

**Additional Work for Road Restoration, Jack Pushing for Railway Crossing & other allied work of Uluberia Surface Based W/S scheme for Shyampur- I & II and Part of Bagnan I & II Block under Howrah Division, PHE Dte**

Sl. No.	Brief Description of item of work	Quantity	Unit	Rate	Amount (Rs.)
1	Excavation in Soil using Hydraulic Excavator CK 90 and Tippers with disposal upto 1000 metres. Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location within all lifts and lead upto 1000m as per Clause 301 of Specifications for Road & Bridge Works of MoRT&H (5th Revision). (Mode of measurement: pre works and post works)	87120.00	Cu M	37.30	32,49,576.00
2	Supplying, spreading and compacting Sand to required thickness, in layers not exceeding 150 mm to proper gradient and camber, inundating each layer by water and packing and ramming layer by layer to achieve desired compaction, including lighting, guarding, barricading and making adequate earthen bundh where necessary, curing with water as per direction, mending cracks and depressions by ramming wherever necessary. (The payment is to be made on the basis of the finished compacted volume.)	41000.00	Cu M	1,253.32	5,13,86,120.00
3	Water Bound Macadam Sub Base by consolidating Jhama metal of specific size in hard crust to requisite thickness (measured after compaction) in layers including screening of metals etc. as necessary, hand packing, sweeping, watering and rolling in stages with power roller to proper line, grade and camber, lighting, guarding & barricading and making necessary earthen bundh of one metre width on each side where necessary to protect edges and preparing the bed by necessary cutting or filling and rolling all complete including the cost of all materials and hire and labour charges of all men and machineries and compacting to the required density, as per Clause 404 of Specifications for Road & Bridge Works of MoRT&H (5th Revision). <b>(i) For Construction of Sub Base by consolidating Jhama metal (63 mm to 45 mm) with moorum screening :</b>	9000	Cu M	2,603.62	2,34,32,580.00
4	<b>Water Bound Macadam Base Course</b>				-
	<b>Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of screening / binding materials to fill up the interstices of coarse aggregate, watering including lighting, guarding, barricading and making necessary earthen bundh of one metre width on each side and preparing the bed by necessary cutting or filling, including cost of all materials and hire and labour charges of all men and machinery and compacting to the required density, as per Clause 404 of Specifications for Road &amp; Bridge Works of MoRT&amp;H (5th Revision).</b>				-
	<b>(iii) Grading-II Aggregate (53 mm to 22.4 mm) Using Stone Screening Type B (11.2 mm)</b>				-
	B. Manual Means	9108	Cu M	3339.71	3,04,18,078.68
5	Single brick flat soling of picked Jhama bricks including ramming and dressing but to proper level and filling soils with local sand.	77000	sqm	357.00	2,74,89,000.00

Sl. No.	Brief Description of item of work	Quantity	Unit	Rate	Amount (Rs.)
6	Ordinary Cement concrete (mix 1:2:4) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement, if any, in ground floor as per relevant IS codes. A] Pakur Variety	11790	Cu.M	5,609.10	6,61,31,289.00
7	Sand filling in foundation trenches and at the back of abutments, wing-walls etc. with good local sand free from earth in layers not exceeding 15 cm. including inundating each layer by profuse water and poking and ramming layer by layer complete including supply of sand. Quality of sand is to be approved by the Engineer-in-charge.	31863	Cu.M	951.83	3,03,28,159.29
8	Supplying Eucalyptus-bullah piles at work site, including dressing and making one end pointed				-
	(iii) 150mm diameter	25000	metre	217.00	54,25,000.00
	(i) 100mm diameter	7000	metre	96.00	6,72,000.00
9	Labour for driving Sal-bullah / Eucalyptus bullah piles by monkey in sorts of soil including hoisting and placing piles in position, protecting the pile head with iron ring and cutting and shaping heads before and after driving and including hire and labour for necessary driving appliances and all tackles.				-
	(iii) 150mm diameter	16670	metre	105.00	17,50,350.00
10	Labour for fitting and fixing 10 cm. to 13 cm. diameter Sal-bullah/Eucalyptus-bullah as ties and runners including necessary nails, bolts and nuts.	7000	metre	20.60	1,44,200.00
11	Fitting, fixing bitumen drum sheet to bullah piling and wailing pieces including cutting straightening drum sheet fixing with country nails @ 20cm c/c at top & bottom and bolts & nuts at top & bottom at every joint of drum sheet with a laping of 15 cm, including supply of drum sheet, fixture all complete as per direction of the Engineer - in - charge.	4000	sqm	437.00	17,48,000.00
12	Brick work with 1st class bricks in cement mortar (1:4)				-
	(b) In superstructure, ground floor	500	Cu.M	5,783.00	28,91,500.00
13	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints including throating, nosing and drip course, scaffolding/staging where necessary (Ground floor).[Excluding cost of chipping over concrete surface]				-
	(i) With 1:6 cement mortar				-
	(c) 15 mm thick plaster	700	Sq.m	144.00	1,00,800.00
14	Neat cement punning about 1.5mm thick in wall, dado, window sill, floor etc. NOTE:Cement 0.152 cu.m per100 sq.m.	500	Sq.m	34.00	17,000.00
15	Controlled cement concrete with well graded stone chips (20 mm nominal size) excluding shuttering & reinforcement with complete design of concrete as per [ISI : 456 and relevant special publication. Submission of job mix formula after preliminary mix design after testing of concrete cube as per direction of the EIC. consumption of cement will not be less than 300kg of cement with super plasticiser per cum. of controlled conc. but actual consumption will be determined on the basis of preliminary test & job mix formula. In ground floor and foundation.[Using concrete mixture] M 25 Grade Foundation & upto 4 mtr above G.L.				-
	To provided pipe support for crossing water body and low elevated land if required.	80	Cu.M	6,606.01	5,28,480.80

Sl. No.	Brief Description of item of work	Quantity	Unit	Rate	Amount (Rs.)
16	Earth work in filling in compound, tank, low land, ditches etc. with good earth, in layers not exceeding 150 mm. including breaking clods and consolidating the same by ramming and dressing complete. (Payment will be made on profile measurement before and after the work)				-
	(b) (i) With carried earth arranged by the contractor within a radius of 3 km. including cost of carried earth.	1000	Cu.M	379.82	3,79,820.00
17	Supplying and laying brick Khoa of ordinary bats of size (38 mmx 63 mm) of approved quality in 100 mm layer (loose) filling in gaps with small ones rammed and compact as directed true to level and grade.	3000	Sqm.	159.00	4,77,000.00
18	Supply & delivery of internal diameter M.S. pipe of wall thickness 9.5 mm of TATA/SAIL make (spirally welded) as per IS3589-2001 or as amended to be delivered at site inclusive of all duties taxes charges and cost of transportation, loading & unloading & stacking all complete at lifting and destination points all complete as per the direction of EIC.				-
	a) 200 mm dia	1800	mtr.	5,351.30	96,32,340.00
	b) 250 mm dia	1175	mtr.	6,582.55	77,34,496.25
	c) 300 mm dia	1325	mtr.	7,847.52	1,03,97,964.00
19	Derusting, scraping, brusing and cleaning (to the extent of exposing the original surface) the outer surface of manufactured M.S. pipes and specials, applying first coat of synthetic primer Type-B as per IS:15337:2003 of approved make over it and wrapping the same with coal tar based insulating tape 2mm thick as per IS:15337:2003 of approved make and applying second coat of synthetic primer Type-B (As specified above) over the first layer of 2mm thick coal tar based insulating tape (as specified above) in staggered pattern (including overlapping at ends) by torching etc. as per manufacturer's specification and as per direction of EIC. (each layer of a protective wrapping shall be tested with Holiday detector at Contractor's coat and the Contractor shall repair all holidays to satisfaction of EIC at no extra cost (Payment will be made on finished area of work)	950	sqm.	350.00	3,32,500.00
20	Derusting, brusing, cleaning, and smothering thoroughly the inner surface of spirally welded Mild steel pipes and specials by sand blasting to SA-1 Swedish specification and immediately after sand blasting applying protection coatings (resistant to corrosion and contamination of drinking water) of Drinking Aluminum Primer 2 coats, DEF (40-50) microns each coat and Drinking Back finish 2 coats, DET (24-30) microns each coat of Shalimar Paints Ltd. of equivalent by spray painting in the inner surface of the pipes as per manufacturer's specification, all complete with supply of requisite materials labour, consumable etc. including stacking of coated pipes properly as per specification, direction and satisfaction of the EIC.	950	Sqm.	196.70	1,86,865.00
21	Gas cutting of different M.S. pipes and specials to required length, grinding and finishing (beveling suitable for V-grove butt welding) all complete including cost of hire and fuel charges of Grinder, Labour charges, consumables, Transportation as per specification and direction of E.I.C.	95000	Sq-cm	5.55	5,27,250.00
	Gas/Electric welding continuous (with D.P. test 100% & U.S. test 50%.)	15000	cm-run	7.66	1,14,900.00

Sl. No.	Brief Description of item of work	Quantity	Unit	Rate	Amount (Rs.)
22	Carrying charges of all materials (CI/DI/MS Pipes specials valves etc. of any diameter and class) by road transport by truck/tralie from depts. Store/Stackyard/Railway yard/works site etc. to any destination as directed including supplying necessary tools and plants. i) Distance carried upto 5 km.	150	metric ton	156.53	23,479.50
	ii) Extra over the rate for 5 km. carriage for every additional 1 km (or part there of) carriage beyond 5 km and upto 10 km.	750.00	Per km/mt	17.53	13,147.50
	iii) Extra over the rate for 10 km carriage for every additional 1 km (or part there of) carriage beyond 10 km and upto 15km.	750.00	Per km/mt	16.35	12,262.50
	iv) Extra over the rate for 15 km carriage for every additional 1 km (or part there of) carriage beyond 15 km and upto 25km.	400.00	Per km/mt	13.99	5,596.00
23	Hire charges of different necessary equipments and machineries for placement of 700 mm dia MS pipe below the railway track in proper line, alignment and depth as per direction of E.I.C by hydraulic jack pushing method including lowering the pipe segment to the drive pit and jointing the pipe segment with soft board and rubber ring with all necessary excavation from inside the pipe, fixing of intermediate jacking station, if necessary and retrieving the driving shield and cleaning of pipe etc. all complete with all labour including lowering, insertion, placing & jointing of 1600 mm dia MS pipe as per direction & satisfaction of EIC. (The rate includes disposing of excavated earth with a lead of 75M from the drive pit) (a) Driving Rig and Jacks. Used For Railway Crossing				
	Supply of 700 mm Dia M.S. Pipe as per specification and direction of E.I.C.	576.00	RMT	28,906.86	1,66,50,351.36
	Inner dia:- 700 mm				
	Thick ness: 12 mm				
	Outer dia:- 724 mm				
	Grade: Fe 410				
24	Supply & Fabricating of 700mm dia MS pipes , 12 mm thick & Fe 400 grade as per specification and direction of EIC.				
	Supply of 700 mm Dia M.S. Pipe as per specification and direction of E.I.C.	576.00	mtr	22,160.85	1,27,64,649.60
	Inner dia:- 700 mm				
	Thick ness: 12 mm				
	Outer dia:- 724 mm				
	Grade: Fe 410				

Sl. No.	Brief Description of item of work	Quantity	Unit	Rate	Amount (Rs.)
25	<p>Supplying HDPE (Materials grade PE-100) pipes conforming to IS 4984- 1995 with latest revision &amp; amendments if any with necessary HDPE specials (excluding cost of CIDF valves) including labour charges for earth work in excavation in any kind of soil including mixed soil with boulder, road sub-grade and aits flank but excluding moorum laterite or sand stone / hard rock cutting with chisel required including cutting road flank/ brick pavement etc. without damaging the exisiting telephone/electrical cable line etc.(in case of damage of any type of cable line by the agency at the time of execution necessary damage charge as applicable by the respective authority will have to be brone by the agency at his own cost)upto the depth (av.) so as to maintain 1.10m.earth cushion from top of the pipe upto G.L. including loading unloading carrying lowering laying fitting fixing carefully pipes, valves and specials with the all types of jointing materials in trenches maintaining proper levels and alignment jointing the pipes and specials by butt welding/ adopting suitable method (But weld jointing with help of hydraulic tack and trimming machines, Hitter etc. for reaching at necessary melting point of HDPE pipe so that joint can be monolithic) so as to facilitate the maintenance of pipe line locally as per conventional method in future.</p> <p><b>Note: All pipes used for Distribution System Certificate Should be from CIPET</b></p>				
	(A) Pressure Rating: Class - PN 6				
	(ii) Laying of pipe line including cost of pipe & fittings/specials but excluding cost of valves.				
	50mm (OD)	1,000.00	Mtr.	170.00	1,70,000.00
	63mm (OD)	2,000.00	Mtr.	216.00	4,32,000.00
	75mm (OD)	15,000.00	Mtr.	252.00	37,80,000.00
26	<p>Construction of different dia Sluice valve/Airvalve/Washout chamber in different sizes for village road where light traffic run and for main road where heavy traffic run as depts.approved drawing with 25cm thick brick work (1:6) over cement concrete (4:2:1) over a single B/F soling over 150mm.thick sand filling in foundation including earth work in excavation and disposal of excess earth from work site with RCC (1:1.5:3) cover slab 100mm / 150mm thick slab on top of chamber with 1% reinforcement in RCC cover slab with necessary opening for operation of valve all complete including cost of labour &amp; materials as per Departmental Dwg. [Reinforcement type:- Other manufacturerers not specified]</p>				-
	80 mm to 150 mm dia pipe	250.00	Each	12,649.00	31,62,250.00
27	<p>Supply and delivery of CIDF sluice valve (Special type) PW-1.00 of different dia make with CI double flanged non rusting spindle sluice valves conforming to IS 14846 -2000 with latest emended having body dome/bonnet and cover of C.I.Gr-F.G 210mtr. spindle of IS-6603 G.R12/Gr-13non-magnetic, nuts seatrings are of Gun one tal as per IS:318LTB-2 flanges and drilled to IS:1538 PartIV &amp;VI valves are suitable forma x. working pressure of 10kg/cm2(seattest)and body tested to 15kg/cm2.</p>				-
	100 dia	150.00	Each	6,138.00	9,20,700.00

Sl. No.	Brief Description of item of work	Quantity	Unit	Rate	Amount (Rs.)
28	Filling the pipeline with water, testing hydraulically as per I.S3114-1965 (Article-6) in section of a length not exceeding 500mtr. for head of pressure as per specification including supplying installing and fixing all equipments such as diesel pump set, blank flange, pressure gauge, valve, pressure pump and all other tools and plants including drilling topping and plugging of necessary holes to pipes, blocking ends providing temporary thrust block and subsequent blocking of holes and other jointing materials and dismantling and removal of the same including disposal of water etc. all complete as per specification and direction of EIC. The rate is inclusive of cost of requisite water to be arranged by the contractor (Recovery rate of water @ Rs.10.00/m3, if contractor used water from deptt. source).				
	For HDPE Pipe				
	50mm (OD)	1,000.00	mtr	2.92	2,920.00
	63 mm (OD)	2,000.00	mtr	3.13	6,260.00
	75mm (OD)	15,000.00	mtr	3.15	47,250.00
29	Cleaning thoroughly the inner surface of pipe line including specials and valves by flushing with water and subsequently disinfection of the same pipe line by flushing again with water containing bleaching powder resulting in residual chlorine not less than 15mg/ltrs. after 24 hrs. of such filling including laboratory testing of water samples obtain from the disinfested pipe line and disposal of water from the pipe line after completion of the work. The rates including of cost of requisite water to be arranged by the contractor (The rate of water @Rs. 10/m3 may be recovered, if the contractor used water from deptt. source).				-
	For HDPE Pipe				-
	50mm (OD)	1,000.00	mtr	0.56	560.00
	63 mm (OD)	2,000.00	mtr	0.62	1,240.00
	75mm (OD)	15,000.00	mtr	0.69	10,350.00
30	Cost of cost of Supervision chages for getting Permission fmm Railway / NH authority / any Govt. Department or other statutory bodies (WBPHED Will Pay the Actual Cost of Permission to the respective department or otherwise actual amount wilhout any profit or other charges will be reimbursed to contractor on payment of relevant documents.& Road resoration Charge If any As per direction of E.I.C.( Payment will be made as per actual expenditure certified by the respective authority)	8.00	L.S	1,00,000.00	8,00,000.00

Sl. No.	Brief Description of item of work	Quantity	Unit	Rate	Amount (Rs.)
31	Labour for boring (horizontal) through any kind of soil for road crossing LDS including hire charges & labour for supply of subtable dia crossing upto full width road with necessary tools, trackles, inclu. Necessary arrangement for boring & pushing reqd. inclu fixing, jointing, pumping out accumulated water, lighting arrangement, sealing of two casing ends by B/W (1:4) etc. as per direction of EIC. (B/W to be given seperately)				
	a) 100 mm dia	7,000.00	mtr	369.62	25,87,340.00
	b) 125 mm dia	6,000.00	mtr	480.74	28,84,440.00
	c) 150 mm dia	4,800.00	mtr	553.40	26,56,320.00
	d) 200 mm dia	3,000.00	mtr	738.21	22,14,630.00
	e) 350 mm dia	600.00	mtr	1,348.65	8,09,190.00
	f) 400 mm dia	60.00	mtr	1,541.87	92,512.20
32	Retro-Reflectorised Traffic Signs				-
	Providing and fixing of retro- reflectorised cautionary, mandatory and informatory sign as per IRC :67 made of high intensity grade sheeting vide clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm x 75 mm x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing and Clause 801 of Specifications for Road & Bridge Works of MoRT&H (5th Revision)				-
	iii) 60 cm circular	26.00	Each	3,750.00	97,500.00
<b>Total Amount =</b>					<b>32,56,40,217.68</b>
<b>Add @18% GST =</b>					<b>5,86,15,239.18</b>
<b>Total =</b>					<b>38,42,55,456.86</b>
<b>Add @1% Cess =</b>					<b>38,42,554.57</b>
<b>Total =</b>					<b>38,80,98,011.43</b>
<b>Say=</b>					<b>38,80,98,011.00</b>



Superintending Engineer  
South-24-Pgns. W/S Circle  
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