 5.6.1**	Labour Charges for Laying of 150mm NP2 RCC Hume Pipe with collar as per I.S.S. 458-1971 including fixing and fitting NP2 hume pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .	7.50	RM	**238.00**	1785.03				
5	**WRD 5.3.22**	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.								
a.		TMT Grade Fe-500 - 16 mm	0.03	M.T.	**73574.90**	2254.92				
6	**M-181**	Structural Steel (Average rate of Angle, Joint and Channel) etc.	0.08	MT	**160035.11**	12687.05				
7	**WRD 5.1.37**	Providing coarse clean sand in filling in foudation of trenches including ramming, watering, royalty all complete job as per specification and direction .	0.89	Cum	**339.90**	302.80				
8		**Carriage of materials**								
		Coarse Sand (60 Km lead)	7.76	Cum	**1075.00**	**8337.83**				
		Coarse Aggregates (100 Km lead)	6.85	Cum	**1398.00**	**9574.84**				
		Cement (30 km lead)	3.70	MT	**742.00**	**2748.60**				
		Boulders (60 km lead)	8.60	Cum	**1159.00**	**9969.69**				
		Steel (30 Km lead)	0.11	M.T.	**742.00**	**81.56**				
		Hume Pipe (30 Km)	7.50	RM	**82.00**	**615.00**				
		TOTAL (In Rs.)				**127744.47**				
		Seigniorage @10%			Rate	Amount in Rs.	10%			
		Coarse Sand	7.76	Cum	**584.64**	4534.54	453.45			
		Coarse Aggregate	6.85	Cum	**944.26**	6467.19	646.72			
		Total					1100.17			
		For 154 nos. outlet, Total Seigniorage charges					**169426.65**			

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND							
BILL OF QUANTITIES FOR CONSTRUCTION OF OUTLET							
Sl. No.	**Name of Item**	**No.**	**Length (m)**	**Width (m)**	**Height (m)**	**Qty.**	**Unit**
1	Providing & laying **P.C.C. or R.C.C. M-150** with nominal mix of (1:2:4) in superstructure of various components of canal or embankment structures with approved quality of graded coarse aggregate of required grade and approved quality sand of requisite F.M. washed and screened including necessary tools and plants, vibrating, curing,royalty etc. excluding cost of form work as well reinforcement its cutting, bending. binding, and placing complete job as per specification &						
	Toe Wall Base in Canal Portion	*1*	*1.5*	*0.75*	*0.15*	*0.17*	*Cum*
	Coping on Stem of Toe Wall	*1*	*1.50*	*0.45*	*0.075*	*0.05*	*Cum*
	Gate Structure (Section A-B)	*1*	*1.80*	*0.75*	*0.15*	*0.20*	*Cum*
	Coping (Section A-B)	*1*	*1.5*	*0.45*	*0.075*	*0.05*	*Cum*
	Water Course (Section C-D)	*1*	*15.00*	*1.50*	*0.15*	*3.38*	*Cum*
	Water Course Floor (Section C-D)	*1*	*15.00*	*0.40*	*0.075*	*0.45*	*Cum*
	Coping above Walls(Section C-D)	*2*	*15*	*0.40*	*0.075*	*0.90*	*Cum*
	Below transition walls	*1*	*1.5*	*1.2*	*0.15*	*0.27*	*Cum*
		1	*1.5*	*0.75*	*0.15*	*0.17*	*Cum*
	Gate Structure (Section A-B)	*2*	*1.50*	*0.45*	*1.21*	*1.63*	*Cum*
	Toe Wall stem	*1*	*1.50*	*0.45*	*0.51*	*0.35*	*Cum*
	TOTAL					***7.61***	*Cum*
2	Providing rough dressed random rubble Stone Masonary in cement Mortar (1:4) in foundation with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints, curing, scaffholding and its removal whereever required including royalty etc. all complete job as per specification and direction of E/I.						
	Transition Walls in U/S	*2*	*1.50*	*0.45*	*1.04*	*1.40*	*Cum*
	Water Course (Section C-D)	*2*	*15.00*	*0.40*	*0.60*	*7.20*	*Cum*
	2					**8.60**	Cum
3	Providing 150mm NP2 RCC Hume Pipe with collar as per I.S.S. 458-1971 including fixing and fitting NP2 hume pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .						
	150 mm Dia R.C.C. Pipe	1			7.5	**7.5**	**RM**
4	Structural Steel (Average rate of Angle, Joint and Channel) etc.						
	Spindle 25 mm dia	*1*	*0.000491*	*7850.00*	*1.29*	*4.97*	*Kg*
		1	*0.000491*	*7850.00*	*0.24*	*0.92*	*Kg*
	300 X300 MM MS GATE	*1*		*60.00*		*60.00*	*Kg*
	I.M.C. Grove (100 x 50) 9.56 kg/m	*2*	*9.56*		*0.70*	*13.38*	*Kg*
	TOTAL (In Kg)					**79.28**	**Kg**
	TOTAL					**0.08**	**MT**
5	Providing coarse clean sand in filling in foudation of trenches including ramming, watering, royalty all complete job as per specification and direction .						
	Toe Wall Base in Canal Portion	*1*	*1.50*	*0.75*	*0.10*	*0.11*	*Cum*
	Water Course Floor (Section C-D)	*1*	*15.00*	*0.40*	*0.10*	*0.60*	*Cum*
	Below transition walls	*1*	*1.50*	*1.19*	*0.10*	*0.18*	*Cum*
	TOTAL					**0.89**	**Cum**
6	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.						
	RCC M-15 (Providing Reinforcement @ 0.24%)	*1.63*	*0.0024*	*0.004*	*7850.00*	*30.648*	*Kg*
	TOTAL					**30.65**	**Kg**

NORTH KOEL RESERVOIR PROJECT , BIHAR AND JHARKHAND							
ANALYSIS OF RATES							
Sl. No.	**Refrences SOR No.**	**Description**	**Quantity**	**Unit**	**Rate**	**Amount**	**Ref**
1	**5.1.3**	Jungle Clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.					
		Unit :- **Per Sqm**					
		Taking Output :- 92.94 Sqm					
		Unskilled mazdoor for cutting shrubs, weed	1.50	nos	424.00	₹ 636.00	
		Unskilled mazdoor for removing grass roots and leveling	0.75	nos	424.00	₹ 318.00	
						₹ 954.00	
		Add Overhead charge &c.P @ 15 %				₹ 143.10	
					Total	₹ 1,097.10	
		Rate per Sqm			**Say, Rs**	**₹ 11.80**	**Per M^2**
2	**5.1.8**	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 28.32 cum					
		Unskilled mazdoor for cutting ,carrying	9.09	nos	424.00	₹ 3,854.16	Sl-1
					Total	₹ 3,854.16	
		Add Overhead charge &c.P @ 15 %				₹ 578.12	
						₹ 4,432.28	
		Rate per Cum			**Say, Rs**	**₹ 156.50**	**Per M^3**
	NOTE:-	Add royalty of earth Rs. 33.00 where needed without overhead charges & C.P.					

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
3	**5.1.31**	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I					
		Unit :- **Per cum**					
		Taking Output :- 28.32 cum					
		Unskilled mazdoor for cutting	4.50	nos	424.00	₹ 1,908.00	SI-1
		Unskilled mazdoor for carrying	4.00	nos	424.00	₹ 1,696.00	
		Head Mason	0.13	nos	569.00	₹ 71.13	
					Total	₹ 3,675.13	
		Add Overhead charge & C.P @ 15 %				₹ 551.27	
						₹ 4,226.39	
		Rate per Cum			**Say, Rs**	**₹ 149.30**	**Per M^3**
4	**5.1.21**	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge					
		Unit :- **Per cum**					
		Taking Output :- 28.32 cum					
		Unskilled mazdoor for cutting	4.00	nos	424.00	₹ 1,696.00	SI-1
		Unskilled mazdoor for carrying	4.00	nos	424.00	₹ 1,696.00	SI-1
		Unskilled mazdoor for controlling Slope and fine dressing	2.00	nos	424.00	₹ 848.00	SI-2
		Skilled Mazdoor	0.25	nos	536.00	₹ 134.00	SII-70
		Mate	1.00	nos	455.00	₹ 455.00	SII-2
					Total	₹ 4,829.00	
		Add Overhead charge &c.P @ 15 %				₹ 724.35	
						₹ 5,553.35	
		Rate per Cum			**Say, Rs**	**₹ 196.10**	**Per M^3**
5	**5.1.22**	Extra for wet earth all complete as per specifications and direction of E/I.					

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
		Unit: per Cum					
		Taking Output :- 28.32 cum					
		Unskilled mazdoor for cutting	1.00	nos	424.00	₹ 424.00	Sl-1
		Add Overhead charge &C.P @ 15 %				₹ 63.60	
						₹ 487.60	
		Rate per Cum			**Say, Rs**	**₹ 17.22**	**Per M^3**
6	**5.1.25**	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.					
		As per Labour rate (19.06.2024)					
		Unit: per Cum					
		Taking Output :- 28.32 cum					
		Labour					
		Unskilled mazdoor for cutting, carrying	9.09	nos	424.00	₹ 3,854.16	Sl-1
		Add extra wages of 1/2 no. unskilled labour per 28.32 m3	0.50	nos	424.00	₹ 212.00	Sl-1
						₹ 4,066.16	
		Add Overhead charge &C.P @ 15 %				₹ 609.92	
						₹ 4,676.08	
					Say, Rs	**₹ 165.12**	**Per M^3**
7	**5.1.39**	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.					
		As per Labour rate (19.06.2024)					
		Unit: per Cum					
		Taking Output :- 28.32 cum					

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
		Cost of water	LS			15.00	
		Bhisti for carriage of water and sprinkling	3.00	nos	417.00	₹ 1,251.00	S II-13
		Hire charges of sheep foot roller assuming 1450 cum to be rolled in 8 hr vide item no. 3.16	0.16	hr	1612.00	₹ 257.92	PM8001
						₹ 1,523.92	
		Add Overhead charge &C.P @ 15 %				₹ 228.59	
						₹ 1,752.51	
					Say, Rs	**₹ 61.88**	**Per M^3**
8	**5.1.46**	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)					
	5.1.46.1	Beyond 150m but upto 1/2 km					
	2	Cost of cutting & loading by Excavator one M3 capacity = Use rate of Excavator/Capacity of Excavator (60 m^3) PM 3005/60				38.13	
	3	Average Speed on Kucha truck Km/hr =(V)				10	
	4	Average haulage path (distance) in one cycle (D) in km				0.65	
	5	Haulage Time in Min (time taken in one cycle of run) =60d/V				3.9	
	6	Loading Time one minute per M^3 for 5.5 M^3				5.5	
	7	Unloading and Turning time in minute				3.3	
	8	Total Time Per trip in minutes Col =T				12.7	
	9	Number of trip per hour taken as 50 minutes N=50/T				3.937	
	10	Output per hour with 80% efficiency Q =0.8 x N x 5.5				17.323	

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
	11	Use Rate per hour of Tippers 5.5 M^3 Capacity =(Tr)				1441	
	12	Carriage cost per metre M^3 = Tr/Q				83.184	
	13	Add for spreading cost = (Use rate of Dozer 175HP per hour /capacity of dozer 175HP, Per hour. 300 cum) =4342/300				14.47	
	14	Add 5% of Haul road maintenance, 5% for processing and 2% for extra labour for finishing =12% of column (2+12+13)				₹ 16.29	
	15	Total cost per Cubic metre Col(2+12+13+14)				₹ 152.08	
	16	Add overhead charges and CP 15%				₹ 22.81	
	17	**Rate per cubic metre**				**₹ 174.89**	
	5.1.46.2	Beyond 1/2 km but upto 1 km					
	2	Cost of cutting & loading by Excavator one M3 capacity = Use rate of Excavator/Capacity of Excavator (60 m^3) PM 3005/60				38.13	
	3	Average Speed on Kucha truck Km/hr =(V)				10	
	4	Average haulage path (distance) in one cycle (D) in km				1.5	
	5	Haulage Time in Min (time taken in one cycle of run) =60d/V				9	
	6	Loading Time one minute per M^3 for 5.5 M^3				5.5	
	7	Unloading and Turning time in minute				3.3	
	8	Total Time Per trip in minutes Col =T				17.8	
	9	Number of trip per hour taken as 50 minutes N=50/T				2.809	
	10	Output per hour with 80% efficiency Q =0.8 x N x 5.5				12.36	
	11	Use Rate per hour of Tippers 5.5 M^3 Capacity =(Tr)				1441	
	12	Carriage cost per metre M^3 = Tr/Q				116.59	
	13	Add for spreading cost = (Use rate of Dozer 175HP per hour /capacity of dozer 175HP, Per hour. 300 cum) =4342/300				14.47	
	14	Add 5% of Haul road maintenance, 5% for processing and 2% for extra labour for finishing =12% of column (2+12+13)				₹ 20.30	
	15	Total cost per Cubic metre Col(2+12+13+14)				₹ 189.50	
	16	Add overhead charges and CP 15%				₹ 28.42	
	17	**Rate per cubic metre**				**₹ 217.92**	
	5.1.46.3	Beyond 1.00 km but upto 1.50 km					

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
	2	Cost of cutting & loading by Excavator one M3 capacity = Use rate of Excavator/Capacity of Excavator (60 m^3) PM 3005/60				38.13	
	3	Average Speed on Kucha truck Km/hr =(V)				10	
	4	Average haulage path (distance) in one cycle (D) in km				2.5	
	5	Haulage Time in Min (time taken in one cycle of run) =60d/V				15	
	6	Loading Time one minute per M^3 for 5.5 M^3				5.5	
	7	Unloading and Turning time in minute				3.3	
	8	Total Time Per trip in minutes Col =T				23.8	
	9	Number of trip per hour taken as 50 minutes N=50/T				2.101	
	10	Output per hour with 80% efficiency Q =0.8 x N x 5.5				9.244	
	11	Use Rate per hour of Tippers 5.5 M^3 Capacity =(Tr)				1441	
	12	Carriage cost per metre M^3 = Tr/Q				155.88	
	13	Add for spreading cost = (Use rate of Dozer 175HP per hour /capacity of dozer 175HP, Per hour. 300 cum) =4342/300				14.47	
	14	Add 5% of Haul road maintenance, 5% for processing and 2% for extra labour for finishing =12% of column (2+12+13)				₹ 25.02	
	15	Total cost per Cubic metre Col(2+12+13+14)				₹ 233.50	
	16	Add overhead charges and CP 15%				₹ 35.03	
	17	**Rate per cubic metre**				**₹ 268.53**	
	5.1.46.4	Beyond 1.50 km but upto 2.00 km					
	2	Cost of cutting & loading by Excavator one M3 capacity = Use rate of Excavator/Capacity of Excavator (60 m^3) PM 3005/60				38.13	
	3	Average Speed on Kucha truck Km/hr =(V)				10	
	4	Average haulage path (distance) in one cycle (D) in km				3.5	
	5	Haulage Time in Min (time taken in one cycle of run) =60d/V				21	
	6	Loading Time one minute per M^3 for 5.5 M^3				5.5	
	7	Unloading and Turning time in minute				3.3	
	8	Total Time Per trip in minutes Col =T				29.8	
	9	Number of trip per hour taken as 50 minutes N=50/T				1.678	
	10	Output per hour with 80% efficiency Q =0.8 x N x 5.5				7.383	
	11	Use Rate per hour of Tippers 5.5 M^3 Capacity =(Tr)				1441	
	12	Carriage cost per metre M^3 = Tr/Q				195.18	

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
	13	Add for spreading cost = (Use rate of Dozer 175HP per hour /capacity of dozer 175HP, Per hour. 300 cum) =4342/300				14.47	
	14	Add 5% of Haul road maintenance, 5% for processing and 2% for extra labour for finishing =12% of column (2+12+13)				₹ 29.73	
	15	Total cost per Cubic metre Col(2+12+13+14)				₹ 277.52	
	16	Add overhead charges and CP 15%				₹ 41.63	
	17	**Rate per cubic metre**				**₹ 319.14**	
	5.1.46.5	Beyond 2.00 km but upto 2.50 km					
	2	Cost of cutting & loading by Excavator one M3 capacity = Use rate of Excavator/Capacity of Excavator (60 m^3) PM 3005/60				38.13	
	3	Average Speed on Kucha truck Km/hr =(V)				10	
	4	Average haulage path (distance) in one cycle (D) in km				4.5	
	5	Haulage Time in Min (time taken in one cycle of run) =60d/V				27	
	6	Loading Time one minute per M^3 for 5.5 M^3				5.5	
	7	Unloading and Turning time in minute				3.3	
	8	Total Time Per trip in minutes Col =T				35.8	
	9	Number of trip per hour taken as 50 minutes N=50/T				1.397	
	10	Output per hour with 80% efficiency Q =0.8 x N x 5.5				6.147	
	11	Use Rate per hour of Tippers 5.5 M^3 Capacity =(Tr)				1441	
	12	Carriage cost per metre M^3 = Tr/Q				234.50	
	13	Add for spreading cost = (Use rate of Dozer 175HP per hour /capacity of dozer 175HP, Per hour. 300 cum) =4342/300				14.47	
	14	Add 5% of Haul road maintenance, 5% for processing and 2% for extra labour for finishing =12% of column (2+12+13)				₹ 34.45	
	15	Total cost per Cubic metre Col(2+12+13+14)				₹ 321.56	
	16	Add overhead charges and CP 15%				₹ 48.24	
	17	**Rate per cubic metre**				**₹ 369.80**	
	5.1.46.6	Beyond 2.50 km but upto 3.00 km					
	2	Cost of cutting & loading by Excavator one M3 capacity = Use rate of Excavator/Capacity of Excavator (60 m^3) PM 3005/60				38.13	
	3	Average Speed on Kucha truck Km/hr =(V)				10	
	4	Average haulage path (distance) in one cycle (D) in km				5.5	

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
	5	Haulage Time in Min (time taken in one cycle of run) =60d/V				33	
	6	Loading Time one minute per M^3 for 5.5 M^3				5.5	
	7	Unloading and Turning time in minute				3.3	
	8	Total Time Per trip in minutes Col =T				41.8	
	9	Number of trip per hour taken as 50 minutes N=50/T				1.196	
	10	Output per hour with 80% efficiency Q =0.8 x N x 5.5				5.263	
	11	Use Rate per hour of Tippers 5.5 M^3 Capacity =(Tr)				1441	
	12	Carriage cost per metre M^3 = Tr/Q				273.80	
	13	Add for spreading cost = (Use rate of Dozer 175HP per hour /capacity of dozer 175HP, Per hour. 300 cum) =4342/300				14.47	
	14	Add 5% of Haul road maintenance, 5% for processing and 2% for extra labour for finishing =12% of column (2+12+13)				₹ 39.17	
	15	Total cost per Cubic metre Col(2+12+13+14)				₹ 365.57	
	16	Add overhead charges and CP 15%				₹ 54.84	
	17	**Rate per cubic metre**				**₹ 420.41**	
9	**5.1.24**	Earthwork in filling in flood embankment, canals banks (Canal Discharge Above 28 Cumecs) as well as special repair of embankments and canal banks in ordinary soil in proper profile obtain from borrow area or any other source free from logs, roots or any other ingredients etc. with intial lead of 30m and initial lift of 1.5m including breaking the clods to maximum 60 mm cube, placing the earth in layers not exceeding 225 mm thicka ll complete as per specification and direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 28.32 cum					
		Unskilled mazdoor for cutting	9.00	nos	424.00	₹ 3,816.00	SI-1
		Skilled Mazdoor	1.00	nos	536.00	₹ 536.00	SI-3
		Mate	0.25	nos	455.00	₹ 113.75	SII-2
					Total	₹ 4,465.75	
		Add Overhead charge & C.P @ 15 %				₹ 669.86	
						₹ 5,135.61	
		Rate per Cum			**Say, Rs**	**₹ 181.30**	**Per M^3**

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
10	**5.1.27**	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 28.32 cum					
		Unskilled mazdoor for cutting and carrying	11.00	nos	424.00	₹ 4,664.00	SI-1
		Head Mason	0.25	nos	569.00	₹ 142.25	SII -3
					Total	₹ 4,806.25	
		Add Overhead charge & C.P @ 15 %				₹ 720.94	
						₹ 5,527.19	
		Rate per Cum			**Say, Rs**	**₹ 195.20**	**Per M^3**
11	**5.3.8**	Providing & laying **P.C.C. M-100** with nominal mix of (1:3:6) in superstructure of various components of canal or embankment structures with approved quality of graded coarse aggregate of required grade and approved quality sand of requisite F.M. washed and screened including necessary tools and plants, vibrating, curing,royalty etc. excluding cost of form work as well reinforcement its cutting, bending. binding, and placing complete job as per specification & direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 2.832 cum					
	A.	**MATERIALS**					
		Coarse aggregates Gr IV **(Rate of approved quality of aggregate as per Design)**	2.66	M^3	1115.24	₹ 2,966.54	M047
		Sand	1.330	M^3	584.64	₹ 777.57	M-004
		Cement	0.443	M^3	8264.70	₹ 3,661.26	M-1P
		Total				₹ 7,405.37	
	B.	**LABOUR**					
		Head mason	0.5	nos	569.00	₹ 284.50	S II -3
		Mason Gr II	1	nos	508.00	₹ 508.00	S II-4
		Unskilled mazdoor	12	nos	424.00	₹ 5,088.00	S II-1
		Bhisti	1	nos	417.00	₹ 417.00	S II -13
		Total				₹ 6,297.50	

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
	C.	**HIRE CHARGES OF MACHINE**					
		(i)Concrete mixer (10 H.P) for 2.832 cum consists	**1.43**	hr	351	₹ 501.93	
		on the basic of mixer production capacity 1.98 m3					
		per hour. Used rate per hourx2.832/1.98					
		(ii) Vibrator 1no. To vibrate 2.832 cum on the	**1.43**	hr	405	₹ 579.15	
		basic of vibrator capacity 1.98 cum per hour.					
		Used rate per hourx2.832/1.98					
		Total				₹ 14,783.95	
		Add Overhead charge & C.P	15	%		₹ 2,217.59	
						₹ 17,001.55	**Per M^3**
					Say, Rs	**₹ 6,003.37**	**Per M^3**
12	**5.3.4**	Providing and laying PCC M-150 with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 2.832 cum					
	A	**Material**					
		Course Aggregate (20mm & 10mm) **(Taking Rate of approved quality as per design)**	2.55	m^3	913.48	₹ 2,327.55	M044
		Sand	1.27	m^3	584.64	₹ 744.83	M-004
		Cement	0.64	m^3	8264.70	₹ 5,264.62	M-1P
		Total				₹ 8,337.00	
	B	**Labour**					
		Head mason	0.50	nos	569.00	₹ 284.50	S II -3
		Mason Gr-II	1.00	nos	508.00	₹ 508.00	S II-4
		Unskilled mazdoor for controlling Slope and fine dressing	12.00	nos	424.00	₹ 5,088.00	S II-1
		Bhisti	1.00	nos	417.00	₹ 417.00	S II -13
		Total				₹ 6,297.50	

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
	C	**Hire charge of Machine**					
		Concrete Mixer (taking 2cum per hr.)	1.43	hr	351.00	₹ 501.93	PM21001
		on the basic of mixer production capacity 1.98 m^3 per hour. Used rate per hour 2.832/1.98					
		(ii) Vibrator 1 no. To vibrate 2.832 cum on the Basic of VibratorCapacity 1.98 m3 per hour.	1.43	hr	405.00	₹ 579.15	PM44001
					Total	₹ 15,715.58	
		Add Overhead charge &c.P @ 15 %				₹ 2,357.34	
						₹ 18,072.92	
		Rate per Cum			**Say, Rs**	**₹ 6,381.70**	**Per M^3**
13	**5.3.5**	Providing & laying **P.C.C. or R.C.C. M-200** with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 2.832 cum					
	A	**Material**					
		Course Aggregate (20mm & 10mm) **(Taking Rate of approved quality as per design)**	2.44	m^3	913.48	₹ 2,225.24	M044
		Sand	1.22	m^3	584.64	₹ 712.09	M-004
		Cement	0.81	m^3	8264.70	₹ 6,710.94	M-1P
		Total				₹ 9,648.27	
	B	**Labour**					
		Head mason	0.50	nos	569.00	₹ 284.50	S II -3
		Mason Gr-II	1.00	nos	508.00	₹ 508.00	S II-4
		Unskilled mazdoor for controlling Slope and fine dressing	12.00	nos	424.00	₹ 5,088.00	S II-1
		Bhisti	1.00	nos	417.00	₹ 417.00	S II -13
		Total				₹ 6,297.50	
	C	**Hire charge of Machine**					
		Concrete Mixer (taking 2cum per hr.)	1.43	hr	351.00	₹ 501.93	PM21001

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
		on the basic of mixer production capacity 1.98 m^3 per hour. Used rate per hour 2.832/1.98					
		(ii) Vibrator 1 no. To vibrate 2.832 cum on the Basic of VibratorCapacity 1.98 m3 per hour.	1.43	hr	405.00	₹ 579.15	PM44001
					Total	₹ 17,026.85	
		Add Overhead charge &c.P @ 15 %				₹ 2,554.03	
						₹ 19,580.88	
		Rate per Cum			**Say, Rs**	**₹ 6,914.20**	**Per M^3**
14	**5.3.5**	Providing & laying **P.C.C. or R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 2.832 cum					
	A	**Material**					
		Course Aggregate (20mm & 10mm) **(Taking Rate of approved quality as per design)**	2.436	m^3	913.48	₹ 2,225.24	M044
		Sand	1.218	m^3	584.64	₹ 712.09	M-004
		Cement	0.812	m^3	8264.70	₹ 6,710.94	M-1P
		Total				₹ 9,648.27	
	B	**Labour**					
		Head mason	0.50	nos	569.00	₹ 284.50	S II -3
		Mason Gr-II	1.00	nos	508.00	₹ 508.00	S II-4
		Unskilled mazdoor	12.00	nos	424.00	₹ 5,088.00	S II-1
		Bhisti	1.00	nos	417.00	₹ 417.00	S II -13
		Total				₹ 6,297.50	
	C	**Hire charge of Machine**					
		Concrete Mixer (taking 2cum per hr.)	1.43	hr	351.00	₹ 501.93	PM21001
		on the basic of mixer production capacity 1.98 m^3 per hour. Used rate per hour 2.832/1.98					

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
		(ii) Vibrator 1 no. To vibrate 2.832 cum on the Basic of VibratorCapacity 1.98 m3 per hour.	1.43	hr	405.00	₹ 579.15	PM44001
					Total	₹ 17,026.85	
		Add Overhead charge &c.P @ 15 %				₹ 2,554.03	
						₹ 19,580.88	
		Rate per Cum			**Say, Rs**	**₹ 6,914.20**	**Per M^3**
15	**5.3.11**	Providing & laying P.C.C. or R.C.C. **M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 2.832 cum					
	A	**Material**					
		coarse Aggregate (20mm & 10mm) (Cost of coarse aggregates as per design)	2.38	m^3	913.48	₹ 2,173.17	M044
		Sand	1.19	m^4	584.64	₹ 695.14	M-004
		Cement	1.19	m^5	8264.70	₹ 9,826.73	M-1P
		Total				₹ 12,695.04	
	B	**Labour**					
		Head mason	0.50	nos	569.00	₹ 284.50	S II -3
		Mason Gr-II	1.00	nos	508.00	₹ 508.00	S II-4
		Unskilled mazdoor for controlling Slope and fine dressing	12.00	nos	424.00	₹ 5,088.00	S II-1
		Bhisti	1.00	nos	417.00	₹ 417.00	S II -13
		Total				₹ 6,297.50	
	C	**Hire charge of Machine**					
		Concrete Mixer (taking 2cum per hr.)	1.43	hr	351.00	₹ 501.93	PM21001
		on the basic of mixer production capacity 1.98 m^3 per hour. Used rate per hour 2.832/1.98					
		(ii) Vibrator 1 no. To vibrate 2.832 cum on the Basic of VibratorCapacity 1.98 m3 per hour.	1.43	hr	405.00	₹ 579.15	PM44001
					total	₹ 20,073.62	
		Add Overhead charge &c.P @ 15 %				₹ 3,011.04	

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
						₹ 23,084.66	
		Rate per Cum			**Say, Rs**	**₹ 8,151.40**	**Per M^3**
16	**5.3.22**	Providing M.S Reinforcement (TOR Steel) as per design, drawing removal of rust cutting, bending, binding including supplying annealed wire placing M.S. roads in position complete job as as per specification & direction of E/I.					
		Unit :- **Per M.T**					
		Taking Output :- 1 M.T					
	(a)	TMT grade Fe-500 ***8 mm***					
	(A)	Providing MS reinforcement plain	1.050	MT	52450	₹ 55,072.50	
		(Including 5% wastage)					
	B	i. Annealed wire	14.00	Kg	48.3	₹ 676.20	M072
		ii. Black Smith Gr.II	9.00	nos	508.00	₹ 4,572.00	SII-10
		iii. Head Black Smith	1.00	nos	569.00	₹ 569.00	SII-9
		Iv.Skilled mazdoor	8.00	nos	536.00	₹ 4,288.00	SI-71
		v. Unskilled Mazdoor	2.00	nos	424.00	₹ 848.00	SI-1
					total	₹ 66,025.70	
		Add Overhead charge &c.P @ 15 %				₹ 9,903.86	
						₹ 75,929.56	
		Rate per M.T			**Say, Rs**	**₹ 75,929.60**	**Per M.T**
	(B)	TMT grade Fe-500 ***10 mm***					
	(A)	Providing MS reinforcement plain	1.050	MT	51094	₹ 53,648.70	
		(Including 5% wastage)					
	B	i. Annealed wire	14.00	Kg	48.3	₹ 676.20	M072
		ii. Black Smith Gr.II	9.00	nos	508.00	₹ 4,572.00	SII-10
		iii. Head Black Smith	1.00	nos	569.00	₹ 569.00	SII-9
		Iv.Skilled mazdoor	8.00	nos	536.00	₹ 4,288.00	SI-71
		v. Unskilled Mazdoor	2.00	nos	424.00	₹ 848.00	SI-1
					total	₹ 64,601.90	
		Add Overhead charge &c.P @ 15 %				₹ 9,690.29	
						₹ 74,292.19	
		Rate per M.T			**Say, Rs**	**₹ 74,292.20**	**Per M.T**

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
	(C)	TMT grade Fe-500 ***12 mm***					
	(A)	Providing MS reinforcement plain	1.050	MT	50500	₹ 53,025.00	
		(Including 5% wastage)					
	B	i. Annealed wire	14.00	Kg	48.3	₹ 676.20	M072
		ii. Black Smith Gr.II	9.00	nos	508.00	₹ 4,572.00	SII-10
		iii. Head Black Smith	1.00	nos	569.00	₹ 569.00	SII-9
		Iv.Skilled mazdoor	8.00	nos	536.00	₹ 4,288.00	SI-71
		v. Unskilled Mazdoor	2.00	nos	424.00	₹ 848.00	SI-1
					total	₹ 63,978.20	
		Add Overhead charge &c.P @ 15 %				₹ 9,596.73	
						₹ 73,574.93	
		Rate per M.T			**Say, Rs**	**₹ 73,574.90**	**Per M.T**
	(C)	TMT grade Fe-500 ***16 mm***					
	(A)	Providing MS reinforcement plain	1.050	MT	50500	₹ 53,025.00	
		(Including 5% wastage)					
	B	i. Annealed wire	14.00	Kg	48.3	₹ 676.20	M072
		ii. Black Smith Gr.II	9.00	nos	508.00	₹ 4,572.00	SII-10
		iii. Head Black Smith	1.00	nos	569.00	₹ 569.00	SII-9
		Iv.Skilled mazdoor	8.00	nos	536.00	₹ 4,288.00	SI-71
		v. Unskilled Mazdoor	2.00	nos	424.00	₹ 848.00	SI-1
					total	₹ 63,978.20	
		Add Overhead charge &c.P @ 15 %				₹ 9,596.73	
						₹ 73,574.93	
		Rate per M.T			**Say, Rs**	**₹ 73,574.90**	**Per M.T**
	(C)	TMT grade Fe-500 ***20 mm***					
	(A)	Providing MS reinforcement plain	1.050	MT	50500	₹ 53,025.00	
		(Including 5% wastage)					
	B	i. Annealed wire	14.00	Kg	48.3	₹ 676.20	M072
		ii. Black Smith Gr.II	9.00	nos	508.00	₹ 4,572.00	SII-10
		iii. Head Black Smith	1.00	nos	569.00	₹ 569.00	SII-9
		Iv.Skilled mazdoor	8.00	nos	536.00	₹ 4,288.00	SI-71
		v. Unskilled Mazdoor	2.00	nos	424.00	₹ 848.00	SI-1

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
					total	₹ 63,978.20	
		Add Overhead charge &c.P @ 15 %				₹ 9,596.73	
						₹ 73,574.93	
		Rate per M.T			**Say, Rs**	**₹ 73,574.90**	**Per M.T**
	(C)	TMT grade Fe-500 ***25 mm***					
	(A)	Providing MS reinforcement plain	1.050	MT	50500	₹ 53,025.00	
		(Including 5% wastage)					
	B	i. Annealed wire	14.00	Kg	48.3	₹ 676.20	M072
		ii. Black Smith Gr.II	9.00	nos	508.00	₹ 4,572.00	SII-10
		iii. Head Black Smith	1.00	nos	569.00	₹ 569.00	SII-9
		Iv.Skilled mazdoor	8.00	nos	536.00	₹ 4,288.00	SI-71
		v. Unskilled Mazdoor	2.00	nos	424.00	₹ 848.00	SI-1
					total	₹ 63,978.20	
		Add Overhead charge &c.P @ 15 %				₹ 9,596.73	
						₹ 73,574.93	
		Rate per M.T			**Say, Rs**	**₹ 73,574.90**	**Per M.T**
17	**5.3.18**	Providing shuttering including strutting, proping etc. and its removal after use in foundation as per specification and direction of E/I.					
		Unit :- **Per Sqm**					
		Taking Output :- 9.3 Sqm					
	A	**Material**					
		Local wood planks. 38 mm thick =9.3x38x1000	0.35	m^3			
		Add 5% wastage	0.02	m^3			
		Cost of 0.37 cum local wood planks.	0.37	m^3	26000.00	₹ 9,620.00	code no 1198 (RCD)
		Add cost for shattering and propping @ 10% of above				₹ 962.00	
					Total	₹ 10,582.00	
		Assuming 4 uses to calculate	4.00	use			
		Cost of shattering for 2.832 cum total cost /4				₹ 2,645.50	
		Add 1% for cost of nails and spikes on total cost of wood				₹ 105.82	
					Total	₹ 2,751.32	A
	B	**Labour**					

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
		Carpenter Gr-II	1.50	nos	508.00	₹ 762.00	S II-17
		Unskilled mazdoor	2.50	nos	424.00	₹ 1,060.00	S I-1
					Total	₹ 1,822.00	B
	C	**Carriage of materials**					
		Cost of carriage of material from godown and back to godown after use, including loading, unloading and stacking @ 1% of total cost of food materials				₹ 105.82	C
		Total cost for 9.3 sqm=A+B+C				₹ 4,679.14	
		Add Overhead charge &c.P @ 15 %				₹ 701.87	
						₹ 5,381.01	
		Rate per Sqm			**Say, Rs**	**₹ 578.60**	**Per M2**
18	**5.3.20**	Providing centering including strutting, proping etc. and its removal after use indeck slab as per specification and direction of E/I.					
		Unit :- **Per Sqm**					
		Taking Output :- 22.326 Sqm					
		(Assuming size in slab 7.32 x 3.05 =22.326 sqm)					
	A	**MATERIALS**					
		a. 40 mm thick local wood planks (22.326x 40)/1000 = 0.893					
		Add 5% wastages = 0.045					
		0.938	0.94	m^3	**26000.00**	**₹ 24,440.00**	**Code no. 1197 (BCD)**
		Assuming 4 uses to calculate	4.00	use			
		Cost of planks per use = 0.89 x rate of local wood/4				**₹ 6,110.00**	
		b. Assuming avg. height of slab from GL = 3.66 m					
		150 mm sal bullah required = 78 nos.					
		Length of sal bullah = 78X3.66 =285.48	285.48	M	**75.00**	**₹ 21,411.00**	**M SL No. 223**
		(Assuming sal bullah to be used 10 times for centering					
		= 285.48 x Rate per mtr/10				**₹ 2,141.10**	
		c. Salwood scanting required (75 mm * 63 mmsize) = 0.311 cum	0.31	m^3	**60000.00**	**₹ 18,660.00**	**Code no. 1199 (BCD)**
		(Assuming 10 uses)					
		Cost per use = 0.311 x Rate per mtr/10				**₹ 1,866.00**	
		Total				**₹ 10,117.10**	
		Add 1% for cost of nails and spikes				**₹ 101.17**	

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
						₹ 10,218.27	**(A)**
	B	**LABOUR**					
		Carpenter Gr-II	4.00	nos	508.00	₹ 2,032.00	S I-17
		Unskilled Majdoor	7.00	nos	424.00	₹ 2,968.00	S I-1
					Total	₹ 5,000.00	**(B)**
	C	Carriage of Materials					
		Cost of carriage of material from godown and back to godown after use, including loading, unloading and stacking @ 1% of total cost of food materials				₹ 101.17	
		Total cost for 22.326 sqm=A+B+C				₹ 15,319.44	
		Add Overhead charge & C.P @ 15 %				₹ 2,297.92	
		Total				₹ 17,617.36	
		Rate per Sqm			**Say, Rs**	**₹ 789.10**	**Per M2**
17	**5.5.10**	Providing 1.5 mm thick cement punning including curing, carriage of water with all leads and lifts as per building specification & direction of E/I.					
		Unit :- **Per Sqm**					
		Taking Output :- 9.3 Sqm					
		Material					
		Cement	0.01	m^4	8264.70	₹ 115.71	M-1P
					Total	₹ 115.71	
	B	**Labour**					
		Head mason	0.06	nos	569.00	₹ 35.56	S II-3
		Mason Gr-II	0.50	nos	508.00	₹ 254.00	S II-4
		Unskilled mazdoor	0.25	nos	424.00	₹ 106.00	S II-1
					Total	₹ 395.56	
		Total				₹ 511.27	
		Add Overhead charge &c.P @ 15 %				₹ 76.69	
						₹ 587.96	

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
		Rate per Cum			**Say, Rs**	**₹ 63.20**	**Per M^3**
18	**5.2.2**	Providing filter of stone chips 20 mm and down well graded as per design for lined canal, drains including hand packing etc all complete as per specification and direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 2.832 cum					
		Material					
		Sone chips (M-040 +M -045)/2	2.83	nos	673.97	₹ 1,908.68	M-004
		Labour					
		Unskilled mazdoor for Screening and grading Filter	2.00	nos	424.00	₹ 848.00	SI-1
		Unskilled mazdoor for laying and hand packing	1.50	nos	424.00	₹ 636.00	SI-1
					Total	₹ 3,392.68	
		Add Overhead charge &c.P @ 15 %				₹ 508.90	
						₹ 3,901.59	
		Rate per Cum			**Say, Rs**	**₹ 1,377.70**	**Per M^3**
19	**5.7.13**	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 2.832 cum					
		Unskilled Mazdoor	3	nos.	424.00	1272.00	
						1272.00	
		Add Overhead charge & C.P. @15%				190.80	
						1462.80	
					Say, Rs	**₹ 516.50**	**Per M^3**

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
20	**5.7.18.1**	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.					
		Unit :- **Per cum**					
		Taking Output :- 2.832 cum					
		Unskilled Mazdoor	6	nos.	424.00	2544.00	
		Mason Gr II	0.5	nos.	508.00	254.00	
		Mate	0.25	nos.	455.00	113.75	
		Stone Dresser	0.25	nos.	538.00	134.50	
						3046.25	
		Add Overhead charge & C.P. @15%				456.94	
						3503.19	
					Say, Rs	**₹ 1,237.00**	**Per M^3**
21	**5.1.37**	Providing coarse clean sand in filling in foudation of trenches including ramming, watering, royalty all complete job as per specification and direction .					
		Unit :- **Per cum**					
		Taking Output :- 2.832 cum					
		Unskilled Mazdoor for cutting	1	nos.	424.00	424.00	
		Local Sand	2.832	nos.	145.87	413.10	
						837.10	
		Add Overhead charge & C.P. @15%				125.57	
						962.67	
					Say, Rs	**₹ 339.90**	**Per M^3**
20	**5.5.5**	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.				**Page -261**	
		Unit :- **Per Sqm**					
		Taking Output :- 9.3 cum					
		Materials					
		Cement	0.07	m^3	8264.70	₹ 562.00	M-1 P
		Sand	0.27	m^3	584.64	₹ 159.02	M044

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
		Total				₹ 721.02	
		Labour					
		Mason Gr II	1.50	nos	508.00	₹ 762.00	SII-4
		Unskilled Mazdoor	2.50	nos	424.00	₹ 1,060.00	SII-1
		Bhisti	0.50	nos	417.00	₹ 208.50	SI-13
					total	₹ 2,030.50	
		Add Overhead charge &c.P @ 15 %				₹ 412.73	
						₹ 3,164.25	
		Rate per Cum			**Say, Rs**	**₹ 340.20**	**Per M^3**
21	**5.6.1**	Labour Charges for Laying of 150mm NP2 RCC Hume Pipe with collar as per I.S.S. 458-1971 including fixing and fitting NP2 hume pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .					
	5.6.1.1	**150 mm dia NP2 H.P.**					
		Unit: per m					
		Taking Output =	**8**	**m**			
		(Assuming 4 pipes of 2m length and three collars)					
		Materials					
		Cement	0.011	cum	8264.70	90.91	**M-1 P**
		Sand	0.011	cum	584.64	6.43	**M-004**
		Jute	1.5	Kg	20.89	31.34	**M Sl. No. 257**
		Total				128.68	
		Labour					
		Head Mason	0.50	nos	569.00	284.50	
		Unskilled Mazdoor	2.25	nos	424.00	954.00	
		Fitter Gr I	0.50	nos	577.00	288.50	
		Total				1527.00	
						1655.68	
		Add Overhead charge & C.P @ 15 %				₹ 248.35	
						₹ 1,904.03	
					Say, Rs	**₹ 238.00**	**Per M**

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
	5.6.2.4	**1000 mm dia NP3 H.P.**					
		Unit: per m					
		Taking Output =	**7.5**	**m**			
		(Assuming 3 pipes of 2.5 m length and two collars)					
		Materials					
		Cement	0.045	cum	8264.70	371.91	**M-1 P**
		Sand	0.045	cum	584.64	26.31	**M-004**
		Jute	7.5	Kg	20.89	156.68	**M Sl. No. 257**
		Total				554.90	
		Labour					
		Head Mason	2	nos	569.00	1138.00	
		Unskilled Mazdoor	21	nos	424.00	8904.00	
		Fitter Gr I	1	nos	577.00	577.00	
		Total				10619.00	
						11173.90	
		Add Overhead charge & C.P @ 15 %				₹ 1,676.08	
						₹ 12,849.98	
					Say, Rs	**₹ 1,713.33**	**Per M**
	5.6.2.5	**Labour Charges for Laying of 1200 mm NP3 RCC Hume Pipe with collar as per I.S.S. 458-1971 including fixing and fitting NP2 hume pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .**					
		Unit: per m					
		Taking Output =	**7.5**	**m**			
		(Assuming 3 pipes of 2.5 m length and two collars)					
		Materials					
		Cement	0.057	cum	8264.70	471.09	**M-1 P**
		Sand	0.057	cum	584.64	33.32	**M-004**
		Jute	12	Kg	20.89	250.68	**M Sl. No. 257**
		Total				755.09	
		Labour					

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
		Head Mason	2.5	nos	569.00	1422.50	
		Unskilled Mazdoor	25	nos	424.00	10600.00	
		Fitter Gr I	1	nos	577.00	577.00	
		Total				12599.50	
						13354.59	
		Add Overhead charge & C.P @ 15 %				₹ 2,003.19	
						₹ 15,357.78	
					Say, Rs	**₹ 2,047.70**	**Per M**
22	**5.6**	Providing NP3 RCC Hume Pipe with collar as per I.S.S. 458-1971 including fixing and fitting NP3 hume pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .					
	5.6.2.2	**600 mm dia NP3 H.P.**					
		Unit: per m					
		Taking Output =	**7.5**	**m**			
		(Assuming 3 pipes of 2.5 m length and two collars)					
		Materials					
		Cement	0.034	cum	8264.70	281.00	**M-1 P**
		Sand	0.034	cum	584.64	19.88	**M-004**
		Jute	4	Kg	20.89	83.56	**M Sl. No. 257**
		Total				384.44	
		Labour					
		Head Mason	1.5	nos	569.00	853.50	
		Unskilled Mazdoor	7	nos	424.00	2968.00	
		Fitter Gr I	0.75	nos	577.00	432.75	
		Total				4254.25	
						4638.69	
		Add Overhead charge & C.P @ 15 %				₹ 695.80	
						₹ 5,334.49	
					Say, Rs	**₹ 711.27**	**Per M**

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
23	**5.4.10**	Providing rough dressed random rubble Stone Masonary in cement Mortar (1:4) in foundation with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints, curing, scaffholding and its removal whereever required including royalty etc. all complete job as per specification and direction of E/I.					
		Unit :- **Per Sqm**					
		Taking Output :- 2.832 cum					
		Materials					
		Stone Boulder	2.832	cum	694.61	1967.14	
		Sand	1.12	cum	584.64	654.80	
		Cement	0.28	cum	8264.70	2314.12	
		Labour				4936.05	
		Head Mason	0.125	nos	569.00	71.13	
		Mason Gr II	2	nos	508.00	1016.00	
		Unskilled Mazdoor	5	nos	424.00	2120.00	
		Bhisti	0.5	nos	417.00	208.50	
						3415.63	
						8351.67	
		Add Overhead charge & C.P @ 15 %				₹ 1,252.75	
						₹ 9,604.43	
					Say, Rs	**₹ 3,391.40**	**Per M^3**

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
24	**5.7.16**	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.					
		Unit :- **Per Sqm**					
		Taking Output :- 9.3 cum					
		Materials					
		Bricks	800	per 1000 nos	4891.00	3912.80	
		Local Sand	0.425	cum	145.87	61.99	
		Total				3974.79	
		Labour					
		Mason Gr II	1.125	nos	508.00	571.50	
		Unskilled Mazdoor	2.25	nos	424.00	954.00	
						1525.50	
						5500.29	
		Add Overhead charge & C.P @ 15 %				₹ 825.04	
						₹ 6,325.34	
					Say, Rs	**₹ 680.10**	**Per M^3**
25	**5.8.9**	Dismantling RCC work including stacking serviceable materials in stacks within 15 meter lead and disposal of unserviceable materials with all leads as per building specifications and direction of E/I.					
		Unit :- **Per Sqm**					
		Taking Output :- 2.832 cum					
		Hammer man	2.25	nos	445.00	₹ 1,001.25	SII-17
		Skilled Mazdoor	2.25	nos	536.00	₹ 1,206.00	SII-18
		Unskilled mazdoor	7.00	nos	424.00	₹ 2,968.00	SI-1
		Blacksmith GR II	1.00	nos	508.00	₹ 508.00	SII-10
		Mate	1.00	nos	455.00	₹ 455.00	SII-2
					total	₹ 6,138.25	
		Add Overhead charge & C.P @ 15 %				₹ 920.74	
						₹ 7,058.99	
		Rate per Cum			**Say, Rs**	**₹ 2,492.58**	**Per M^3**

Sl. No.	Refrences SOR No.	Description	Quantity	Unit	Rate	Amount	Ref
25	**5.4.6**	Brick work in designation 100A Brick with cement mortar (1:4) in superstructure with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints to 12 mm depth, curing, scaffolding and its removal wherever required including royalty etc. complete job including royality as per specification and direction of E/I.					
		Unit :- **Per Sqm**					
		Taking Output :- 2.832 cum					
		Materials					
		Bricks	1150	per 1000 nos	4891.00	5624.65	
		Sand	0.92	cum	584.64	537.87	
		Cement	0.23	cum	8264.70	1900.88	
		Total				8063.40	
		Labour					
		Head Mason	0.125	nos	569.00	71.13	
		Mason Gr II	2.5	nos	508.00	1270.00	
		Unskilled Mazdoor	6	nos	424.00	2544.00	
		Bhisti	1	nos	417.00	417.00	
						4302.13	
						12365.52	
		Add Overhead charge & C.P @ 15 %				₹ 1,854.83	
						₹ 14,220.35	
					Say, Rs	**₹ 5,021.30**	**Per M^3**

ITEM RATES					
Sl. No.	Reference		Particular	Unit	Rate (in Rs.)
1	**WRD SOR 2023 & PL JUNE 2024**	**WRD 5.1.3**	Jungle clearance and weeding out shrubs including small tree upto 0.50 m girth and removal as per specifications and direction of E/I.	**Sqm**	**11.80**
2	**WRD SOR 2023 & PL JUNE 2024**	**WRD 5.1.8**	Earthwork in Excavation of canals carrying minimum full supply discharge between 8.5 cumecs (300 cusecs) and 0.14 cumecs (5 cusecs) in ordinary soil (vide classification of soil item -A) and making the banks with excavated earth in proper profile and clod breaking and laying earth in 225 mm layer & rough dressing of soil with initial lead of 30 m and lift of 1.5 m.all complete as per specifications and direction of E/I.	**Cum**	**156.50**
3	**WRD SOR 2023 & PL JUNE 2024**	**WRD 5.1.31**	Earthwork in filling foundation trenches and back filling of structures in layer not exceeding 150 mm thick well watered rammed and fully compacted and finely dressed with suitable earth obtained from excavation of foundation trenches and placed in a suitable profile within a lead of 30m and lift of 1.5 m complete job, as per specification and direction of E/I	**Cum**	**149.30**
4	**WRD SOR 2023 & PL JUNE 2024**	**5.1.21**	Earthwork in lip cutting in side slopes and bed of canal in ordinary soil with initial lead of 30M and lift of 1.5M includind the cost of formation of subgrade of canal lining profiling, levelling, controlling of slopes and fine dressing, disposal of excavated earth and nominal dewatering if any all complete as per approved design, specification and direction of engineer in charge.	**Cum**	**196.10**
5	**WRD SOR 2023 & PL JUNE 2024**	**5.1.22**	Extra for wet earth all complete as per specifications and direction of E/I.	**Cum**	**17.22**
6	**WRD SOR 2023 & PL JUNE 2024**	**5.1.25**	Earthwork in filling of canal banks (discharge upto 28 cumecs) as well as special repair of canal banks in ordinary soil in proper profile obtained from borrow area or any other sources free from logs, roots or any other ingredients etc. with initial lead of 30m and lift of 1.5 m including breaking the clods to maximum 60 mm cube placing the earth in layers not exceeding 225mm thick all complete and as per specification and direction of E/I.	**Cum**	**165.12**
7	**WRD SOR 2023 & PL JUNE 2024**	**WRD 5.1.39**	Labour for rolling and compacting the earth in layers of 225mm thick at O.M.C. by sheep foot roller driven by tractor to achieve minimum 95% of maximum dry density, including sprinkling the required quantity of water with all leads and lifts, finishing the surface as per plan and drawing, including hire charge of compaction machine and other tools and plants etc. for lined canal all complete as per specification and direction of E/I.	**Cum**	**61.88**

8	**WRD SOR 2023 & PL JUNE 2025**	**5.1.46**	Earthwork by mechanical means with help of Excavator, Tipper and Spreader in canal or flood embankment or dhar all types of work like filling and making of canal banks or embankment of earth free from logs, roots or any other gradients desilting of canal bed and dhar in proper profile with dressing and finishing including new construction, repair or restoration in ordinary soil including cutting, loading, carriage from pit to banks or emabankments, unloaidng, spreading, clod-breaking and laying in layers properly with lead of ..... meter (Lead will be considered as track path i.e. half of distance travelled in one cycle i.e. half of the haulage path from pit to bank or embankment. Pit will be beyond 150 m from centre of bank ie perpendicular distance from centre of bank to nearest boundary of pit will be more than 150 m) and with all liftss all complete job as per specifications and direction of E/I. (Mode of measurement - sectional measurement of compacted earth)		
		5.1.46.1	Beyond 150m but upto 1/2 km	**174.89**	**Cum**
		5.1.46.2	Beyond 1/2 km but upto 1 km	**217.92**	**Cum**
		5.1.46.3	Beyond 1 km but upto 1.50 km	**268.53**	**Cum**
		5.1.46.4	Beyond 1.50 km but upto 2.00 km	**319.14**	**Cum**
		5.1.46.5	Beyond 2.00 km but upto 2.50 km	**369.80**	**Cum**
		5.1.46.6	Beyond 2.50 km but upto 3.00 km	**420.41**	**Cum**
9	**WRD SOR 2023 & PL JUNE 2024**	**WRD 5.1.27**	Earthwork in excavation of foundation trenches in ordinary soil (vide classification of soil item A) and disposal of excavated earth so obtained to a distance upto 50 mtr and average lift of 1.5 m including levelling, ramming the foundation trenches, removing the roots of shrubs etc. all complete as per specifications and direction of E/I.	**195.20**	**Cum**
10	**WRD SOR 2025 & PL 2025**	**WRD 5.5.10**	Providing 1.5 mm thick cement punning including curing complete job as per specification & direction of E/I.	**Sqm**	**63.20**
11	**WRD SOR 2023 & PL JUNE 2025**	**5.5.5**	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of D/I.	**Cum**	**340.20**
12	**WRD SOR 2025 & PL 2025**	**5.3.8**	Providing & laying **P.C.C. M-100** with nominal mix of (1:3:6) in superstructure of various components of canal or embankment structures with approved quality of graded coarse aggregate of required grade and approved quality sand of requisite F.M. washed and screened including necessary tools and plants, vibrating, curing,royalty etc. excluding cost of form work as well reinforcement its cutting, bending. binding, and placing complete job as per specification & direction of E/I.	**Cum**	**6003.37**
13	**WRD SOR 2025 & PL 2025**	**5.3.4**	Providing and laying **PCC M-150** with nominal mix of (1:2:4) in foundation of various components of canal or embankment structures with approved quality sand of requisite FM washed and screened including necessary tools and plants, vibrating, curing, excluding cost of form work as well reinforcement, its cutting, bending, binding and placing complete job including royalty as per specifications and direction of E/I.	**Cum**	**6381.70**

14	**WRD SOR 2025 & PL 2025**	**5.3.5**	Providing & laying **P.C.C. or R.C.C. M-200** with nominal mix of (1:1.5:3) in foundation of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	**Cum**	**6914.20**
15	**WRD SOR 2025 & PL 2025**	**5.3.10**	Providing & laying **P.C.C. or R.C.C. M-200** with nominal mix of (1:1.5:3) in superstructure of various components of canal or embankment structures with approved quality coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	**Cum**	**6914.20**
16	**WRD SOR 2025 & PL 2025**	**5.3.11**	Providing & laying **P.C.C. or R.C.C. M-250** with nominal mix (1:1:2) in superstructure of various components of canal or embankment structures with approved quality of 20 mm graded coarse aggregate of required grade and approved quality of sand of requisite F.M. (washed and screened including necessary tools & plants, vibrating, curing royalty etc. excluding cost of form work as well as reinforcement, its cutting bending, binding & placing complete as per specification & direction of E/I.	**Cum**	**8151.40**
17	**RCD 2025**	**RCD 14.09**	Drainage Spouts complete as per drawings & techincal specifications & as per clause 2705 of specifications.	**NO.**	5588.70
18	**WRD SOR 2025 & PL 2025**	**WRD 5.3.22**	Providing M.S. reinforcementas per approved design, drawing, removal of rust, cutting, bending, including supplying annealed wire, placing M.S. rods in position complete job as per specifications and direction of E/I.		
			TMT Grade FE-500 - 8 mm	**MT**	**75929.60**
			TMT Grade FE-500 - 10 mm	**MT**	**74292.20**
			TMT Grade FE-500 - 12 mm	**MT**	**73574.90**
			TMT Grade FE-500 - 16 mm	**MT**	**73574.90**
			TMT Grade FE-500 - 20 mm	**MT**	**73574.90**
			TMT Grade FE-500 - 25mm	**MT**	**73574.90**
19	**WRD SOR 2025 & PL 2025**	**WRD 5.3.19**	Providing shuttering including strutting, propping etc. and its removal after use in various components of canal structure or embankment structure as per specifications and direction of E/I.	**Cum**	**578.60**
20	**WRD SOR 2025 & PL 2025**	**WRD 5.3.20**	Providing centering including strutting, propping etc. and its removal after use in deck slab as per specifications and direction of E/I.	**Cum**	**789.10**
21	**WRD SOR 2025 & PL 2025**	**WRD 5.2.2**	Providing filter of stone chips 20mm & down well graded as per design for lined canal, drains including hand packing etc. as per specification and direction of E/I.	**Cum**	**1377.70**
22	**WRD SOR 2025 & PL 2025**	**WRD 5.7.13**	Labour charges for laying coarse dry graded filter of stone chips in slope and apron including light ramming etc. all complete as per specification and direction of E/I.	**Cum**	**516.50**
23	**WRD SOR 2025 & PL 2025**	**WRD M-002**	Supply of quarried stone 150-200 mm size for hand broken at Source Quarry.	**Cum**	694.61

24	**WRD SOR 2025 & PL 2025**	**WRD 5.7.18.1**	Labour Charges for pitching on apron slope of bank with stone boulders duly packed (uncrated) complete job (materials within 150m lead) with all lifts including royalty etc. complete as per approved design, specifications and direction of E/I.	**Cum**	**1237.00**
25	**WRD SOR 2025 & PL 2025**	**WRD 5.1.37**	Providing coarse clean sand in filling in foudation of trenches including ramming, watering, royalty all complete job as per specification and direction .	**Cum**	**339.90**
26	**WRD SOR 2025 & PL 2025**	**WRD 5.5.5**	Providing 25mm thick cement plaster (1:4) with approved quality of sand of requisite F.M. washed and screened including curing, scaffolding wherever required and its removal , royalty etc, complete as per specification and direction of E/I.	**Cum**	**340.20**
27	**WRD SOR 2025 & PL 2025**	**M-1701**	Providing 150mm NP2 RCC Hume Pipe with collar as per I.S.S. 458-1971 including fixing and fitting NP2 hume pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .	**RM**	220.00
28	**WRD SOR 2025 & PL 2025**	**WRD 5.6.1.1**	Labour Charges for Laying of 150mm NP2 RCC Hume Pipe with collar as per I.S.S. 458-1971 including fixing and fitting NP2 hume pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .	**RM**	**238.00**
29	**RCD 2025**	**RCD M-148**	Providing RCC Pipe NP 4 heavy duty non pressure pipe 1000 mm dia with spigot	**R.M.**	6002.82
30	**WRD SOR 2025 & PL 2025**	**WRD 5.6.2.4**	Labour for laying 1000mm NP3 RCC Hume Pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .	**R.M.**	**1713.33**
31	**RCD 2025**	**RCD M-149**	Providing RCC Pipe NP 4 heavy duty non pressure pipe 1200 mm dia with spigot	**R.M.**	7015.86
32	**WRD SOR 2025 & PL 2025**	**WRD 5.6.2.5**	Labour for laying 1200mm NP3 RCC Hume Pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .	**R.M.**	**2047.70**
33	**WRD SOR 2025 & PL 2025**	**5.4.10**	Providing rough dressed random rubble Stone Masonary in cement Mortar (1:4) in foundation with approved quality of coarse sand of requisite F.M. washed and screened with raking out joints, curing, scaffholding and its removal whereever required including royalty etc. all complete job as per specification and direction of E/I.	**Cum**	**3391.40**
34	**WRD SOR 2025 & PL 2025**	**M-181**	Structural Steel (Average rate of Angle, Joint and Channel) etc.	**MT**	**160035.11**
35	**WRD SOR 2025 & PL 2025**	**5.7.16**	Providing pitching work with designation 100A bricks in panel and in herring bond pattern one brick on edge over a brick flat soling joints filled with local sand free from clay contents including royalty etc. all complete as per approved design, specifications and direction of E/I.	**Sqm**	**680.10**
36	**RCD 2025**	**RCD 15.22**	Providing and fixing in position 20 mm thick compressible fibre board in expansion joint complete as per drawing & Technical specification.	**RM**	499.80
37	**RCD 2025**	**RCD M-151**	Providing RCC Pipe NP 4 heavy duty non pressure pipe 600 mm dia with spigot	**RM**	2532.61

38	**WRD SOR 2025 & PL 2025**	**5.6.2.2**	Providing NP3 RCC Hume Pipe with collar as per I.S.S. 458-1971 including fixing and fitting NP3 hume pipe with collars in line, level and grade, as well as providing approved jointing materials and joints properly filled to make them water proof, all complete, as per specification & direction of E/I .	**RM**	**711.27**
39	**WRD SOR 2025**	**M-126**	Modular Strip/box seal expansion joint	**RM**	36993.21
40	**PWD NH SOR CHHATISGARH 2025**	**3.18 PWD NH SOR CHHATISGARH 2025**	Providing & Fixing in position Tar Paper Bearing for slab as per approved drawings & specifications. (3.18 PWD NH SOR CHHATISGARH 2025)	**RM**	66.00
41	**RCD 2025**	**RCD M-148**	Providing RCC Pipe NP 4 heavy duty non pressure pipe 900 mm dia with spigot	**R.M.**	4849.67
42	**RCD 2025**	**13.08**	Weepholes	**No.**	152.60
43	**RCD 2025**	**3.06 - 301**	Excavation for road work in soil with hydraulic excavator including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and tranporting to the embankment location within all lifts and lead upto 1000 m	**Cum**	78.40
44	**RCD 2025**	**4.01 B - 401**	Construction of granular sub-base by providing closegraded material, spreading in uniform layers with motorgrader on prepared surface, mixing by mix in placemethod with front end loader at OMC, and compactingwith vibratory roller to achieve the desired density,complete as per clause 401.	**Cum**	1044.90
45	**RCD 2025**	**14.01 C**	RCC Grade M-30 using Batching plant, Transit Mixer and Concrete Pump	**Cum**	6217.20
46	**RCD 2025**	**8.14**	Kilometer Stone M-15	**Nos.**	3853.40

	MATERIAL RATE:				
1	**WRD SOR 2025**	**M-004**	Coarse Sand	**Cum**	584.64
2	**WRD SOR 2025**	**M-012**	Coarse Aggregate	**Cum**	944.26
3	**WRD SOR 2025**	**M-001**	Boulder	**Cum**	694.61
4	**WRD SOR 2025**	**M-11 9(ii)**	Brick	**Cum**	4891
5	**WRD SOR 2025**	**M-006**	Fine Sand	**Cum**	145.87
6	**WRD SOR 2025**	**M1**	Cement (Gaya)	**per bag of 50 Kg**	281.00
7	**WRD SOR 2025**	**M-025**	Aggregate 26.5 mm to 4.75 mm	**Cum**	913.48
8	**WRD SOR 2025**	**M-015**	Aggregate 9.5 mm to 4.75 mm	**Cum**	602.28
9	**WRD SOR 2025**	**M-017**	Aggregate 4.75 mm and below	**Cum**	266.62
10	**WRD SOR 2025**	**M-181**	Structural Steel	**MT**	55116.67