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Contract Agreement

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THIS AGREEMENT made the 6th day of September, 2011, between **Guwahati Metropolitan Development Authority, Government of Assam, Guwahati, Assam, India** (hereinafter "the Employer"), of the one part, and **M/s. IVRCL Infrastructure & Projects Ltd., "MIHIR" H.No. 8-2-350/5/A/24/1B, Road No – 2, Banjara Hills, Hyderabad, India** (hereinafter "the Contractor"), of the other part:

WHEREAS the Employer desires that the Works known as Procurement of Works (Item Rate) for Supply, Installation and Commissioning of M.S. Pipes and HDPE Pipes & Installation and Commissioning of D.I. Pipes for Distribution Network in Ramsa Hill & Amiya Nagar of South Central Zone (Contract Identification No. GWSP/LCB/C#05) should be executed by the Contractor, and has accepted a Bid by the Contractor for the execution and completion of these Works and the remedying of any defects therein,

The Employer and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.

2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.

- (i) the Letter of Acceptance;
- (ii) the Letter of Technical Bid;
- (iii) the Letter of Price Bid, Priced Bill of Quantities and Schedule of Adjustment data;
- (iv) the addenda (following addenda as issued to the Bidders on the date mentioned);
- Addendum #1: dated March 03, 2011 Addendum #2: dated March 08, 2011
 - Addendum #3: dated March 15, 2011
 - Addendum #4: dated April 07, 2011
 - (v) the Particular Conditions;
- in the General Conditions;

- (vii) the Specification (as issued to the Bidder on Januray 20, 2011 including addenda as above);
- (Viii) the Drawings (as issued to the Bidder on Januray 20, 2011 including addenda as above);
- (ix) the completed Schedules (as submitted by the Bidder in Technical Bid);
- (X) Acknowledgment of Compliance with Guidelines for Procurement under Japanese ODA Loans; and
- (xi) Forms:
 - a) Performance Security
 - b) Advance Payment Security
 - c) Retention Money Security

3. In consideration of the payments to be made by the Employer to the Contractor as indicated in this Agreement, the Contractor hereby covenants with the Employer to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.

4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of India on the day, month and year indicated above.

cutive Officer ev. Authority 4 F

Signed by: Sri Preetom Saikia, CEO, GMDA for and on behalf of the Employer

Signed by: <u>Achip Chawthra</u> thy In 1

for and on behalf the Contractor

in the presence of

in the presence of

2011 Signature: Name: BHUYAN Designation: D Date: 01 nal Project Director Project Implementation Unit (P.I.U.) JICA funded Guwahati Water Supply Project

Signature: Name: J.S. PARIJAT Designation: ENGINEER (CIVIL) Date: 692011

OFFICE OF THE CHIEF EXECUTIVE OFFICER GUWAHATI METROPOLITAN DEVELOPMENT AUTHORITY BHANGAGARH, GUWAHATI-5

Letter of Acceptance

No. GMDA/JICA/22/2011/ 5

August 26, 2011

To:

M/s. IVRCL Infrastructure & Projects Ltd. "MIHIR" H.No. 8-2-350/5/A/24/1B Road No – 2, Banjara Hills Hyderabad – 500 034, India

This is to notify you that your Bid dated 20th April 2011 for execution of the Works (Item Rate) for Supply, Installation and Commissioning of M.S. Pipes and HDPE Pipes & Installation and Commissioning of D.I. Pipes for Distribution Network in Ramsa Hill & Amiya Nagar of South Central Zone (Contract Identification No. GWSP/LCB/C#05) for the Accepted Contract Amount of the equivalent of INR 830,629,405 (Rupees Eight Hundred and Thirty Million Six Hundred and Twenty Nine Thousand Four Hundred and Five Only), as corrected and modified in accordance with the Instructions to Bidders, is hereby accepted by our Agency.

You are requested to furnish the Performance Security within 28 days in accordance with the Conditions of Contract, using for that purpose one of the Performance Security Forms included in Section IX, Annexed to the Particular Conditions - Contract Forms, of the Bidding Document.

Authorized Signature:

(Preetom Saikia) PICSON

Name and Title of Signatory: Mr. Preetom Saikia, Chief Executive Officer GMDA Guwahati Metropolitan Dev. Authority Name of Agency: Guwahati Metropolitan Development Authority

Attachment: Contract Agreement

No. GMDA/JICA/22/2011/ 5 - A

August 26, 2011

Copy to:

- 1) The Project Director, Project Implementation Unit, JICA assisted GWSP, Guwahat
- 2) Japan International Cooperation Agency, JICA India Office, New Delhi, India
- 3) Project Management Consultant, Guwahati, India







Letter of Technical Bid

Date: v19 4 201

Invitation for Bid No.: GWSP/LCB/C-05/10-11/

To: The Chief Executive Officer, JICA ODA Loan Project, Guwahati Metropolitan Development Authority 3rd Floor, STATFED Building, GMCH Road, Bhangagarh, Guwahati - 781005, Assam, India

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Document, including Addenda No.: issued in accordance with Instructions to Bidders (ITB) 8;
 1/2,3,4
- (b) We offer to execute in conformity with the Bidding Document the following Works: Procurement of Works (Item rate) for Supply, Installation, and Commissioning of M.S. Pipes and HDPE Pipes & Installation and Commissioning of D.I Pipes for Distribution Network in Ramsa Hill & Amiya Nagar of South Central Zone (Contract Package No. C-05).
- (c) Our bid consisting of the Technical Bid and the Price Bid shall be valid for a period of 120 days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (d) We, including any subcontractors or suppliers for any part of the contract, have or will have nationalities from eligible countries, in accordance with ITB 4.2;
- (e) We, including any subcontractors or suppliers for any part of the contract, do not have any conflict of interest in accordance with ITB 4.3;
- (f) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process in accordance with ITB 4.3, other than alternative offers submitted in accordance with ITB 13;

Name : Dilip Gogoi In the capabity of IVRCL Infrastructures & Projects Ltd., Signed : and on behalf of IVRCL Infrastructures & Projects Ltd., Duly authorized to 19 4 2 Dated on : **Regd. Office :** M-22/3RT, Vijayanagar Colony, Hyderabad - 500 057, A.P., India. Tet. : 91-40-2334 3678 / 2334 3550 / 2334 8467 / 2334 5130 / 3093 1999 (30 Lines), Fax: 91-40-2334 5004. Grams:"VENCON" e-mail: info@ivrinfra.com, website: www.ivrcl.com Corporate Office : "MIHIR", 8-2-350/5/A/24/1-B & 2, WINGSW COMPANY ISO 9001 Road # 2, Panchavati Colony, Banjara Hills, Hyderabad - 500 034, A.P. India. 150 14001 180 1800 Tel: +91-40-2335 6613 / 15 / 18 / 21 / 51 to 55, 3093 1111 / 1444 (60 Lines), Fax: +91-40-2335 6693 Standards crtification Standards Eic. No. EMS:R91:129 OHSAS Certified Company QMS, E M Sr. OAC/R91.0470 OBS-R91.12 Guwahati Metropolitan Dev. A



IVRCL Infrastructures & Projects Ltd.

Mr. robal

Letter of Price Bid

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Date: 2.0/4/2.011 Loan No.: ID-P 201 Invitation for Bid No.: GWSP/LCB/C-05/10-11/

To:

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The Chief Executive Officer, JICA ODA Loan Project, Guwahati Metropolitan Development Authority 3rd Lloor, STATFED Building, GMCH Road, Bhangagarh, Guwahati - 781005, Assam, India

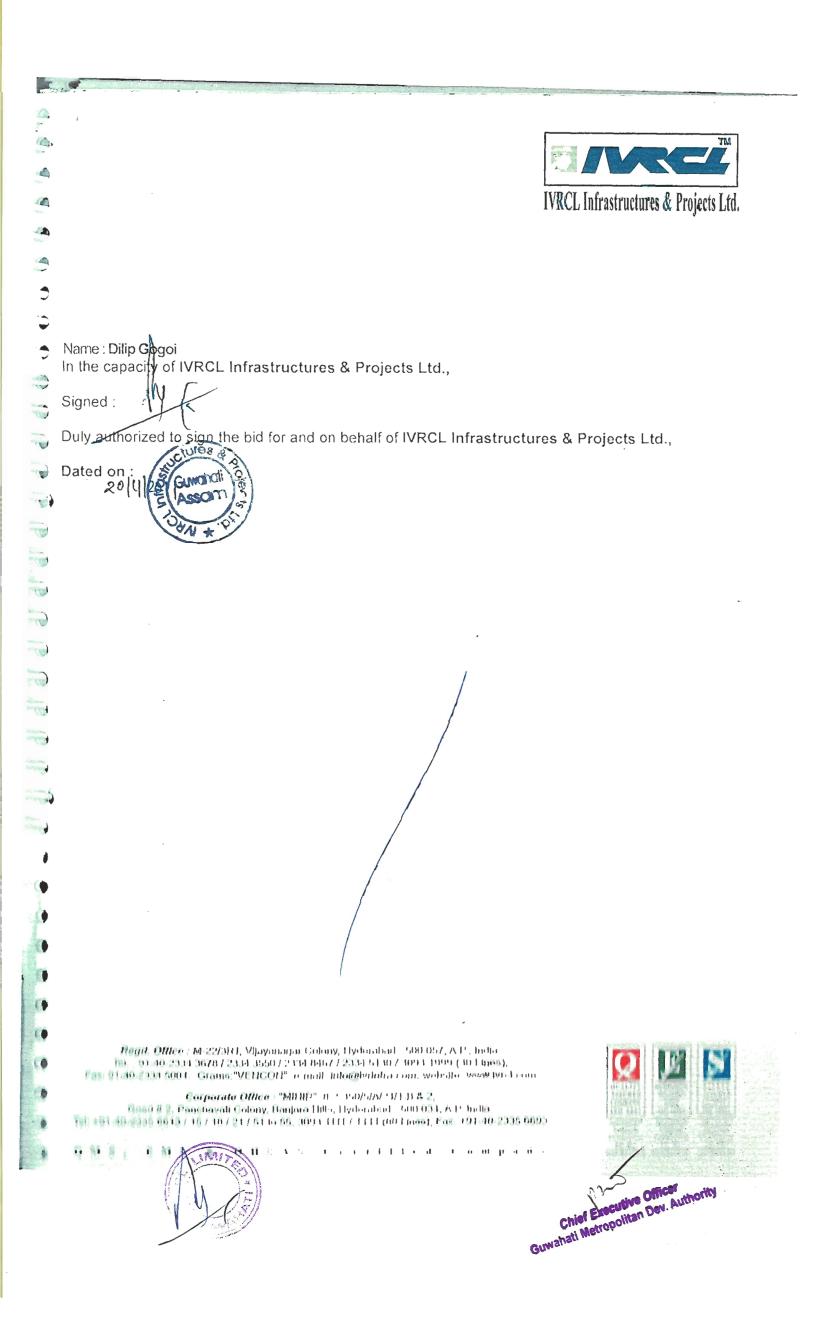
We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Document, including Addenda No.: $1, 2, 3, \ell$ issued in accordance with Instructions to Bidders (ITB) 8;
- (b) We offer to execute in conformity with the Bidding Document and Technical Bid submitted for the following Works: Procurement of Works (Item rate) for Supply, Installation, and Commissioning of M.S. Pipes and HDPE Pipes & Installation and Commissioning of D.I. Pipes for Distribution Network in Ramsa Hill & Amiya Nagar of South Central Zone;
- (c) The total price of our bid, excluding any discounts offered in item (d) below is $\frac{1}{2}$: $\frac{89,41,084,88'0'0}{0}$

(d) The discounts offered and the methodology for their application are: 7'10% (Server prime me on the graded value as pu &f.(e) above and it will be applicable on all Brill of grandities.

- 'e) Our bid shall be valid for a period of 180 days from the date fixed for the bid submission deadline in accordance with the Bidding Document, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (I) If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Document;
- (i) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a format contract is prepared and executed; and
- (h) We noderstand that you are not bound to accept the towest evaluated bid or any other bid that ven may receive.





	Contract Pac	kageNo C#05 : Summary of Priced Bill	of Quantities	
		Summary of Prices (in INR)		
Item No.	Item Description	Amount including local transportation, transit insurance etc., but (excluding all taxes and other levies payable, etc.)	Amount all taxes and other levies payable etc.	Amount (including local transportation, transit insurance, all taxes and other levies payable etc.)
1	Survey Work	1,821,600.00	-	1,821,600.00
2	Earthwork	99,180,320.00	-	99,180,320.00
3	Pipelines, Specials and Appurtenances	117,606,069.00	854,696.00	118,460,765.00
4	Pipe Jacking	54,049,480.00	-	54,049,480.00
5	Valves and Appurtenances	26,128,539.00	2,897,398.00	29,025,937.00
6	Valve Chambers	45,155,156.00	-	45,155,156.00
7	Miscellaneous Civil Work	16,875,710.00	_	16,875,710.00
8	Road Restoration	520,441,600.00	-	520,441,600.00
9	Testing, Trial Runs and Commissioning	8,107,500.00	-	8,107,500.00
	Subtotal (Items 1-8)	889,365,974.00	3,752,094.00	893,118,068.00
10-12	Day works	993,240.00		993,240.00
	GRAND TOTAL	890,359,214.00	3,752,094.00	894,111,308.00
	Offered Discount (7.10%)	63,215,504.19	266,398.67	63,481,902.87
	Discounted Price	827,143,709.81	3,485,695.33	830,629,405.13



Chief Executive Officer Authority

All Figures in INR

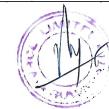
	Jantities					Quoted		
tem No.	Description	Unit	Quantity	Uni	t Rate		Amount	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
1	SURVEY WORK							
1.1	Topographical survey work using Total Station as directed by the Employer's Representative, including preparation and finalization of survey drawings and CADD files.	km	40	27600		1104000		1104000
1.2	Preparation of Working drawing including carrying out mecessary survey and investigation as per specification and ditected by Employer's Representative	km	260	2760		717600		717600
Subtotal	item No. 1					1821600	0	1821600
2	EARTHWORK							
2.1	Earth work for excavation of foundations, pipe trenches, valve chambers, thrust blocks, etc. in all kinds of ordinary soils such as murum, sand, sandy silt, clay, kankar etc. or in combination. Excavation shall include the removal of WBM roadway surfaces, brick surfacing, including dressing, compaction of the bottoms of the excavation, shoring and strutting wherever required, dewatering whenever required, removal of the excavated soil, stockpiling and disposal of surplus excavated soil off-site as directed by the EmDlover's Reoresentative.							
	Excavation will be paid for in the following segments:							
(a)	0 to 1.5 m from GL	m3	291000	83		24153000		24153000
(b)	above 1.5 m to 3.0 m depth from GL	m3	15500	90		1395000		1995000
(C)	above 3.0 m to 4.5 m depth from GL	m3	50	110		5500		5500
2.2	Earth work for excavation of foundations, pipe trenches, valve chambers, thrust blocks, etc. in all kinds of ordinary rock, Excavation shall include the removal of asphalt and concrete road surfacing, including dressing, compaction of the bottoms, shoring and strutting wherever required, dewatering whenever required, removal of the excavated rock, stockpiling and disposal of surplus excavated rock off-site as directed by the Employer's Representative.							
	Excavation will be paid for in the following segments:			-				
(a)	0 to 1.5 m from GL	m3	54500	166		9047000		9047000
(b)	above 1,5m to 3.0 m depth from GL	m3	3000	179		537000		537000
(C)	above 3.0 m to 4 6 m depth from GL	m3	10	207		2070		2070 Chief Execu Suwahati Metropo

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	Jantities					Quoted		
tem No	Description	Unit	Quantity	Uni	t Rate		Amount	
		_		Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
2.3	Earth work for excavation of foundations, pipe trenches, valve chambers, thrust blocks, etc. in all kinds of hard rock requiring blasting, Excavation shall include dressing, compaction of the bottoms, shoring and strutting wherever required, dewatering whenever required, removal of the excavated rock, stockpiling and disposal of surplus excavated rock off-site as directed by the Employer's Representative.							
	Excavation will be paid for in the following segments:							
(a)	0 to 1.5 m from GL	m3	20000	523		10460000		10460000
(b)	above 1.5m to 3.0 m depth from GL	m3	1000	551		551000		551000
2.4	Earth work for excavation of foundations, pipe trenches, valve chambers, thrust blocks, etc. in all kinds of hard rock (blasting prohibited), Excavation shall include dressing, compaction of the bottoms, shoring and strutting wherever required, dewatering whenever required, removal of the excavated rock, stockpiling and disposal of surplus excavated rock off-site as directed by the Employer's Representative.							
	Excavation will be paid for in the following segments:							
(a)	0 to 1.5 m from GL	m3	10	1703		17030		17030
(b)	above 1.5m to 3.0 m depth from GL	m3	10	1772		17720		17720
2.5	Backfilling of pipe trenches, foundations, etc. with approved graded excavated soil (select granular material), excluding rock, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.	m ³	263000	30		7890000		7890000
2.6	Backfilling of pipe trenches, foundations, etc. with approved graded sand, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.	m ³	75000	375		28125000		28125000
2.7	Backfilling of pipe trenches, foundations, etc. with approved graded gravel, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and standard drawings and as directed by the Employer's Representative.	m ³	30000	566		16980000		16980000
ubtota	Item No. 2					99180320	0	99180320
3	PIPELINES, SPECIALS AND APPURTENANCES							Guwanati Metropo



	Jantities		ļ			Quoted		
ltem No.	Description	Unit	Quantity	Uni	t Rate		Amount	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
3.1	Supplying spirally welded MS pipe with internal lining and external coating as per the specification of the following internal diameters and wall thicknesses. The rate shall include third party inspection, transportation, freight charges, loading, unloading and stacking at the project site, with the cost of all labor, material, taxes and duties.							
(a)	400 mm ID 6 mm thick (at railway crossing)	m	50	4726		236300		236300
(b)	700 mm ID 6 mm thick	m	409	9318	112	3811062	45808	3856870
(c)	750 mm ID 6 mm thick	m	2007	9856	120	19780992	240840	20021832
(d)	800 mm ID 6 mm thick	m	2570	9998	120	25694860	308400	26003260
(e)	900 mm ID 20 mm thick (at railway crossing)	m	40	35694		1427760		1427760
(f)	400 mm ID 20 mm thick (for trenchless pipe laying)	m	200	16295		3259000		3259000
(g)	500 mm ID 20 mm thick (for trenchless pipe laying)	m	100	20175		2017500		2017500
3.2	Supplying all types of MS Specials plain ended, socket ended and flanged as required with internal lining and external coating as per the specification, such as bends, tees, tapers, spool pieces, blind flanges, pieces for pipe connection, valve connections, dismantling joints, anchor bolts, straps, air vent pipe, etc. of different diameters, manufactured from Fe 410 grade steel. This item includes loading, transportation to the project site, unloading and stacking, etc. complete with cost of third party inspection, material, labor, taxes and duties.	MT	18	85509		1539162		1539162
3.3	Handling, aligning, laying and jointing MS pipes and specials to correct line and level in trenches. The item includes transportation of pipes and specials from the storeyard to the project site, stacking of pipe as per BIS requirements, loading, unloading, hoisting, lowering, marginal cutting and grinding wherever necessary, assembling, jointing, providing temporary supports, lining and coating at joints etc. for pipe of the following diameters and thicknesses. The rate also shall include radiography of field joints, field testing, etc. as specified and shown on the drawings and specification.							
(a)	400 mm ID 6 mm thick (at railway crossing)	m	50	654		32700		32700
(b)	700 mm ID 6 mm thick	m	409	588		240492		240492
(C)	750 mm ID 6 mm thick	m	2007	579		1162053		1162053
(d)	800 mm ID 6 mm thick	m	2570	571		1467470		1467470



All Figures in INR

Bill of Qu	antities					Quoted		
ltem No.	Description	Unit	Quantity	Uni	t Rate		Amount	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
3.4	Supplying DI Specials and fittings with plain, double socket, socket & flanged and double flanged end connections as required, with lining and coating as per the specification, and IS 9523 with EPDM rubber gaskets as per IS 5382 as required for successful completeion of the work. This item includes third party inspection, transportation, freight, loading and unloading, stacking etc. all complete for various sizes of DI specials and fittings as noted with the following end connections.							
	Tee's, Socket, collar, tail pieces, flanged tapers, socketed tapers, flanged spigot short pipes, flanged socket short piece, all bends, end caps, barrel piece, dismantling joints etc. required for suitable completion of the works.	МТ	156	112500		17550000		17550000
(b)	Double flanged pipe pieces, required for suitable completion of works.	MT	27	118750		3206250		3206250
3.5	Handling, aligning, laying and jointing of Employer furnished K-9 DI pipe to other pipe and to Contractor furnished fittings and specials, with EPDM rubber O-rings (as per IS 5382) and flange gaskets (as per IS 12288) and the specifications. This item includes transportation of pipes, specials and fittings from the storeyard to the project site, stacking of pipe and fittings as per BIS requirements, loading, unloading, hoisting, lowering, marginal cutting and grinding wherever necessary, assembling, jointing, providing temporary supports etc., all complete with approved equipment, for pipe of the following diameters.							
(a)	100 mm ID DI - K9 pipe	m	197442	66		13031172		13031172
(b)	150 mm ID DI - K9 pipe	m	12440	91		1132040		1132040
(c)	200 mm ID DI - K9 pipe	m	8543	132		1127676		1127676
(d)	250 mm ID DI - K9 pipe	m	4497	165		742005		742005
(e)	300 mm ID DI - K9 pipe	m	6169	238		1468222		1468222
(f)	400 mm ID D! - K9 pipe	m	5714	323		1845622		1845622
(K)	500 mm ID DI - K9 pipe	m	449	424		190376		190376
(h)	600 mm ID DI - K9 pipe	m	4350	516		2244600		2244600
3.6	Supplying of PN10 HDPE (PE80) pipe including all specials confirming to IS 4984 and the specifications, including third party inspection, all taxes and duties, transportation, freight charges, loading and unloading, conveyance to the project site and stacking with cost of all labor and material for following pipe diameters.							
(a)	110 mm OD HDPE PE-80	m	1278	447	9	571266	11502	582768



GWSP/LCB/C#05

Chief Executive Officer Guwahati Metropolitan Dev, Authority

All Figures in INR

sill of Qu	antities					Quoted		
tem No.	Description	Unit	Quantity	Uni	t Rate		Amount	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
(b)	125 mm OD HDPE PE-80	m	14883	581	11	8647023	163713	8810736
(c)	160 mm OD HDPE PE-80	m	639	950	18	607050	11502	618552
(d)	200 mm OD HDPE PE-80	m	939	1479	29	1388781	27231	1416012
(e)	250 mm OD HDPE PE-80	m	300	2303	45	690900	13500	704400
(f)	315 mm OD HDPE PE-80	m	200	3662	71	732400	14200	746600
(g)	355 mm OD HDPE PE-80	m	200	4630	90	926000	18000	944000
3.7	Handling, aligning, laying and jointing of PN10 HDPE (PE80) pipes with specials by butt welding / spigot joints confirming to IS and specifications. The item includes transportation of pipes and specials from store yard to site, stacking of pipe as per BIS, loading, unloading, hoisting, lowering, cutting and grinding wherever necessary, assembling, jointing, providing temporary supports etc., all complete with approved equipment, for pipes of following diameters.							
(a)	110mmOD HDPE PE-80	m	1278	43		54954		54954
(b)	125 mm OD HDPE PE-80	m	12783	54		690282		690282
(C)	160 mm OD HDPE PE-80	m	639	61		38979		38979
(d)	200 mm OD HDPE PE-80	m	639	80		51120		51120
Subtotal	Item No. 3					117606069	854696	118460765
4	PIPE JACKING							
4.1	Pipe jack for Railway crossing with Jacking and Pushing method. The item include pushing jointing following diameter MS pipe of required length, construction of Receiving and Jacking pit with suitable shoring and strutting (if required), including installation of jacking platform, thrust resistant arrangement of required capacity including , hydraulic jacking with required accessories, required excavation inside the jacking pipe and disposal the same, etc. all complete as per drawing, specification and as directed.							
(a)	Jacking and pushing of 900 mm ID 20 mm thick MS pipe	m	40	48142		1925680		1925680
4.2	Laying of pipe and jointing by trenchless technology including construction of pit with required accessories, all civil and mechanical works, disposal of excess earth, etc. all complete as per specification and instruction of Employer's representative.							
(a)	125 OD HDPE PERO PNIO	m	2100	10991		23081100		23081100 Grief Executive O Grief Executive O anati Metropolitan D



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All Figures in INR

of Quantities					Quoted		
n No. Description	Unit	Quantity	Uni	t Rate		Amount	
			Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
b) 200 OD HDPE PE80 PN 10	m	300	19735		5920500		5920500
d) 250 OD HDPE PE80 PN 10	m	300	19735		5920500		5920500
d) 315 OD HDPE PE80 PN 10	m	200	24045		4809000		4809000
e) 355 OD HDPE PE80 PN 10	m	200	24045		4809000		4809000
(f) 400 ID MS Pipe	m	200	22367		4473400		4473400
g) 500 ID MS Pipe	m	100	31103		3110300		3110300
total Item No. 4					54049480	0	54049480
5 VALVES AND APPURTENANCES							
Providing and supplying of following diameters Cast iron double flanged end Sluice valve PN 1.6 as per IS 14864 with end cap and all accessories required for fixing and jointing, and shall include anti-corrosive painting etc. all complete. Th rate shall include all local and central taxes, third party inspection, transportation freight charges, loading and unloading, conveyance to storeyard and stacking th same, with cost of all labour and material. The item shall be as per specification drawing and as directed.	or e n, e.						
(a) 80 mm dia (for Fire hydrant)	Nos.	21	9931	1408	208551	29568	238119
(b) 100mmdia	Nos.	1030	14358	2035	14788740	2096050	16884790
(c) 150 mm dia	Nos.	45	22260	3155	1001700	141975	1143675
(d) 200 mm dia	Nos.	17	35069	4971	596173	84507	680680
(e) 250 mm dia	Nos.	7	48303	6847	338121	47929	386050
(f) 300 mm dia	Nos.	20	70359	9974	1407180	199480	1606660
Handling, aligning and installing in true to line and level cast iron PN 1.6 rate double flanged Sluice Valves (IS 14864) of the following diameters. This iter includes transportation of valves and accessories from the storeyard to th project site, loading, unloading, hoisting, lowering, assembling and jointin including the cost of all jointing materials such as rubber gaskets, nuts, bolts, etc and providing temporary supports, as per the specifications and drawings.	n e g						
(a) 80 mm dia (for Fire hydrant)	Nos.	21	2640		55440		55440
(b) 100 mm dia	Nos.	1030	3300		3399000		3399000
(c) 150 mm dia	Nos.	45	3960		178200		178200 Chief Executiv vahati Metropolitz



GWSP/LCB/C#05

Bill of Qu	antities		ļ			Quoted			j
ltem No.	Description	Unit	Quantity	Uni	t Rate		Amount		
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total	
(d)	200 mm dia	Nos.	17	5445		92565		92565	
(e)	250 mm dia	Nos.	7	8085		56595		56595	
(f)	300 mm dia	Nos.	20	9900		198000		198000	
5.3	Providing and supplying of following diameters double flanged Butterfly valves PN 1.6 (manually operated) as per IS 13095 with all accessories, including approved anti-corrosive painting. The rate shall include all local and central taxes, third party inspection, transportation, freight charges, loading, unloading, conveyance to storeyard and stacking the same, with cost of all labour, and material. The item shall be as per specification, drawing and as directed.								
(a)	400 mm diameter	Nos.	6	80284	11380	481704	68280	549984	
(b)	500 mm diameter	Nos.	1	97929	13882	97929	13882	111811	
(C)	600 mm diameter	Nos.	3	129910	18415	389730	55245	444975	
5.4	Handling, aligning, and fixing in true to line and leve' following diameters and rating double flanged Butterfly valves PN 1.6 (manually opereted as per IS 13095) including cost of required jointing material such as rubber packing, nuts bolts etc. The item includes transportation of valves and accessories from store yard to site, loading, unloading, hoisting, lowering, grinding wherever necessary, assembling and jointing, providing temporary supports etc., all complete with approved equipment, for valves of following diameters, for all lead and lift. The item shall be as per specification, drawing and as directed.								
(a)	400 mm diameter	Nos.	6	14850		89100		89100	
(b)	500 mm diameter	Nos.	1	26400		26400		26400	
(C)	600 mm diameter	Nos.	3	33000		99000		99000	
5.5	Providing and supplying of following diameters of Double chamber Air valves with in built sluice valve PN 1.6 rating with flanged ends as per IS 14845, with all accessories required, including anti-corrosive painting etc. all complete. The rate shall include all local and central taxes, third party inspection, transportation, freight charges, loading and unloading, conveyance to store yard and stacking the same, with cost of all labour, and material. The item shall be as per specification, drawing and as directed.								
(a)	80 mm dia	Nos.	47	20733	2939	974451	138133	1112584	and the second se
(b)	100 mm dia	Nos.	1	26219	3717	26219	3717	29936	officer
(b)	100 mm dia	Nos.	1	26219	3717	26219	3717	1112584 29936 Cniel Erecuti Gunali Matropol	ve Officer tan Dev. A

Unit Rate Applica Taxes Duties, e 32863 4658 32863 4658 5280	s, Basic Rate (CIP) etc. 3 131452 248160 6600 31680	Amount Applicable Taxes, Duties, etc. 18632	Total 150084 248160 6600 31680
Dasic Rate (CIP) Taxes Duties, e 32863 4658 5280 - 6600 - 7920 -	s, Basic Rate (CIP) etc. 3 131452 248160 6600 31680	Taxes, Duties, etc.	150084 248160 6600
5280 6600 7920	248160 6600 31680	18632	248160 6600
6600 7920	6600 31680		6600
6600 7920	6600 31680		6600
7920	31680		
			31680
18108 0			
18108 0			
	36216	0	36216
27260 0	81780	0	81780
41319 0	123957	0	123957
55803 0	55803	0	55803
79109 0	553763	0	553763
3300	6600		6600
3960	11880		11880
5445	16335		16335
	3300 3960	3300 6600 3960 11880	3300 6600 3960 11880

	lantities			· · · ·		Quoted		
ltem No.	Description	Unit	Quantity	Uni	t Rate		Amount	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
	250mm dia	Nos.	1	8085		8085		8085
	300mm dia	Nos.	7	9900		69300		69300
5.9	Providing and supplying Fire hydrants of 80mm diameter as per IS 909, consisting single flanged outlet oblique type hydrant valve, and shall include cost of anti-corrosive painting etc. all complete. The rate shall include all local and central taxes, third party inspection, transportation, freight charges, loading and unloading, conveyance to site and stacking the same, with cost of all labour, and material. The item shall be as per specification, drawing and as directed.	Nos.	21	6250	0	131250	0	131250
5.10	Handling, aligning, and fixing Fire hydrants true to line and level. The item includes transportation of valves and accessories from store yard to site, loading, unloading, hoisting, lowering, grinding wherever necessary, assembling and jointing with cost of jointing material such as rubber packing, nuts bolts, providing temporary supports etc., all complete with approved equipment, for all leads and lifts. The item shall be as per specification, drawing and as directed.	Nos.	21	5280		110880		110880
ubtotal	Item No. 5					26128539	2897398	29025937
6	VALVE CHAMBERS							
6.1	Construction of RCC and Brick masonry chambers for valves* hydrants, flow meters etc. including cost of PCC and RCC work, cost of supply and bending and binding of steel with required shuttering, cost of brick work with plaster from inside and outside, precast slabs and supply and installation of SFRC frame and coves wherever required, including all the miscellaneous items of work, but excluding the supply and installation of pipes and specials, valves etc. The item shall be as per specification, drawing and as directed.							
(a)	Chamber for Sluice valve TYPE S1	Nos.	737	33907		24989459		24989459
(b)	Chamber for Sluice valve TYPE S2	Nos.	10	36849		368490		368490
(c)	Chamber for Wash out valve TYPE W1	Nos.	186	33907		6306702		6306702
W	Chamber for Wash out valve TYPE W2	Nos.	151	32373		4888323		4888323
(e)	Chamber for Butterfly valve TYPE B1	Nos.	6	102353		614118		614118
(f)	Chamber for Butterfly valve TYPE B2	Nos.	4	124250		497000		497000
(g)	Chamber for Air valve TYPE A1	Nos.	47	47512	-	2233064		2233064 71844 Cniet Executiv Cniet Executiv Guwahati Metropoli
(h)	Chamber for Air valve TYPE A2	Nos.	1	71844		71844		71844



All Figures in INR

n No. Description	Unit						
		Quantity	Uni	t Rate		Amount	
			Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
(i) Chamber for Air valve TYPE A3	Nos.	4	91952		367808		367808
(j) Chamber for Fire hydrant TYPE F1	Nos.	21	33798		709758		709758
k) Chamber for Pressure reducing valve/ Flowmeter TYPE P1	Nos.	33	52853		1744149		1744149
(I) Chamber for Pressure reducing valve/ Flowmeter TYPE P2	Nos.	5	112094		560470		560470
m) Chamber for Pressure reducing valve/ Flowmeter TYPE P3	Nos.	1	119267		119267		119267
n) Chamber for Pressure reducing valve and flow meter TYPE P4	Nos.	8	65740		525920		525920
o) Chamber for Pressure reducing valve and flow meter TYPE P5	Nos.	8	144848		1158784		1158784
total Item No. 6					45155156	0	45155156
7 MISCELLENEOUS CIVIL WORK							
7.1 Plain Cement Concrete Work							
Providing and placing plain cement concrete (PCC) of one of the following grades for thrust blocks, anchor blocks, floatation blocks, etc. with 20-40mm stone aggreate (crusher broken) including finishing the surface, shuttering and staging curing etc. as per the specifications and drawings and as directed by the Employer's Representative. This is Work not included in Item 6.							
a) Grade M15 concrete	m3	1750	7060		12355000		12355000
b) Grade M20 concrete	m3	20	8589		171780		171780
7.2 Reinforced Cement Concrete Work							
Providing and placing reinforced cement concrete (RCC) of one of the following grades with 10-20 mm stone aggregate (crusher broken) including shuttering and staging, curing etc. as per the specifications and drawings and as directed by the Employer's Representative. This is Work not included in Item 6.	i						
a) Grade M20 concrete	m3	20	8589		171780		171780
b) Grade M25 concrete	m3	24	8875		213000		213000
7.3 Concrete Reinforcement							
Providing and fabricating steel reinforcement with Fe 415 grade steel for RCC work including straightening, cuting, bending, placing in position and tying (including cost of tie wire) .taxes and duties, transportation etc. all complete, as per specifications and drawings and as directed by the Employer's Representative. This is Work not included in Item 6.	kg	4000	70		280000		280000 Chiel Execution

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Bill of Qu	antities					Quoted		
ltem No.	Description	Unit	Quantity	Uni	t Rate		Amount	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
7.4	Brick Masonry Work							
	Construction of Brick Masonry for sub/superstructure of 230/350 mm thick walls using cement mortar with a cement to sand ratio of 1:6. This item includes the cost of transportation of all materials, labor, scaffolding, curing etc. as per specifications and drawings and as directed by the Employer's Representative. This is Work not included in Item 6.		50	5282		264100		264100
7.5	Plastering Work							
(a)	Providing and applying cement sand plaster 12 mm thick in a single coat using cement mortar with a cement to sand ratio of 1:4 without neeru finish to concrete or brick surfaces including scaffolding and curing as directed by the Employer's Representative. This is Work not included in Item 6.	m2	50	158		7900		7900
(b)	Providing and applying cement sand plaster 20 mm thick in a single coat using cement mortar with a cement to sand ratio of 1:4 without neeru finish to concrete or brick surfaces including scaffolding and curing as directed by the Employer's Representative. This is Work not included in Item 6.	m?	50	197		9850		9850
7.6	Providing and laying boulder soling with boulders 100-200mm size in foundation, packing with locally available mooram and sand, including watering, dressing and leveling, all complete as per drawing and specification and as directed.	m3	20	1380		27600		27600
7.7	Providing and laying 100 mm thick brick soling for foundations and under flooring with best quality jhama brick, sand packed and laid to level after preparing the subgrade including all labor and materials and dewatering if necessary, complete and as per the specifications and drawings and as directed by the Employer's Representative. This is Work not included in Item 6.	m²	100	1827		182700		182700
7.8	Structural Steel Work							
	Providing and fabricating structural steel work in rolled sections including joists, channels, angles, beams, etc. including cutting, fabricating, grinding, hoisting, erecting, fixing in position making bolted/welded connections, applying coatings etc., as per the specifications and drawings and as directed by the Employer's Representative.		42000	76		3192000		3192000
Subtotal	Item No. 7					16875710	0	16875710
8	ROAD RESTORATION							
8.1	Reconstruction of Bituminous Asphalt Roads							
a)	Providing and laying of Granular sub base (GSB), as per specification drawing and as directed	m3	65,000	1757		114205000		114205000
	AN AN AN						G	114205000 Criel Executiv Criel Executiv Uniahati Metropolita



All Figures in INR

Bill of Qu	lantities					Quoted		
tem No.	Description	Unit	Quantity	Uni	t Rate		Amount	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
b)	Providing and laying of Prime Coat, as per specification drawing and as directed	m2	320,000	34		10880000		10880000
C)	Providing and laying of Wet mix macadam (WMM) , as per specification drawing and as directed	m3	80,000	2730		218400000		218400000
d)	Providing and laying of Dense graded bituminous macadam (DBM), as per specification drawing and as directed	m3	1,200	9311		11173200		11173200
e)	Providing and laying of Semi dense bituminous concrete (SDBC), as per specification drawing and as directed	m3	600	9737		5842200		5842200
f)	Providing and laying of Tack coat (TC), as per specification drawing and as directed	m2	46,000	13		598000		598000
g)	Providing and laying of Bituminous macadam (BM), as per specification drawing and as directed	m3	2,300	7944		18271200		18271200
h)	Providing and laying of Premix carpet (PC), as per specification drawing and as directed	m2	295,000	201		59295000		59295000
8.2	Reconstruction of WBM Roads							
a)	Providing , laying .spreading and compacting stone aggregates of specific sizes as per specification and drawing to water bound macadam 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 stone screenings & binding material, and completer as per specification drawing and as directed	m3	20,000	3091		61820000		61820000
8.3	Reconstruction of Concrete Roads							
	Providing, placing and finishing Cement Concrete roads to match the existing roadway which was removed, if directed by the Employer's Representative . Grade M20 concrete shall be used and placeid to the same depth as the existing roadway surface. A screeded finish shall be applied.	m3	1,600	8395		13432000		13432000
8.4	Reconstruction of Brick Roads							
	Providing and laying of bricks on edge for road restoration on earth subgrade. The bricks shall be on edge, diagonally placed, and gap filled up with sand, all complete, as per specification and drawings.	m2	7,500	870		6525000		6525000
Subtotal	Item No. 8					520441600	0	520441600
9	TESTING, TRIAL RUNS AND COMMISSIONING							
9.1	Hydraulic testing of the distribution system piping of the folowing diameters in segments at the required test pressures. This item includes the costs of water, labor, pumping, etc. all complete, as per the specifications and as directed by the Employer's Representative.							15
	1)			-				Cniet Erecuti Cniet Erecuti Guwahati Metropoli

Bill of Qu	antities					Quoted		
ltem No.	Description	Unit	Quantity	Unit	t Rate		Amount	
				Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Basic Rate (CIP)	Applicable Taxes, Duties, etc.	Total
(a)	80 mm - 200mm internal diameter	km	234	13800		3229200		3229200
(b)	Above 200 mm - 300 mm internal diameter	km	11	34500		379500		379500
(C)	Above 300 mm - 500 mm internal diameter	km	6	48300		289800		289800
(d)	Above 500 mm - 800 mm internal diameter	km	9	69000		621000		621000
9.2	Trial Runs and Commissioning including the cost of labour, electricity, etc., all complete as per specification and as directed by the Employer's Representative.	km	260	13800		3588000		3588000
Subtotal	Item No. 9					8107500	0	8107500
	GRAND TOTAL (Items 1-9)					889365974	3752094	893118068



Chief Executive Officer Guwahati Metropolitan Dev. Authority

ltem No	Description	Quantity	Unit	Unit Rate Local	Amount Local	
	The following provisional items and quantities are to be priced by the Bidder. used for any Dayworks required as instructed under Clause 13.6 of Section V Refer to the Notes following the schedule.					
10	Daywork - Labor			Rate	Amount	
10.01	Skilled Labor	50	man days	345	17250	
10.02	Unskilled Labor	50	man days	276	13800	
10.03	Carpenter	20	man days	483	9660	
10.04	Blacksmith	20	man days	552	11040	
10.05	Mason	20	man days	414	8280	
10.06	Pipelayer / Fitter	50	man days	690	34500	
10.07	Welder	20	man days	621	12420	
Subtotal	I Item No. 10				106950	
11	Daywork - Material					
11.01	Cement - ordinary portland type (43 Grade) in 50 kg bags	50	bags	455	22750	
					0	
					0	
					0	
					0	
11.02	Provide Fe 415 steel reinforcing bars up to 20 mm diameter as per the specification	2,000	kg	59	118000	
11.03	Fine aggregate for concrete as per the specification	20	m³	828	16560	/
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All Figures in INR

Guwahati Metropolitan Dev. Authority

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ltem	uantities - Daywork			Unit Rate	Amount
No	Description	Quantity	Unit	Local	Local
11.04	Coarse aggregate for concrete as per the specification	20	m3	2208	44160
11.05	First class bricks as per the specification	250	No.	8	2000
11.06	Primer paint as per the specification	10	liters	110	1100
11.07	Epoxy paint as per the specification	10	liters	276	2760
11.08	Welding rods in 5 kg packs	10	packs	3450	34500
Subtotal	Item No. 11				241830
12	Daywork - Equipment				
12.01	Dump Truck (min capacity 4 m ³)	20	days	1380	27600
12.02	Water tank truck (min capacity 11,000 liters)	20	days	1104	22080
12.03	Mobile crane (up to 10 ton capacity)	10	days	6900	69000
12.04	Wheeled bucket excavator (min capacity 0.45 m ³)	20	days	11040	220800
12.05	Wheeled front-end loader (min capacity 0.75 m ³)	10	days	6900	69000
12.06	Compressor (at least 3.2 m ³ /minute capacity)	10	days	4140	41400
12.07	Generator (at least 15 kw capacity)	20	days	6900	138000
12.08	Dewatering Pump (at least 60 m ³ /hour capacity and 100 mm diameter discahrqe) with DiDing and valvina	10	days	828	8280
12.09	Concrete Mixer (at least 0.25 m ³ capacity)	20	days	2070	41400
12.10	Portable vibratory plate or ramming compactor	10	days	690	6900
Subtotal	Item No. 12				644460
GRAND	TOTAL (Items 10-12)				993240



PELINES, SPECIALS AND APPURTENANCES upplying spirally welded MS pipe with internal lining and external bating as per the specification of the following internal diameters and all thicknesses. The rate shall include third party inspection, ansportation, freight charges, loading, unloading and stacking at the oject site, with the cost of all labor, material, taxes and duties. 00 mm ID 6 mm thick (at railway crossing) 00 mm ID 6 mm thick 00 mm ID 6 mm thick (at railway crossing) 00 mm ID 20 mm thick (at railway crossing) 00 mm ID 20 mm thick (for trenchless pipe laying) 00 mm ID 20 mm thick (for trenchless pipe laying)	Basic Amount (INR)	a 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	25% 25% 25% 25%	b 3.75% 3.75% 3.75% 3.75% 3.75%	c1 63.75% 63.75% 63.75%	0%	
upplying spirally welded MS pipe with internal lining and external bating as per the specification of the following internal diameters and all thicknesses. The rate shall include third party inspection, ansportation, freight charges, loading, unloading and stacking at the toject site, with the cost of all labor, material, taxes and duties. 20 mm ID 6 mm thick (at railway crossing) 20 mm ID 6 mm thick 50 mm ID 6 mm thick (at railway crossing) 50 mm ID 20 mm thick (at railway crossing)		2 2 2 2 2 2	25% 25% 25%	3.75% 3.75%	63.75% 63.75%	0%	
bating as per the specification of the following internal diameters and all thicknesses. The rate shall include third party inspection, ansportation, freight charges, loading, unloading and stacking at the oject site, with the cost of all labor, material, taxes and duties. 20 mm ID 6 mm thick (at railway crossing) 20 mm ID 6 mm thick 50 mm ID 20 mm thick (at railway crossing) 50 mm ID 20 mm thick (for trenchless pipe laying)		2 2 2 2 2 2	25% 25% 25%	3.75% 3.75%	63.75% 63.75%	0%	
00 mm ID 6 mm thick 50 mm ID 6 mm thick 00 mm ID 6 mm thick 00 mm ID 20 mm thick (at railway crossing) 00 mm ID 20 mm thick (for trenchless pipe laying)		2 2 2 2 2 2	25% 25% 25%	3.75% 3.75%	63.75% 63.75%	0%	
50 mm ID 6 mm thick 00 mm ID 6 mm thick 00 mm ID 20 mm thick (at railway crossing) 00 mm ID 20 mm thick (for trenchless pipe laying)		2 2 2	25% 25%	3.75%	63.75%		
00 mm ID 6 mm thick 00 mm ID 20 mm thick (at railway crossing) 00 mm ID 20 mm thick (for trenchless pipe laying)		2	25%				
00 mm ID 20 mm thick (at railway crossing) 00 mm ID 20 mm thick (for trenchless pipe laying)		2	0.000	3 75%	00 750/		
00 mm ID 20 mm thick (for trenchless pipe laying)		Sectors in which is in	2001	0.70701	63.75%	0%	
		2	25%	3.75%	63.75%	0%	
00 mm ID 20 mm thick (for trenchless pipe laying)			25%	3.75%	63.75%	0%	
		2	25%	3.75%	63.75%	0%	
upplying all types of MS Specials plain ended, socket ended and anged as required with internal lining and external coating as per the becification, such as bends, tees, tapers, spool pieces, blind flanges, eces for pipe connection, valve connections, dismantling joints, nchor bolts, straps, air vent pipe, etc. of different diameters, anufactured from Fe 410 grade steel. This item includes loading, ansportation to the project site, unloading and stacking, etc. complete ith cost of third party inspection, material, labor, taxes and duties.		2	25%	3.75%	63.75%	0%	
upplying DI Specials and fittings with plain, double socket, socket & anged and double flanged end connections as required, with lining and bating as per the specification, and IS 9523 with EPDM rubber gaskets sper IS 5382 as required for successful completeion of the work. his item includes third party inspection, transportation, freight, loading nd unloading, stacking etc. all complete for various sizes of DI becials and fittings as noted with the following end connections.							C.2
an an ith up an ban ban ban ban	cification, such as bends, tees, tapers, spool pieces, blind flanges, es for pipe connection, valve connections, dismantling joints, nor bolts, straps, air vent pipe, etc. of different diameters, nufactured from Fe 410 grade steel. This item includes loading, sportation to the project site, unloading and stacking, etc. complete cost of third party inspection, material, labor, taxes and duties. plying DI Specials and fittings with plain, double socket, socket & ged and double flanged end connections as required, with lining and ting as per the specification, and IS 9523 with EPDM rubber gaskets ber IS 5382 as required for successful completeion of the work. item includes third party inspection, transportation, freight, loading unloading, stacking etc. all complete for various sizes of DI	cification, such as bends, tees, tapers, spool pieces, blind flanges, es for pipe connection, valve connections, dismantling joints, nor bolts, straps, air vent pipe, etc. of different diameters, nufactured from Fe 410 grade steel. This item includes loading, sportation to the project site, unloading and stacking, etc. complete cost of third party inspection, material, labor, taxes and duties. plying DI Specials and fittings with plain, double socket, socket & ged and double flanged end connections as required, with lining and ting as per the specification, and IS 9523 with EPDM rubber gaskets per IS 5382 as required for successful completeion of the work. item includes third party inspection, transportation, freight, loading unloading, stacking etc. all complete for various sizes of DI	cification, such as bends, tees, tapers, spool pieces, blind flanges, es for pipe connection, valve connections, dismantling joints, nor bolts, straps, air vent pipe, etc. of different diameters, nufactured from Fe 410 grade steel. This item includes loading, sportation to the project site, unloading and stacking, etc. complete cost of third party inspection, material, labor, taxes and duties.	cification, such as bends, tees, tapers, spool pieces, blind flanges, es for pipe connection, valve connections, dismantling joints, nor bolts, straps, air vent pipe, etc. of different diameters, nufactured from Fe 410 grade steel. This item includes loading, sportation to the project site, unloading and stacking, etc. complete cost of third party inspection, material, labor, taxes and duties.	cification, such as bends, tees, tapers, spool pieces, blind flanges, es for pipe connection, valve connections, dismantling joints, nor bolts, straps, air vent pipe, etc. of different diameters, nufactured from Fe 410 grade steel. This item includes loading, sportation to the project site, unloading and stacking, etc. complete cost of third party inspection, material, labor, taxes and duties.	cification, such as bends, tees, tapers, spool pieces, blind flanges, es for pipe connection, valve connections, dismantling joints, nor bolts, straps, air vent pipe, etc. of different diameters, nufactured from Fe 410 grade steel. This item includes loading, sportation to the project site, unloading and stacking, etc. complete cost of third party inspection, material, labor, taxes and duties.	Diffication, such as bends, tees, tapers, spool pieces, blind flanges, es for pipe connection, valve connections, dismantling joints, nor bolts, straps, air vent pipe, etc. of different diameters, nufactured from Fe 410 grade steel. This item includes loading, sportation to the project site, unloading and stacking, etc. complete cost of third party inspection, material, labor, taxes and duties. plying DI Specials and fittings with plain, double socket, socket & ged and double flanged end connections as required, with lining and ting as per the specification, and IS 9523 with EPDM rubber gaskets per IS 5382 as required for successful completeion of the work. a: teem includes third party inspection, transportation, freight, loading unloading, stacking etc. all complete for various sizes of DI

1 of 4

5.5.

Contract PackageNo.-5 : Schedule of Adjustment Data

ltem No.	Description	Basic Amount (INR)	Non- adjust	able	Labour portion (L)		Other Materials (MA)	Equipment operation (E)
(a)	Tee's, Socket, collar, tail pieces, flanged tapers, socketed tapers, flanged spigot short pipes, flanged socket short piece, all bends, end caps, barrel piece, dismantling joints etc. required for suitable completion of the works.			25%	3.75%	63.75%		
(b)	Double flanged pipe pieces, required for suitable completion of works.			25%	3.75%	63.75%	0%	7.5%
3.6	Supplying of PN10 HDPE (PE80) pipe including all specials confirming to IS 4984 and the specifications, including third party inspection, all taxes and duties, transportation, freight charges, loading and unloading, conveyance to the project site and stacking with cost of all labor and material for following pipe diameters.							
(a)	110 mm OD HDPE PE-80		Explicit	25%	3.75%	0%	63.75%	7.5%
(b)	125 mm OD HDPE PE-80		121111	25%	3.75%	0%	63.75%	7.5%
(C)	160 mm OD HDPE PE-80		177110	25%	3.75%	0%	63.75%	7.5%
(d)	200 mm OD HDPE PE-80		les la la	25%	3.75%	0%	63.75%	7.5%
(e)	250 mm OD HDPE PE-80		A deste:	25%	3.75%	0%	63.75%	7.5%
(f)	315 mm OD HDPE PE-80		a transfer	25%	3.75%	0%	63.75%	7.5%
(g)	355 mm OD HDPE PE-80		1.000	25%	3.75%	0%	63.75%	7.5%
	Subtotal							
4.0	PIPE JACKING							
	Pipe jack for Railway crossing with Jacking and Pushing method . The item include pushing jointing following diameter MS pipe of required length, construction of Receiving and Jacking pit with suitable shoring and strutting (if required), including installation of jacking platform, thrust resistant arrangement of required capacity including , hydraulic jacking with required accessories, required excavation inside the jacking pipe and disposal the same, etc. all complete as per drawing, specification and as directed.							
4.1	Jacking and pushing of 900 mm ID 20 mm thick MS pipe		Network 1	25%	3%	64.00%	0%	8.0%
								W office
B/C#	05							8.0% Wetter entropolitan Dev. A

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ltem No.	Description	Basic Amount (INR)	Non- adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
	Subtotal						
5.0	VALVES AND APPURTENANCES						
5.1	Providing and supplying of following diameters Cast iron double flanged ends Sluice valve PN 1.6 as per IS 14864 with end cap and all accessories required for fixing and jointing, and shall include anti- corrosive painting etc. all complete. The rate shall include all local and central taxes, third party inspection, transportation, freight charges, loading and unloading, conveyance to storeyard and stacking the same, with cost of all labour and material. The item shall be as per specification, drawing and as directed.						
(a)	80 mm dia (for Fire hydrant)		25%	3.75%	63.75%	0%	7.5%
(b)	100 mm dia		25%	3.75%	63.75%	0%	7.5%
(C)	150 mm dia		25%	3.75%	63.75%	0%	7.5%
(d)	200 mm dia		25%	3.75%	63.75%	0%	7.5%
(e)	250 mm dia		25%	3.75%	63.75%	0%	7.5%
(f)	300 mm dia		25%	3.75%	63.75%	0%	7.5%
5.3	Providing and supplying of following diameters double flanged Butterfly valves PN 1.6 (manually operated) as per IS 13095 with all accessories, including approved anti-corrosive painting. The rate shall include all local and central taxes, third party inspection, transportation, freight charges, loading, unloading, conveyance to storeyard and stacking the same, with cost of all labour, and material. The item shall be as per specification, drawing and as directed.						
(a)	400 mm dia		25%	3.75%	63.75%	0%	7.5%
(b)	500 mm dia		25%	3.75%	63.75%	0%	7.5%
(C)	600 mm dia		25%	3.75%	63.75%	0%	7.5%
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ltem No.	Description	Basic Amount (INR)	Non- adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
5.5	Providing and supplying of following diameters of Double chamber Air valves with in built sluice valve PN 1.6 rating with flanged ends as per IS 14845, with all accessories required, including anti-corrosive painting etc. all complete. The rate shall include all local and central taxes, third party inspection, transportation, freight charges, loading and unloading, conveyance to store yard and stacking the same, with cost of all labour, and material. The item shall be as per specification, drawing and as directed.						
(a)	80 mm dia		25%	3.75%	63.75%	0%	7.5%
(b)	100 mm dia		25%	3.75%	63.75%	0%	
(C)	150 mm dia		25%	3.75%	63.75%		
5.7	Providing and supplying of following diameters Pressure Reducing valve with double flanged ends and shall including anti-corrosive painting etc. all complete. The rate shall include all local and central taxes, third party inspection, transportation, freight charges, loading and unloading, conveyance to storeyard and stacking the same, with cost of all labour, and material. The item shall be as per specification, drawing and as directed.						
	100mm dia		25%		63.75%	0%	7.5%
	150mm dia		25%		63.75%	0%	7.5%
	200mm dia		25%	3.75%	63.75%	0%	7.5%
	250mm dia		25%	3.75%	63.75%	0%	7.5%
	300mm dia		25%	3.75%	63.75%	0%	7.5%
5.7	Providing and supplying Fire hydrants of 80mm diameter as per IS 909, consisting single flanged outlet oblique type hydrant valve, and shall include cost of anti-corrosive painting etc. all complete. The rate shall include all local and central taxes, third party inspection, transportation, freight charges, loading and unloading, conveyance to site and stacking the same, with cost of all labour, and material. The item shall be as per specification, drawing and as directed.		25%	3.75%	63.75%	0%	7.5%
	Subtotal						and the second s
	TOTAL					ومسارقهم والمعارين	V AIVE Office
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		Civil Work					
ltem No.	Description	Basic Amount in INR	Non- adjustable	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
			а	b	c1	c2	d
2.0	EARTHWORK						
2.1	Earth work for excavation of foundations, pipe trenches, valve chambers, thrust blocks, etc. in all kinds of ordinary soils such as murum, sand, sandy silt, clay, kankar etc. or in combination. Excavation shall include the removal of WBM roadway surfaces, brick surfacing, including dressing, compaction of the bottoms of the excavation, shoring and strutting wherever required, dewatering whenever required, removal of the excavated soil, stockpiling and disposal of surplus excavated soil off-site as directed by the Employer's Representative.						
	Excavation will be paid for in the following segments:						
(a)	0 to 1.5 m from GL		25%			40%	1:
(b)	above 1.5 m to 3.0 m depth from GL		25%	20%		40%	1:
(C)	above 3.0 m to 4.5 m depth from GL		25%	20%		40%	1:
2.2	Earth work for excavation of foundations, pipe trenches, valve chambers, thrust blocks, etc. in all kinds of ordinary rock, Excavation shall include the removal of asphalt and concrete road surfacing, including dressing, compaction of the bottoms, shoring and strutting wherever required, dewatering whenever required, removal of the excavated rock, stockpiling and disposal of surplus excavated rock off- site as directed by the Employer's Representative.						
	Excavation will be paid for in the following segments:						
(a)	0 to 1.5 m from GL		25%	20%		40%	15
(b)	above 1.5m to 3.0 m depth from GL		25%	20%		40%	15
(c)	above 3.0 m to 4.5 m depth from GL		25%	20%		40%	1:



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ltem	Description	Civil Work	Non-	Labour		Other Materials	Equipment
No.	Description	Basic Amount in INR	adjustable	portion (L)	Steel (MS)	(MA)	operation (E)
			а	b	c1	c2	d
2.3	Earth work for excavation of foundations, pipe trenches, valve chambers, thrust blocks, etc. in all kinds of hard rock requiring blasting, Excavation shall include dressing, compaction of the bottoms, shoring and strutting wherever required, dewatering whenever required, removal of the excavated rock, stockpiling and disposal of surplus excavated rock off-site as directed by the Employer's Representative.						
	Excavation will be paid for in the following segments:						
(a)	0 to 1.5 m from GL		25%	20%		40%	15%
	above 1.5m to 3.0 m depth from GL		25%	20%		40%	159
2.4	Earth work for excavation of foundations, pipe trenches, valve chambers, thrust blocks, etc. in all kinds of hard rock (blasting prohibited), Excavation shall include dressing, compaction of the bottoms, shoring and strutting wherever required, dewatering whenever required, removal of the excavated rock, stockpiling and disposal of surplus excavated rock off-site as directed by the Employer's Representative.						
	Excavation will be paid for in the following segments:						
(a)	0 to 1.5 m from GL		25%	20%		40%	15%
(b)	above 1.5m to 3.0 m depth from GL		25%	20%		40%	15%
2.5	Backfilling of pipe trenches, foundations, etc. with approved graded excavated soil (select granular material), excluding rock, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative.		25%	20%		40%	15%
2.6	Backfilling of pipe trenches, foundations, etc. with approved graded sand, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and as directed by the Employer's Representative		25%	20%		40%	15%

	Description	Basic Amount	Non-	Labour			
		in INR	1	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
			а	b	c1	c2	d
	Backfilling of pipe trenches, foundations, etc. with approved graded gravel, including placing in layers not exceeding 20 cm in depth each, and compacting each layer, complete as per the specification and standard drawings and as directed by the Employer's Representative.		25%	20%		40%	15%
	Subtotal						
3.0	PIPELINES, SPECIALS AND APPURTENANCES						
	Handling, aligning, laying and jointing MS pipes and specials to correct line and level in trenches. The item includes transportation of pipes and specials from the storeyard to the project site, stacking of pipe as per BIS requirements, loading, unloading, hoisting, lowering, marginal cutting and grinding wherever necessary, assembling, jointing, providing temporary supports, lining and coating at joints etc. for pipe of the following diameters and thicknesses. The rate also shall include radiography of field joints, field testing, etc. as specified and shown on the drawings and specification.						
(a)	400 mm ID 6 mm thick (at railway crossing)		25%	20%		40%	15%
(b)	700 mm ID 6 mm thick		25%	20%		40%	15%
	750 mm ID 6 mm thick		25%	20%		40%	15%
	800 mm ID 6 mm thick		25%	20%		40%	15%
	Handling, aligning, laying and jointing of Employer furnished K-9 DI pipe to other pipe and to Contractor furnished fittings and specials, with EPDM rubber O-rings (as per IS 5382) and flange gaskets (as per IS 12288) and the specifications. This item includes transportation of pipes, specials and fittings from the storeyard to the project site, stacking of pipe and fittings as per BIS requirements, loading, unloading, hoisting, lowering, marginal cutting and grinding wherever necessary, assembling, jointing, providing temporary supports etc., all complete with approved equipment, for pipe of the following diameters.						uner crecutive Officer Inati Metropolitan Dev. A

tem No.	Description	Basic Amount in INR	Non- adjust	able	Labour portion (L)	Steel (MS)	Other Materials (MA)	Equipment operation (E)
			a		b	c1	c2	d
(a)	100 mm DN DI - K9 pipe		Sec. Contest	25%			40%	
(b)	150 mm DN DI - K9 pipe		的问题是	25%			40%	
(C)	200 mm DN DI - K9 pipe			25%	20%		40%	15%
(d)	250 mm DN DI - K9 pipe		A. Las	25%	20%		40%	15%
(e)	300 mm DN DI - K9 pipe			25%	20%		40%	15%
(f)	400 mm DN DI - K9 pipe			25%	20%		40%	15%
(g)	500 mm DN DI - K9 pipe			25%	20%		40%	15%
(ĥ)	600 mm DN DI - K9 pipe			25%	20%		40%	15%
3.7	Handling, aligning, laying and jointing of PN10 HDPE (PE80) pipes with specials by butt welding / spigot joints confirming to IS and specifications. The item includes transportation of pipes and specials from store yard to site, stacking of pipe as per BIS, loading, unloading, hoisting, lowering, cutting and grinding wherever necessary, assembling, jointing, providing temporary supports etc., all complete with approved equipment, for pipes of following diameters.							
(a)	110 mm OD HDPE PE-80		Nakaka .	25%	20%		40%	15%
(b)	125 mm OD HDPE PE-80		Sec. St.	25%	20%		40%	15%
(c)	160 mm OD HDPE PE-80		a di ki	25%	20%		40%	15%
(d)	200 mm OD HDPE PE-80		No. La Co	25%	20%		40%	15%
	Subtotal							
4.0					1			
4.2	Laying of pipe and jointing by trenchless technology including construction of pit with required accessories, all civil and mechanical works, disposal of excess earth, etc. all complete as per specification and instruction of Employer's representative.							
(a)	125 OD HDPE PE80 PN10		141.485	25%	20.00%		40%	15.0%
(b)	200 OD HDPE PE80 PN 10		and the set	25%	20.00%		40%	
(d)	250 OD HDPE PE80 PN 10 A			25%			40%	15.0%
(d)			2192159	25%	20.00%		40%	Chief Executive Office Wahati Metropolitan Dev:

ltem No.	Description	Basic Amount in INR	Non- adjustable	Labour portion (L)	Steel (MS)	(MA)	Equipment operation (E)
(e)	355 OD HDPE PE80 PN 10		25%			40%	
(f) (g)	400 ID MS Pipe		25% 25%			40%	
(g)			2070	20.0078		40%	15.0%
	Subtotal						
5.0	VALVES AND APPURTENANCES						
5.2	Handling, aligning and installing in true to line and level cast iron PN 1.6 rated double flanged Sluice Valves (IS 14864) of the following						
	diameters. This item includes transportation of valves and accessories						
	from the storeyard to the project site, loading, unloading, hoisting,						
	lowering, assembling and jointing including the cost of all jointing						
	materials such as rubber gaskets, nuts, bolts, etc., and providing						
	temporary supports, as per the specifications and drawings.						
(a)	80 mm dia (for Fire hydrant)		25%	20%		40%	15%
(b)	100 mm dia		25%	20%		40%	15%
(C)	150 mm dia		25%	20%		40%	15%
(d)	200 mm dia		25%	20%		40%	15%
(e)	250 mm dia		25%	20%		40%	15%
(f)	300 mm dia		25%	20%		40%	15%
5.4	Handling, aligning, and fixing in true to line and level following						
	diameters and rating double flanged Butterfly valves PN 1.6 (manually				, ,		
	opereted as per IS 13095) including cost of required jointing material						
	such as rubber packing, nuts bolts etc. The item includes						
	transportation of valves and accessories from store yard to site,						
	loading, unloading, hoisting, lowering, grinding wherever necessary,						
	assembling and jointing, providing temporary supports etc., all complete						
	with approved equipment, for valves of following diameters, for all lead						
	and lift. The item shall be as per specification, drawing and as directed.						
(a)	400 mm diameter		25%			40%	15%
(b)	500 mm diameter		25%	20%		40%	Lniet Executive Dev

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