

G M D A ' S C O P Y

CONTRACT AGREEMENT

BETWEEN

**GUHATI METROPOLITAN DEVELOPMENT
AUTHORITY**

AND

GAMMON INDIA LIMITED

GAMMON HOUSE, VEER SAVARKAR MARG, PRABHADEVI, MUMBAI - 400025.

FOR

**Design & Construction of a Complete new 107 MLD
Capacity Potable Water Supply Infrastructure Project on
Turnkey Basis for Guwahati City (South Guwahati Part).**

AT

Guwahati.

JOB NO: 8728

WSS NO: 1295

Ref. No. P/9460
Date: 03rd January, 2009



To,
The Chief Executive Officer,
Guwahati Metropolitan Development Authority,
Bhangagarh, Guwahati - 781005.

Dear Sir,

Sub: Design & Construction of a Complete new 107 MLD Capacity Potable Water Supply Infrastructure Project on Turnkey Basis for Guwahati City (South Guwahati Western Part).

We are thankful to you for issuing us the above referred Tender document and we are pleased to submit our offer for the same with relevant enclosures as required.

Our tender is in accordance with the conditions stipulated in the tender document, thereby accompanied by the following:

Technical Bid (Volume - 1; Part-A)

1. Power of Attorney.
2. Copy of EMD Submission Receipt of Rs. 2.5 Crores.
3. Affidavit.
4. Bidder's credentials.
5. Copy of Experience Certificates of previous work done.
6. General, Financial Information, Technical & Additional Information (From 1 to 9) duly filled and the Summary Sheet.
7. List of Plant equipments owned by company.
8. List of senior personnel.
9. ISO Certificate.
10. Tax relevant certificates.
11. Copy of Annual Report 2005 - 06 to 2007 - 08.
12. Incorporation certificate.
13. Memorandum & Article of Association.
14. Solvency certificate from the bank.
15. Registration Certificates with various state & Central Government Dept.
16. Quality Assurance and Quality Control Manual
17. Safety Health & Environment.
18. Organization chart of the company.
19. Preliminary site organization chart.
20. Bar chart & CPM.
21. Corrigendum & Clarifications issued by GMDA.
22. Data Sheets duly filled.

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Continued
Chief Executive Officer
Guwahati Metropolitan Dev. Authority

GAMMON INDIA LIMITED

An ISO 9001 Company

GAMMON HOUSE, VEER SAVARKAR MARG, P. O. BOX NO. 9129, PRABHADEVI, MUMBAI-400 025, INDIA
Telephone : 91- 22 - 6744 4000 • 2430 6761 • Fax : 91 - 22 - 2430 0221 • 2430 0529
E-Mail : gammon@gammonindia.com • Website : www.gammonindia.com



Technical Bid (Volume-1, Part-B).

Financial Bid.

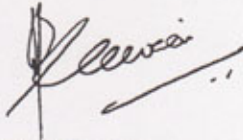
As advised in the Pre bid Meeting, we have furnished Price bid for Operation & Maintenance in a separate sealed cover.

Our Bid Validity is for 180 days. We trust that you will find our offer interesting; also we would remain at your service for any further clarifications/information on the same.

Thanking you,


Yours faithfully,

For Gammon India Limited.



A.D. Alawani
(Vice President-Marketing)

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Chief Executive Officer
Punehathi Metropolitan Dev. Authority

GAMMON INDIA LIMITED

An ISO 9001 Company

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E-Mail : gammon@gammonindia.com • Website : www.gammonindia.com





**GUWAHATI METROPOLITAN DEVELOPMENT AUTHORITY
(GMDA)**

**GOVERNMENT OF ASSAM
GUWAHATI**




TENDER DOCUMENT FOR

**DESIGN AND CONSTRUCTION OF
A COMPLETE NEW 107 MLD CAPACITY
POTABLE WATER SUPPLY INFRASTRUCTURE PROJECT
ON TURNKEY BASIS FOR GUWAHATI CITY
(SOUTH GUWAHATI WESTERN PART)**

VOLUME - II

FINANCIAL BID

ISSUED TO M/S Gannon India Ltd.


Chief Executive Officer
GMDA



**GUWAHATI METROPOLITAN DEVELOPMENT AUTHORITY
(GMDA)
GOVERNMENT OF ASSAM
GUWAHATI**

TENDER DOCUMENT FOR

**DESIGN AND CONSTRUCTION OF
A COMPLETE NEW 107 MLD CAPACITY
POTABLE WATER SUPPLY INFRASTRUCTURE PROJECT
ON TURNKEY BASIS FOR GUWAHATI CITY
(SOUTH GUWAHATI WESTERN PART)**

VOLUME - II

FINANCIAL BID



[Signature]
Chief Executive Officer 4
Guwahati Metropolitan Dev. Authority



Design and Construction of a complete new 107 MLD Capacity
potable urban water supply infrastructure project on turnkey
basis for Guwahati City (South Guwahati Western Part)"

CONTENTS OF VOLUME – II

FINANCIAL BID DOCUMENT

- 1.0 **Financial Bid System and Coverage**
 - 1.1 Design and Construction
 - 1.2 Financial Bid Evaluation System

- 2.0 **Price Offer Components**
 - 2.1 Design and Construction
 - 2.2 Total Offer Upto Commissioning

- 3.0 **Schedule of Works**
 - 3.1 Item Rate Offer



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Chief Executive Officer
Guwahati Water Supply & Sewerage Authority

1.0 FINANCIAL BID SYSTEM AND COVERAGE

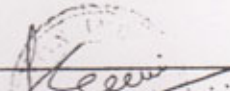
Financial offer consists of: a) Total offer for entire job specified in Technical Bid Document including trial run and commissioning, and b) Item rate offer as per Schedule of Works. Financial offer for the project encompasses all design works viz. hydraulic, structural, computerized monitoring system, PLC design and all related designs for supply of materials, equipments, accessories, instruments and construction of all works as per schedule of works including all sorts of transportation and safety costs, taxes, octroi & other fees & charges if payable to state government & central govt. and commissioning the water supply infrastructure system as detailed in technical bid document.

The above offers constitute the works the bidders shall maintain upto defect liability period in terms of the requirements described in technical bid document.

1.1 Design and Construction

Offers are invited for the following works:


Sl. No.	Design Work	Sl. No.	Construction Works
1	Design of technical report format, progress report etc as described in technical bid document.	1	Construction of all civil, structural works, installation of all electro- mechanical components, instruments as described in technical bid document with supplying all labour and materials.
2	Preparation of maps and working and final drawing and making inventory after completion of the work including preparation of O&M manual.	2	Installation of control measures system in flow and pressure in the process of water supply infrastructures system.
3	Design of software for computerized distribution management and other information and reporting packages including metering and billing.	3	Supply and installation of all management system as described in the technical bid document.
4	Hard core Design - i) Hydraulic system for water supply infrastructure components ii) Electro-mechanical components and system design iii) Pipe network analysis & design iv) Water hammer analysis including location of pressure release valves in the distribution system. v) Civil and structural design of all construction activities required for creation of the water supply infrastructure as described in technical bid documents including construction facilities and protective works. vi) Design of other auxiliary facilities to be provided for full completion of the project. vii) Testing, trial run & one year defect liability period.	4	Supply and installation of water quality test laboratory with water meter test and calibration bench.
		5	All works including power supply, energisation and commissioning of the entire water supply system as per tender including supply and installation of consumer water meters as per tender packages.


Signature of the Authorized Person
of the Contractor

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Chief Executive Officer
Guwahati Metropolitan Development Authority




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Chief Executive Officer
Guwahati Metropolitan Dev. Authority

1.2 Financial Bid Evaluation System

Total cost offered for the entire works under design and construction phase including one year's defect liability period after commissioning in terms of the requirements specified in the technical bid document will be arrived at after going through each financial bid (who have scored minimum 70% marks in technical evaluation only). Lowest bidder may be asked to negotiate to arrive at agreed cost. **Authority reserves the right to accept or reject any or all tenders.**

2.0 PRICE OFFER COMPONENTS

2.1 Design and Construction

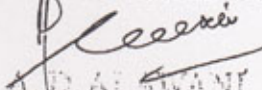
Rates to be quoted by the bidders both for total offer and item rate offer as in Clause 2.2 and Clause 3.1.

2.2 Total Offer Upto Commissioning

I/ we hereby offer our price bid for the project "Design and construction of a complete 107 MLD capacity potable water supply infrastructure project on a turnkey basis for Guwahati City (South Guwahati Western Part)". Our price offer is inclusive of defect liability period in terms of the requirements specified in the technical bid document at a total cost mentioned below.

Description	Quoted Price
1. With intake system of Jackwell type construction and pumping station constructed on the top of the well. Clarification will be done by inclined Plate Settlers and filtration by R.G. filter beds having nozzle bases false bottom, air & water mixed back wash system with all other works as per Tender Document.	In figure Rs. <u>3497</u> Million In words, Rs. <u>Three thousand, four hundred ninety Seven Millions.</u>

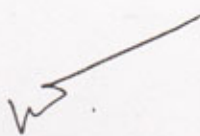
PER PRO GAMMON INDIA LTD.


A. D. AL SWANI
VICE PRESIDENT (MKTG)
Signature of the Authorised Person
of the Contractor

Chief Executive Officer
Guwahati Metropolitan Development Authority

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Chief Executive Officer
Guwahati Metropolitan Dev. Authority

3.0 SCHEDULE OF WORKS

As per details given in Technical Bid Document for the requirement of item rate offer to be quoted under Clause 3.1 below subjected to the requirements of Technical Bid Document.

3.1 Item Rate Offer

Sl. No.	Description of Items	Approximate Quantity	Price Offered in Rs.
1	(a) (i) Supply of Pipes, specials, Fittings, Accessories as per specifications prescribed in relevant national and international codes & specifications described in technical bid document including testing at factory of production including marking of manufacture detail, pressure rating not below PN 16 including coating, lining & transportation and loading, unloading at Employers/ Contractors site store as will be directed by the Engineer all complete.		
	DI K9 DN 100mm	210945.33m	312,444,000
	DI K9 DN 150mm	51336.06m	111,496,000
	DI K9 DN 200mm	47401.43m	131,650,000
	DI K9 DN 250mm	39979.85m	146,857,000
	DI K9 DN 300mm	28807.75m	134,709,000
	DI K9 DN 350mm	22222.26m	130,696,000
	DI K9 DN 400mm	13644.49m	96,296,000
	DI K9 DN 450mm	9244.21m	78,292,000
	DI K9 DN 500mm	10321.90m	102,290,000
	DI K9 DN 600mm	9736.08m	125,664,000
	MS 700mm	6895.29m	87,903,000
	MS 750mm	8819.20m	118,135,000
	MS 800mm	69.43m	1,021,000
	MS 900mm	7907.70m	153,254,000
	(ii) HDPE pipes, fittings, specials and accessories with special jointing system as described in technical bid document and as per relevant national & international codes of practices socket and spigot joints and spline inserting made of EPDM material with grooves in socket and spigot as per relevant ASTM standard used for drinking water with NSF certification including coating, lining & transportation and loading, unloading at Employers/ Contractors site store as will be directed by the Engineer all complete.		
	100mm	11171.00m	2,645,000
	160mm	5941.56m	3,127,000
	(iii) Spirally welded MS pipes of steel Fe 410 grade, thickness 12.5 mm with coating both inside and outside as described in Technical Bid Document, coating done in factory after thorough cleaning as per technical specification including coating, lining & transportation and loading, unloading at Employers/ Contractors site store as		

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Signature of the Authorised Person
of the ContractorChief Executive Officer
Guwahati Metropolitan Development Authority

Chief Executive Officer
Guwahati Metropolitan Development Authority

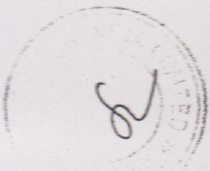
Sl No.	Description of Items	Approximate Quantity	Price Offered in Rs.		
	will be directed by the Engineer all complete.				
	1400 mm (Raw water Main)	3318.00m	116,206,000		
	1400 mm (Clear water Pumping Main)	4452.00m	155,921,000		
(b)	Supply of DI valves national/ international make and as per IS Standard of all sizes of type gate valves (non rising spindle), Butterfly valves, check valves and other control valves for automatic closing devices, air admission & venting of all sizes of pressure ratings not below PN 16 of different sizes as shown in network drawing including transportation and loading unloading at Employers/ Contractors site store as will be directed by the Engineer all complete.	1532 Nos	47,642,000		
(c)	Supply of full bore electro magnetic flow meters fitted with flow and pressure sensors with data logger & data transfer instruments and accessories as per ISO and National/International standards fitted with flanged and reducer and enlarger & additional flanged to match the DI and MS pipes at both ends of different sizes of pipes for recording flow & pressure data 24 hours and transmitting the same of to monitoring station of water supply management and control centre including installation & construction of RCC chambers all complete and as per specifications prescribed in the technical bid document. The data logger unit shall have battery back up including coating, lining & transportation and loading unloading at Employers/ Contractors site store as will be directed by the Engineer all complete.				
	System	Pipe Size (mm)	Full bore flow & pressure meter size (mm)		
	Raw water Pumping Main	1400	1000	2 Nos	2,588,000
	Clear water Pumping Main	1400	1000	3 Nos	3,635,000
	Gravity/ Boosting Main	900	700	6 Nos	4,268,000
		750	500	2 Nos	973,000
		700	500	4 Nos	1,945,000
		600	400	8 Nos	2,740,000
		500	400	8 Nos	2,740,000
		450	300	7 Nos	1,710,000
		400	250	5 Nos	1,102,000
		350	200	7 Nos	1,308,000
		300	200	6 Nos	1,121,000
		250	200	4 Nos	747,000
		200	150	1 No	144,000
		100	100	1 No	125,000



Sl. No.	Description of Items	Approximate Quantity	Price Offered in Rs.
(d)	Setting up computerized distribution centre by providing at least 5 computers, 5 set of electronic pipe locations, 5 set of leak detection equipments of which 2 sets shall be leak-noise correlators, sounding rods & other accessories with two vehicles (covered) for carrying man & materials (instruments and arrangement of manpower) for daily running the system obtaining reports in suitable formats including updating pipe network updating as & when necessary	One Item	73,669,000
(e)	Supply of Electro-magnetic consumer water meters of different sizes (Refer Section E, Clause 10 of Technical Document) of good quality as per IS Standard.		
	Domestic Class B of 15 mm & 20 mm	17609 Nos	34,748,000
	Commercial meter Class B of sizes 25mm to 40mm	492 Nos	3,084,000
	Industrial Water meter with Strainer Class B of sizes 50 mm to 200 mm	1425 Nos	23,711,000
(f)	A water test laboratory be set up for the tests of samples of category-I water works and supply of equipment and manpower as per provisions of CPHEE manual on water supply & treatment in Appendix 15.9, 15.8, 15.7 an 15.1 including coating, lining & transportation and loading unloading at Employers/ Contractors site store as will be directed by the Engineer all complete.	One Item	2,256,000
(g)	Supply of raw water pumps For well intake system - Centrifugal Vertical Turbine Pumps single stage of varying head (15m-25m) with capacity of 521 lps drawing raw water containing silt & fine south of Brahmaputra river water with stainless steel impeller on continuous run basis as per design to be approved by the department and as per technical specification of NIT pump efficiency shall not be less than 86% including coating, lining & transportation and loading unloading at Employers/ Contractors site store as will be directed by the Engineer all complete.	6 Nos	18,118,000
(h)	Supply of clear water pumps - Horizontal split casing centrifugal pumps with stainless steel impeller continuous run type as per design & specification of Tender Document including coating, lining & transportation and loading unloading at Employers/ Contractors site store as will be directed by the Engineer all complete.		
	i) Clear water Pumps 388lps and 130m head	6 Nos	11,206,000
	ii) Do.. Do.. for booster Pumps 33.33lps and 130m head	2 Nos	295,000
	iii) Do.. Do.. for booster Pumps 131lps and 105m head	2 Nos	1,219,000
	iv) Supply of low lift pumps (15 m head) of 521lps	5 Nos	4,834,000

Signature of the Authorised Person
ContractorChief Executive Officer
Guwahati Metropolitan Development Authority

 Chief Executive Officer
 Guwahati Metropolitan Development Authority

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Description of Items	Approximate Quantity	Price Offered in Rs.
(i) Supply of electric motors as per design & specification of Tender Document		
i) For raw water Pumps – 220KW AC – 3 phase 6.6KV supply	6 Nos	1,64,50,000
ii) For clear water Pumps – 750KW AC - 3 phase 6.6KV supply	6 Nos	26,044,000
iii) For Booster Pumps – 75KW AC – 3 phase 6.6KV supply	2 Nos	640,000
iv) For Booster Pumps – 200KW AC – 3 phase 6.6KV supply	2 Nos	5,210,000
v) For low lift pumps – 150KW AC – 3 phase 6.6KV supply	5 Nos	1,682,000
(j) Installation of Pump – Motor sets with designed suction delivery pipes of maximum 10m length each side (of dia varying between 300mm – 500mm) with fitting fixing suction side gate valve and delivery side DF with non-return valves, pump well mouths & other accessories & instruments and as per installation design to be approved by the Department for raw water, clear water & Booster Pumping system with auxiliary like bridge Pumps priming etc as would be required including statutory testing, machine foundation power connection all complete	21 Sets	1,02,52,000
(k) Supply of electrical items except motors but including HT switch Gear, LT panel/ MCC, Distribution transformer, FCMA Neutral, Soft starters, 6.6KV capacitor panel, HT cables, LT power and control cables cable terminals, Light Fixtures, cable Trans, Misc local control system etc., installation testing with all auxiliary station of raw water, clear water and Booster Pumping systems including coating, lining & transportation and loading unloading at Employers/ Contractors site store as will be directed by the Engineer all complete.	One Item	33,490,000
(l) Supply and installation of other electro-mechanical items for those pumping stations viz. i) EOT Crane – 3T – 10T Capacity ii) MS Header Pipes (1200 – 1600m) with inside & outside epoxy coating – (8m – 10m length) iii) MS Ladder for each pump – Motor Sets & MS railing as per design to be approved by the Department including coating, lining & transportation and loading unloading at Employers/ Contractors site store as will be directed by the Engineer all complete.	One Item	40,053,000
(m) Supply and installation of		
i) Chlorination system at clear water pumping with 2 nos. vacuum feed chlorination each of 25kg/hr. Capacity including all safety measures required for dealing with hazardous chemicals	One Item	1,880,000

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Signature of the Authorised Person
of the Contractor



Chief Executive Officer
Guwahati Metropolitan Development Authority

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Chief Executive Officer
Guwahati Metropolitan Dev. Authority



Sl. No.	Description of Items	Approximate Quantity	Price Offered in Rs.
	including 3 ton manual traveling hoist with all other accessories as per design to be approved by the department including supply of 10nos. of chlorine tonners.		
	ii) Design , Supply and installation of other booster chlorination system one each of two booster pumping status and at each of 5 nos zonal chlorinators with all accessories and safety devices including supplying of Chlorine tonners/ Cylinders	One Item	1,648,000
2	Laying of Pipe lines of DI & MS & HDPE of different diameters as per Schedule 4(a) (I - iii) excavation in types of soil, rocks, removal of excess soil, water, bedding where necessary, back filling, fixing all valves & specials , jointing per technical specification testing, construction of valve chambers for transmission (Pumping & Gravity mains), thrust blocks, making manholes in large dia transmission mains with saddle & blank flange fixing all kinds of valves including supplying necessary flanges (MS/DI) , construction of Pipe bridges where necessary (Lengths as per schedule 4(a) all complete for successful operation as per technical bid document.	One Item	196,000,000
3	Installation of full bore electro- magnetic flow meters with flow & pressure sensors and all arrangement of data transfer through GSM as per quantity and description of schedule item 4©, operation & maintenance for 1 year after commissioning with supply of necessary M.S> specials with M.S. flanges, gaskets, bolts & nuts and construction of underground RCC chamber of 1.5m x 2.5m x 2m for all 64 units including necessary power connection (220v AC) nearby some within 50m as would be shown at site including execution, dewatering excess soil removal of excess soil all complete as per detail in technical bid document	64 Nos	20,574,000
4	Design and Construction of RCC (M30 grade) (3 Nos. Jack well type) raw water intake structure on river Brahmaputra at site located by the department and as per drawing, soil investigation reports enclosed (however , successful bidder may carry out such works) and construction of Pump house on Jackwell with foundation, pipe support platform and bridge including supplying fitting fixing all suction & delivery pipes for 6 nos. pump motor sets, electro-mechanical accessories, common header, valves, flow meters, construction of coffer dam and retaining wall (lengths shown in the enclosed drawing), excavation in all soils, rocks, drilling, RCC piling, construction of RCC channels as shown in the drawing (Successful bidder shall carry out structural design and all other electrical-	One Item	315,534,430

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Signature of the Authorised Person
of the ContractorChief Executive Officer
Guwahati Metropolitan Development Authority

Chief Executive Officer
Guwahati Metropolitan Dev. Authority

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Sl. No.	Description of Items	Approximate Quantity	Price Offered in Rs.
	mechanical design for complete intake system, energisation, trial run commissioning all complete including one year defect liability period with guaranteed abstraction of raw water during all weather as per concept drawing.		
	Design (both hydraulic & structural) and construction of complete new 107 MLD capacity water treatment Plant (including site development by filling with river sand of average 2.25m depth) comprising of components of Aerator, Collecting wells, Pre-setting tanks, Pumping station (low lift pumps) with all pump motor set for lifting raw water to aerator level, Flash Mixers, flocculators, Inclined Plate Settlers, RG filter beds with false bottom nozzle based backwash system including supplying fitting fixing of all accessories, piping, valves, instruments, Air blowers, compressors in modular concept described in component sizing in Technical Bid Document, other structures of chemical house, chlorine contact chamber, clear water pumping (Civil, electrical, mechanical works) including all accessories roads, boundary wall drain, plumbing arrangements, lighting (flood lighting and boundary lighting), arrangements etc. complete as per Technical Bid Document and Concept Drawing.	One Item	212,042,570
	Design & construction of other building and structures including clear water sump, pump house, all electrical- mechanical works lighting arrangements for chemical House, Coagulant godown, Chlorine contact chamber, sludge sump, backwash administrative building, water & drainage, sump & pump houses, plumbing works all complete including access roads etc. all complete as described in Technical Bid Document.	One Item	46,920,000
	Setting up stack yard, sludge disposal site with offices, guard rooms, open yard, boundary wall, access road, lighting, arrangement of water, lighting (flood lighting and boundary lighting), all complete as per Tender Bid Document all complete.	One Item	168,033,000
	Construction of RCC service reservoirs (Hilltop and ERS) at different locations as described in tender document, boundary wall, guard rooms, lighting arrangements (flood lighting and boundary lighting), access road, drainage and all plumbing works etc. all complete as per Technical Bid Document.	One Item	21,954,000

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of the Contractor

Chief Executive Officer
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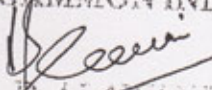


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Chief Executive Officer
Guwahati Metropolitan Development Authority

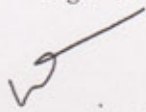
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Sl No.	Description of Items	Approximate Quantity	Price Offered in Rs.
	Adopting Trenchless technology device a) Micro Tunneling under railway tracks and special areas including hiring of MTBM (Micro Tunneling Boring Machine) from India or outside including all cost and charges complete.	750 m	82,129,000
	b) Jack Pushing for water supply pipe line to negotiate crossings and thoroughfares	1500 m	42,000,000

PER PRO GAMMON INDIA LTD.


A. D. ALAWANI
VICE PRESIDENT (MKTG)





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Chief Executive Officer
Guwahati Metropolitan Dev. Authority