



VCS Quality Services Private Limited

TENDER FOR

**LAYING OF MDPE NETWORK AND GI/Cu/MLC
INSTALLATION AND MRS FABRICATION IN NCT OF
DELHI, UP, HARYANA & RAJASTHAN GA**

TENDER DOCUMENT NO. IGL/ET2/CP/CP18519

VCS REF. NO.VCS/NOIDA/C&P/18440/WC/MDPE/01

(OPEN DOMESTIC COMPETITIVE BIDDING)

COMMERCIAL VOLUME

(Volume I of II)

Issued: 17.07.2025



Indraprastha Gas Limited (IGL)

New Delhi | India



COMMERCIAL TENDER

IGL/ET2/CP/CP18519

INDRAPRASTHA GAS LIMITED (IGL)

**CITY GAS DISTRIBUTION PROJECT IN NCT OF DELHI, UP,
HARYANA AND RAJASTHAN GA**

**TENDER FOR
LAYING OF MDPE NETWORK AND GI/Cu/MLC INSTALLATION
AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA
& RAJASTHAN GA**

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**VOLUME I OF II
COMMERCIAL VOLUME**

**OPEN DOMESTIC COMPETITIVE BID
(THROUGH E-TENDERING MODE)**

0	17.07.2025	Issued for Bids	Sachin Singh	Rajesh Sharma	Rachna Shukla
Rev	Date	Description	Prepared	Checked	Approved

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INVITATION FOR BIDS (IFB)

IGL/ET2/CP/CP18519

SECTION - I INVITATION FOR BIDS (IFB)



INVITATION FOR BIDS (IFB)

IGL/ET2/CP/CP18519

OPEN DOMESTIC COMPETITIVE BID (THROUGH E-TENDERING MODE)

NOTICE OF INVITATION FOR BIDS (IFB)

LAYING OF MDPE NETWORK AND GI/Cu/MLC INSTALLATIONS AND MRS FABRICATION IN NCT OF DELHI, UTTAR PRADESH, HARYANA & RAJASTHAN GA

BID DOCUMENT NO. IGL/ET2/CP/CP18519

1.0 INTRODUCTION

- 1.1 Indraprastha Gas limited (IGL) (hereinafter referred as Owner), is supplying Piped Natural Gas (PNG) to domestic, commercial and Industrial consumers and Compressed Natural Gas (CNG) to automobiles in U.P., Haryana & Rajasthan and NCT of Delhi & NCR.
- 1.2 VCS Quality Services Pvt. Ltd. (VCS) has been appointed as Project Management Consultant for providing consultancy services for tendering activities (hereinafter referred as Consultant), by IGL.
- 1.3 CMS (Construction Management Services) Agency shall be deployed by IGL for construction management services

2.0 BRIEF DESCRIPTION OF PROJECT

- 2.1 The present project is for the developing pipeline network for supplying natural gas to domestic, commercial, industrial consumers in NCT of Delhi, Uttar Pradesh, Haryana and Rajasthan GA. It is proposed to execute the work of MDPE pipe laying & GI / Copper MLC installation in Low Rise & High Rise Segment and MRS Fabrication & Installation as per details furnished in this tender document.

3.0 BRIEF SCOPE

- 3.1 Scope of work shall be included for Laying of MDPE Network and GI/Copper/MLC Installation and MRS Fabrication as per the specifications and other details given in tender document.
- 3.2 Bidders shall also be responsible for liaisoning of all permissions from respective statutory authorities for laying of MDPE pipes. Bidder shall be responsible to carry out detail survey and preparing the drawing as per the requirement of statutory authority, applying for permissions, regular follow ups and obtaining the permission. IGL is responsible only for preparing the letter towards application for permission and submission of demand note raised by statutory authorities.
- 3.3 Free Issue Material shall be issued to the Contractor from the designated store(s) of Owner. Contractor shall be responsible for lifting the free issue material from Owner's storage point(s) and transporting the same to work site(s) at his own cost. Contractor shall also return material after completion of work to owner's designated stores at above mentioned location (s) as directed by owner / owner's representative.
- 3.4 It is proposed to get this network laid in 6 different Segments. Details of these segments are as below.



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Segments	Zone	Description
1	Delhi (North & West)	MDPE laying of 1200 Km and domestic PNG connections of 1,20,000 nos.
2	Delhi (East, Central, South)	MDPE laying of 1100 Km and domestic PNG connections of 1,10,000 nos.
3	Gautambudh Nagar & Ghaziabad (inc.Hapur)	MDPE laying of 600 Km and domestic PNG connections of 60,000 nos. MDPE laying of 600 Km and domestic PNG connections of 60,000 nos.
4	Rewari Gurugram Karnal Kaithal	MDPE laying of 90 Km and domestic PNG connections of 6,000 nos. MDPE laying of 90 Km and domestic PNG connections of 6,000 nos. MDPE laying of 90 Km and domestic PNG connections of 6,000 nos. MDPE laying of 90 Km and domestic PNG connections of 6,000 nos.
5	Muzzafarnagar, Meerut & Shamli Kanpur, Hamirpur & Fatehpur Banda, Chitrakoot & Mahoba	MDPE laying of 390 Km and domestic PNG connections of 26,000 nos. MDPE laying of 300 Km and domestic PNG connections of 20,000 nos. MDPE laying of 300 Km and domestic PNG connections of 20,000 nos.
6	Ajmer, Pali & Rajsamand	MDPE laying of 900 Km and domestic PNG connections of 60,000 nos.
	Total MDPE laying of 5,750 Km and total domestic PNG connections of 5,00,000 nos.	

- 3.5 Contractor can quote for any or all the segments. The quantity mentioned above are tentative and subject to change.
- 3.6 It is intended to engage contractors to work in all the segments. The requirement of number of contractors for each zone shall be based on Owner's assessment of quantum of work and will be shared with contractors at the time of award. Initially it is intended to consider a total of about 108 contractors for entire project work in NCT of Delhi, UP, Haryana & Rajasthan GA.
- 3.7 IGL reserve the right to increase / decrease the number of contractors in each segments at the time of award as well as during the validity of contract based on project requirement at its sole discretion.
- 3.8 For detailed Scope of work and specifications, refer Technical Volume.



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4.0 CONTRACT PERIOD

The duration of contract shall be two (02) years from the date of first notification of award from IGL.

5.0 BID VALIDITY

5.1 Bid should be valid for **90 (Ninety)** days from the date of schedule submission.

6.0 BIDDING PROCEDURE

6.1 Bidding will be conducted through **Open Domestic Competitive bidding basis**. Single stage two bid system will be adopted for this tender.

6.2 The submission and opening of bids will be through e-tendering mode at <https://igl.ewizard.in> Tender document can be downloaded from the website <https://igl.ewizard.in> or from e-tender link given on official IGL website <http://www.iglonline.net>

Note:

(1) *To participate in the e-tendering, it is mandatory for the bidders to have user ID & password. For this purpose, the bidder has to register itself with ITI Limited's e-wizard website <https://igl.ewizard.in>. Please also note that the bidder has to obtain digital signature token (Class III Certificates with signing and encryption combo key usage issued by any Certifying Authority recognized by CCA India with their profile) for applying in the tender and in general, activation of registration may take 24 hours' subject to the submission of all requisite documents required in the process.*

(2) *IGL in no way shall be responsible if the bidder fails to apply due to non-possession of Digital Signature & non registration.*

7.0 DETAILS OF BID DOCUMENTS

7.1	Tender Document Number	IGL/ET2/CP/CP18519, Dated 17.07.2025
7.2	Availability of Tender Document on e-tendering website	From 17.07.2025 to 07.08.2025
7.3	Pre bid meeting date and venue	On 24.07.2025 at 1500 HRS. IST through video conferencing
7.4	Pre-bid meeting link	Click on the below link: Join the meeting now
7.5	Bid Submission date and time	07.08.2025 till 1430 HRS. IST, on e-tendering website https://igl.ewizard.in
7.6	Un-Priced bid opening date and Time	07.08.2025 at 1500 HRS. IST, on e-tendering website https://igl.ewizard.in
7.7	Price bid opening date and time	Date and time shall be intimated later
7.8	Address for opening of bids through e-tendering website https://igl.ewizard.in	HOD (C&P and Stores) C & P Department Indraprastha Gas Limited IGL Bhawan, 4, Community Centre, Sector – IX, R. K. Puram, New Delhi 110 022, India.



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Note:

Bidders are advised to complete the registration on e-tender portal (<https://igl.ewizard.in>) at least two working days prior to bid submission date.

Please note that in accordance with the general conditions of tender, IGL may amend these dates of the tender process at its sole discretion. In case any of the specified dates are declared a public holiday, the deadline shall be the next working date.

DOWNLOADING OF TENDER DOCUMENT

The tender document is available for downloading from ITI's e-procurement website <https://igl.ewizard.in> or from e-tender link given on official IGL website <http://www.iglonline.net> or viewing / participation of the eligible bidders. Bidders meeting the bid evaluation criteria who intend to submit their bid may download the tender for submission by the bid due date and time. Bidder shall give an undertaking on his letterhead that the contents of the bidding document have not been altered or modified. Bid evaluation criteria shall be applicable for all the bidders.

Any revision, clarification, addendum, corrigendum, time extension, etc. to this Tender Document will be hosted on the website mentioned above.

Disclaimer clause: Bidders are advised to visit ITI's e-tendering website and IGL website regularly for any updates on the tender. The ignorance to visit the website, will not be accepted as a reason for any gap / missing information like corrigenda, amendments, clarifications etc.

Bid shall be uploaded in two parts as below:

PART- I (UN-PRICED BID)

Un-priced bid must be completed with all technical details along with all other required documents including price schedule WITH PRICE BLANKED OUT etc. as per clause no. 22.1 of ITB.

Following documents need to be uploaded along with Un-Priced bid on e-Portal.

- i) EMD/Bid Security
- ii) Power of Attorney to the bid signatory on Non-Judicial Stamp Paper / Board Resolution on Company Letterhead
- iii) All Forms & Formats as per Section - V
- iv) Documents for compliance of Bidder Evaluation Criteria (BEC)
- v) Other techno-commercial documents required as per tender requirement, if any

PART-II (PRICED BID)

Priced bid shall contain only the prices without any conditions as per clause no. 22.2 of ITB.

8.0 BIDDER EVALUATION CRITERIA (BEC)

8.1 TECHNICAL

- 8.1.1 The bidder should have executed a contract/order of at least amount **as per table-1** below for MDPE/Steel Pipe Line Laying/ GI & Cu Installation work in any City Gas Distribution Network entity in last 7 years reckoned from the date of floating of tender and the bidder should have completed at least **no. of connections as per Table-1** below of domestic PNG connections in a single contract/order in any city gas distribution entity.



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8.2 FINANCIAL

8.2.1 Annual Turnover

The bidder should have achieved annual turnover of at least **amount as per Table-1** below during any of the preceding three financial years.

8.2.2 Net Worth

Bidder's Net worth should be **positive** as per the audited financial result of preceding financial year.

8.2.3 Working Capital

The working capital of the company should be minimum **amount as per Table-1** below for preceding financial year.

Table-1					
Segment (s)	Technical BEC		Financial BEC		
	No. of Connections	Work Order (INR Cr.)	Annual Turnover (INR Cr.)	Net Worth	Working Capital (INR CR.)
Segment-1	1200	1.75	3.51	Positive	0.70
Segment-2	1200	1.79	3.57	Positive	0.71
Segment-3	1200	1.57	3.15	Positive	0.63
Segment-4	1200	1.31	2.62	Positive	0.52
Segment-5	1200	1.46	2.92	Positive	0.58
Segment-6	1200	1.85	3.70	Positive	0.74

Note:

- a. The Bidder may quote in all segments with the above BEC, but only two segments from different states will be awarded (*refer award criteria*).
- b. If the bidder's working capital is inadequate for the segment(s) quoted, the bidder should supplement this with a letter from the bidder's bank, having net worth not less than INR100 Crore, confirming the availability of the line of credit to cover the inadequacy of working capital required as above. Line of credit must contain tender no., Tender Description and Client Name. Letter for line of credit must be issued by a scheduled bank. **Format of line of credit letter from bank has been enclosed at Annexure-2.**
- c. In case of tenders having bid submission date up to 30th September of the relevant financial year, and audited financial results of the immediate preceding financial year is not available, the bidder can submit the audited financial results of the three years immediately prior to that. Wherever the closing date of the bid is after 30th September of the relevant financial year, bidder has to compulsorily submit the audited financial results for the immediate 3 preceding financial years.
- d. In case the bidder is executing a rate contract which is still running and the quantity/value executed till one day prior to the due date of submission is equal to or more than the minimum prescribed quantity/value as mentioned in the BEC, such experience will also be taken into

consideration provided that the bidder has submitted satisfactory Execution certificate to this effect issued by the end user/owner/ authorized consultant.

- e. In case a bidder quotes for multiple segments, they only need to qualify the BEC for the segment with the highest BEC requirement. Meeting the BEC for such highest segment qualifies them for all the quoted segments with lower BEC requirements. (For example, a bidder with Turnover of Rs. 3.50 Cr. and Work experience of Rs. 1.60 Cr. shall qualify for Segments 3, 4 & 5 as these segments have lower BEC requirement).
- f. However, in case a particular bidder is eligible for award in more than one segment, award of such segments shall be done only if the bidder qualifies the Financial BEC (Turnover & Working Capital) cumulatively.

8.3 Documents Required

The documents required to be submitted by the bidder to substantiate their qualification under Bidder Evaluation Criteria (BEC) shall be as follows:

- a) Purchase order(s)/ Work Order(s) copy.
- b) Copy of SOR clearly describing the scope of work.
- c) Certificate from owner certifying executed amount against the said PO / WO in a single contract covering the BEC clauses.
- d) Certificate from owner certifying completion of PNG domestic connection in a single contract covering the BEC clauses.
- e) Audited Balance sheet and Profit & Loss of the last three preceding financial years with Auditors Report & UDIN.
- f) Any other document required for qualification against BEC clauses.

Note:

- a. The bidder shall be required to submit the documentation and proof for above BEC requirements and purchaser (IGL) may at his discretion make additional checks for the same.
- b. It shall be noted that in case bidder fails to submit requisite details/ documents, the bid submitted by bidder is liable to be rejected.
- c. IGL/ VCS decision shall be final with respect to bidder's qualification based on bid evaluation criteria.

9.0 BID SECURITY / EMD

9.1 All bids must be accompanied by a bid security amount **INR 20,00,000/-**

9.2 Bid security/EMD against e-tender can be submitted either through online e-payment mode available on e-tender portal or in the form of Letter of Credit / Demand Draft / Banker's Cheque in favour of Indraprastha Gas Ltd, payable at Delhi or in the form of Bank Guarantee from any Nationalized/ Scheduled Indian Bank or by the branch of a reputable international bank located in India, as per proforma attached in the Tender document. Bid security in the form of Bank Guarantee shall be valid for sixty (60) days beyond the validity of the bid i.e. 150 days from scheduled date of bid submission.



INVITATION FOR BIDS (IFB)

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- 9.3 Bid security/EMD can also be submitted through online transaction directly to **IGL account as mentioned below**. Bidders opting for this mode of EMD shall be required to upload the successful transaction details along with their bid under the EMD section of the portal, failure of which may render the bid liable for rejection.

Account No.	200999031485
IFSC	INDB00000005
MICR NO	110234002
Bank Name	Indusind

- 9.4 Bidders have to upload scanned copy of their EMD on the e-tender portal. During bid opening, any bid uploaded without such scanned copy shall be summarily rejected. Bidders submitting bid security in the form other than that of online transaction, shall submit the same in physical form to HOD (C&P and Stores), C&P Department, Indraprastha Gas Limited, IGL Bhawan, 4, Community Centre, Sector-9, R. K. Puram, New Delhi – 110022 within 7 working days from the date of bid opening, failure of which may render the bid liable for rejection.
- 9.5 PSUs and firms registered as Micro/Small Enterprise with MSME or NSIC are exempted from furnishing Earnest Money Deposit (EMD) / Bid Security, (subject to their enclosing a copy of latest and valid registration certificate for the tendered products/services) with their bid.

Bidders must verify their latest status of MSME registration as on date of bid submission.

*Enterprise which have been re-classified as Medium' enterprise from their earlier status as 'Micro' or 'Small' enterprise in Udyam registration certificate shall be exempted from submitting EMD. The bidders shall be given this exemption for a period of three years from the date of such upward change in their MSME status. Bidders are required to submit Udyam registration certificate(s) meeting above stated conditions for exemption under this provision, failing which bid shall be rejected. **Declaration as per Annexure-1 to be mandatorily submitted along with exemption certificate by such bidders.** Traders / Dealers / Distributors / Stockist / Wholesalers are not entitled for exemption of Earnest Money Deposit (EMD) / Bid Security.*

Note: The notification s.o.4926 (e) dated 18.10.2022 is applicable to the upward change took place in the status of Udyam Registered Enterprises only for availing the benefits of the schemes as per the policy or guidelines, not on erstwhile Udyog Aadhaar Memorandum(UAM). Any reference to Udyog Aadhaar Memorandum (UAM) certificate shall not be considered for such EMD exemption."

- 9.6 Subject to exemption permissible, offers without Earnest Money Deposit (EMD) / Bid Security will not be considered and will be summarily rejected.

10.0 PRE-BID MEETING

- 10.1 The bidder(s) or their designated representatives, who have downloaded the tender document, or to whom tender document has been issued and intend to bid are invited to attend the pre-bid meeting. Bidder(s) queries if any, must reach Purchaser office at least one day prior to pre-bid meeting date. The pre bid meeting shall be organized through video conferencing.
- 10.2 Owner will not entertain any queries received after 1800 HRS post one (1) day of pre-bid meeting
- 10.3 Non-attendance of the pre-bid meeting will not be a cause for disqualification of a bidder. Corrigendum / addendum, if any, to the tender document, shall be hosted on the website subsequent to the pre-bid meeting.



INVITATION FOR BIDS (IFB)

IGL/ET2/CP/CP18519

10.4 All bidders intending to attend pre-bid meeting must send their interest through email. E-mail received from bidders within due date and time shall be invited formally through email to attend the meeting. Instructions to bidders:

- (a) All the Bidders who have submitted their interest to attend the pre-bid meeting in email up to 2 hours prior to start of scheduled meeting will be invited to join as guests through the link shared in mail.
- (b) Upon joining the video conference, bidders have to mention their organization name as well as representative name.
- (c) All bidders/participants mandatorily have to pin IGL screen on their computer screens during the pre-bid meeting.
- (d) Bidders shall be allowed to discuss their queries in sequence of their responses received.
- (e) Time slot shall be allotted to each bidder to ask his queries.
- (f) Recording shall be done for pre-bid meeting.
- (g) Clarifications or queries raised shall be responded to during meeting or through subsequent email.

11.0 GENERAL

- 11.1 IGL reserves the right to split the items among the bidders or place the order for part quantity or delete an item from bidder's scope of work.
- 11.2 The bids received after bid due time/ date shall be rejected.
- 11.3 Bids through Fax/ E-MAIL are not acceptable.
- 11.4 IGL reserves the right to reject any or all the bids received at its discretion without assigning any reason whatsoever.
- 11.5 Owner/ Consultant will not be responsible for cost incurred in preparation and delivery of bids.
- 11.6 Bid document is non-transferable.
- 11.7 Contact details of owner is given below

HOD (C&P and Stores)
C & P Department
Indraprastha Gas Limited
IGL Bhawan, 4, Community Centre,
Sector – IX, R. K. Puram,
New Delhi 110 022, India
Telephone: +91 (011) 46074661
Fax no.: +91 (011) 26171863
Email: adesh.singhal@igl.co.in; ankush.jain@igl.co.in; aakash.rajput@igl.co.in;
ajitesh.kushwaha@igl.co.in

- 11.8 Contact details of consultants is given below:

VCS Quality Services Pvt. Ltd.
Unit no. 1116 - 1121, Tower 4, 11th Floor, Assotech Business Cresterra, Plot No. 22, Sector-135,
Expressway Noida-201301, U.P
Telephone: +91 9105709079/ 9899812852/8076548002/8010489356
Email: hk.sharma@vcsprojects.com, rachna.shukla@vcsprojects.com,
rajesh.sharma@vcsprojects.com; sachin.singh@vcsprojects.com



INSTRUCTIONS TO BIDDERS (ITB)

IGL/ET2/CP/CP18519

SECTION - II INSTRUCTIONS TO BIDDERS (ITB)



INSTRUCTIONS TO BIDDERS (ITB)

IGL/ET2/CP/CP18519

A. INTRODUCTION

1.0 INTRODUCTION

- 1.1 The Owner/ Consultant invites bids through e-tendering mode for the Laying of MDPE Network and GI/Copper/MLC Installation and MRS Fabrication in six segments as mentioned in the tender documents
- 1.2 The bidding document specifies the contractor scope of work, terms and conditions.
- 1.3 All terms, conditions and specifications of the bidding document shall be construed as applicable in general, unless specifically indicated to the contrary.
- 1.4 Bidders shall quote in the manner as specified in the bidding document. Owner reserves the right to evaluate and accept bids at their sole discretion.

2.0 ELIGIBILITY OF BIDDERS

- 2.1 Bidders shall as part of their bid, submit a written Power of Attorney authorizing the signatory of the bid to bind the bidder.
- 2.2 Bidders should not be associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Owner to provide consultancy services for the preparation of the design, specifications, and other documents to be used for carrying out the Works under this Invitation for Bids.
- 2.3 The Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the Owner/ Consultant in accordance with ITB.
- 2.4 The bidder should not be on holiday or black listed by Owner, any government ministry / MOPNG / Delhi Government / Promoter) / any government (national, state or local), PSU, PSU-JV and/or other government entities. If the documents were issued inadvertently/ downloaded from website, offers submitted by such bidders shall not be considered for opening/ evaluation/award

3.0 ONE BID PER BIDDER

- 3.1 Each bidder shall submit only one bid in the same bidding process either by himself or as a member of consortium/joint venture, (wherever consortium or joint venture is allowed). A bidder who submits or participates in more than one bid in the same bidding process will cause all the proposals in which the bidder has participated to be disqualified.
- 3.2 "More than one bid" means bid(s) by bidder(s) having any of the Proprietor / Partner / Limited Liability Partner in any other bidder(s). Further, more than one bids shall also include two or more bidders having common power of attorney holder. Failure to comply with this clause during tendering process will disqualify all such bidders from process of evaluation of Bids.
- 3.3 Alternative Bids shall not be considered.
- 3.4 The provisions mentioned at cl. no. 3.1 and 3.2 shall not be applicable wherein Bidders are quoting for different Items / Sections / Parts / Groups / SOR items of the same tender, which specifies evaluation on Items / Sections / Parts / Groups / SOR items basis.



INSTRUCTIONS TO BIDDERS (ITB)

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4.0 SINGLE POINT RESPONSIBILITIES

The bidder shall submit bid on single point sole/prime bidder responsibility basis. No consortium/joint bid shall be accepted. The status of all the other vendor(s)/collaborator(s), (if any), referred/identified by the bidder in their offer shall be that of bidder's sub-vendor / supplier/sub-service provider.

5.0 COST OF BIDDING

The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Owner/ Consultant will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

6.0 NON-TRANSFERABILITY OF THE BID DOCUMENTS

Bid documents are non-transferable. The party to whom the bid documents are issued may only furnish the bid. The bid received from any party other than to whom the bid documents are issued shall be rejected immaterial of fact of any relationship between party to whom bid documents are issued and party, who furnished the bid.

7.0 SITE VISIT

- 7.1 The bidder is advised to visit and examine the site of works and its surroundings and obtain for himself at his own responsibility all information that may be necessary for preparation of the bid and entering into the Contract. The cost of visiting the site shall be at bidder's own expenses.
- 7.2 The bidder and any of his personnel or Agents will be granted permission by the Owner to enter upon his premises and lands for the purpose of such inspection, but only upon the explicit condition that the bidder, his personnel or agents will release and indemnify the Owner and his personnel and agents from and against all liability in respect thereof and will be responsible for personnel injury (whether fatal or otherwise), loss of or damage to property and any other loss, damage, cost and expenses incurred as a result thereof.

B. THE BID DOCUMENTS

8.0 CONTENT OF BID DOCUMENTS

- 8.1 The bidding procedures, and contract terms are prescribed in the bid documents. In addition to the Invitation for Bids (IFB), the bid document includes:

Volume I	:	Commercial Volume consisting of:
Section – I	:	Invitation for Bids (IFB)
Section – II	:	Instructions to Bidders (ITB)
Section – III	:	General Conditions of Contracts (GCC)
Section – IV	:	Special Conditions of Contracts (SCC)
Section – V	:	Forms and Formats
Section – VI	:	Schedule of Rates (SOR)
Section –VII	:	Forms to be used after award of Contract.
Volume II	:	Technical Volume



INSTRUCTIONS TO BIDDERS (ITB)

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- 8.2 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bid documents. Failure to furnish all information required by the bid documents or to submit a bid not substantially responsive to the bid documents in every respect will be at the Bidder's risk and may result in the rejection of its bid.

9.0 CLARIFICATION ON BID DOCUMENTS

A prospective Bidder requiring any clarification of the bid documents may notify the Owner and / or the Consultant as the case may be, in writing or by cable (hereinafter, the term 'cable' is deemed to include electronic mail and facsimile) at the address indicated in the tender. The Owner / Consultant will respond in writing to any request for clarification of the bid documents which it receives after issue of the bid documents but prior to at least two (02) working days before the pre-bid meeting date. Owner will not entertain any queries received after 1800 HRS post one (1) day of pre-bid meeting. Written copies of the Owner's/ Consultant's response (including an explanation of the query but without identifying the source of inquiry) will be hosted on ITI's e-procurement website <https://igl.ewizard.in> and official IGL website <http://www.iglonline.net> along with the corrigendum before the bid due date. All such clarifications issued shall deem to form a part and parcel of the Bid documents.

The Bidder shall submit their queries / clarifications in the format given in tender.

10.0 AMENDMENT OF BID DOCUMENTS

- 10.1 At any time prior to the deadline for submission of bids, the Owner / Consultant, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, may modify the bid documents by amendment.
- 10.2 Any addendum /corrigendum/ clarifications to bidders query thus issued shall be part of the bidding documents pursuant to ITB Clause 8.0 and shall be hosted on the on website and www.iglonline.net , and ITI's e-tendering website before bid due date. All the prospective bidders who have attended the Pre-Bid meeting/ submitted bid document fee, shall be informed by email/ post about the addendum/ corrigendum/ clarifications to bidders query for their reference. Bidders desirous to submit its bid have to take into consideration of all the addendum(s)/ corrigendum (s)/ clarifications to bidders query hosted on the above websites before submitting the bid.
- 10.3 In order to allow prospective bidders reasonable time to take care of the addendum/ corrigendum into account in preparing their bids, the Owner / Consultant, at its discretion, may extend the deadline for the submission of bids.
- 10.4 Bidders are advised to visit www.iglonline.net and ITI's e-tendering website <https://igl.ewizard.in> from time to time to get updated information / documents.

C. PREPARATION OF BIDS

11.0 LANGUAGE OF BID

- 11.1 The bid prepared and submitted by the Bidder, as well as, all correspondence and documents relating to the bid exchanged by the Bidder and the Owner / Consultant, shall be in English.
- 11.2 In the event of submission of any document/ certificate by the bidder in a language other than English, the English translation of the same duly authenticated by Chamber of Commerce of bidder's country shall be submitted by the bidder along with the bid.



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12.0 DOCUMENTS CONSTITUTING THE BID

12.1 The bid prepared by the Bidder shall comprise the following components:

- i. Un-priced Techno-commercial bid along with the Bid Forms completed in accordance with the tender documents;
- ii. Price Bid having Price Schedule/SOR filled up in accordance with tender documents
- iii. Documentary evidence established in accordance with ITB that the goods and ancillary services to be supplied by the Bidder are eligible goods and services and conform to the bid documents; and
- iv. Bid security furnished in accordance with Performa given in this bid documents.

12.2 All pages of the bid offer to be signed and stamped by an authorised representative of the bidder

13.0 BID FORM

13.1 The Bidder shall complete all the Bid Forms attached in Section-V of bid document and submit the same as a part of "Techno-Commercial Un-priced bid" as per clause mentioned in ITB.

13.2 In two-part bidding as specified in IFB, Bidder shall bid in two parts, the first part will contain all bid forms with related documents, SOR without prices and bid security but not the price schedule, the second part will contain only price schedule.

14.0 BID PRICES

14.1 The Bidder shall indicate in the appropriate Schedule of Rates, the unit prices inclusive of all applicable taxes viz. GST, freight, Insurance including Transit Insurance, overheads, provision of safety gadgets to their personnel, transportation, conveyance, trainings, recruitments, communication charges, liaisoning work, cost for providing tools & tackles, equipment, machineries, spares, etc. If quoted in separate typed sheets and any variation in item description, unit or quantity is noticed, the bid is liable to be rejected.

14.2 Bidder must quote for complete scope of work & indicate prices against each SOR item. Bid submitted for part scope shall be rejected.

14.3 All corrections and alterations in the entries shall be signed in full by the bidder with date. No erasures or over-writings are permissible.

15.0 PRICE BASIS

Prices quoted by the bidder shall be considered as firm and fixed during the entire execution of the contract and not subject to variation on any account (except statutory variation in GST).

16.0 CURRENCIES OF BID

Bidders shall submit bid in INR only.

17.0 DOCUMENTS ESTABLISHING BIDDER'S ELIGIBILITY AND QUALIFICATION

17.1 Pursuant to IFB, the Bidder shall furnish, as part of its bid, documents establishing the Bidder's eligibility to bid and its qualifications to perform the contract if its bid is accepted.



INSTRUCTIONS TO BIDDERS (ITB)

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17.2 The documentary evidence of the Bidder's qualifications to perform the contract if its bid is accepted shall establish to the Owner's satisfaction:

- a. that the Bidder has the financial, technical capability necessary to perform the contract;
- b. that the Bidder meets the qualification criteria stipulated in the Tender.

18.0 BID SECURITY/ EMD

18.1 Pursuant to the provisions of IFB and ITB, the Bidder shall furnish, as part of its bid, a bid security in the amount specified in the Tender.

18.2 The bid security is required to protect the Purchaser against the risk of Bidder's conduct, which would warrant the security's forfeiture.

18.3 Non-submission of EMD (in form of BG in physical form) to purchaser's office as mentioned in IFB may render the bid liable for rejection.

18.4 Original Bid Security in the form of BG/LC/DD/Banker's Cheque shall be submitted in a sealed envelope clearly super scribing "Bid Security – Original" along with the name and address of bidder, tender subject, tender document number and shall be addressed to the address given in Section-IFB. If the envelope is not sealed and marked as above, the Purchaser will assume no responsibility for the misplacement of the EMD and its consequential rejection.

18.5 Any bid not secured in accordance with IFB and ITB Clauses may be treated as non-responsive and rejected.

18.6 Earnest Money Deposit (EMD) so paid will be refunded to the unsuccessful bidders after the award of work. For bidders who have submitted their EMD through any of the e-payment mode, refund of the EMD amount shall be made to the account as mentioned in their profile on the e-tender portal.

18.7 The successful Bidder's bid security will be discharged upon such Bidder accepting the award and furnishing the performance security against Contract/Order.

18.8 The bid security may be forfeited if:

- (i) The bidder withdraws the bid within its validity.
- (ii) The bidder revised / modified their bids suo moto affecting the bid requirement.
- (iii) The bidder does not accept the LOA/PO/Contract.
- (iv) Execution of job has not started as per timelines defined in tender document.
- (v) If it is established that bidder has indulged in corrupt and fraudulent practice or have submitted forged documents the bid security shall be forfeited in addition to other action like putting the vendor on holiday after following the due process.

18.9 In case of default by bidders under MSME / NSIC category under heads (i) to (v) above, recovery letter for amount equivalent to Earnest Money Deposit (EMD) / Bid Security shall be sent to bidder and information letter indicating the nature of default shall be sent to Ministry of Micro, Small and Medium Enterprises, Udyog Bhawan, Rafi Marg, New Delhi - 110011.

18.10 PSUs and firms registered as Micro/Small Enterprise with MSME or NSIC are exempted from furnishing Earnest Money Deposit (EMD) / Bid Security, (subject to their enclosing a copy of latest and valid registration certificate for the tendered products/services) with their bid.



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Bidders must verify their latest status of MSME registration as on date of bid submission

Enterprise which have been re-classified as Medium' enterprise from their earlier status as 'Micro' or 'Small' enterprise in Udyam registration certificate shall be exempted from submitting EMD. The bidders shall be given this exemption for a period of three years from the date of such upward change in their MSME status. Bidders are required to submit Udyam registration certificate(s) meeting above stated conditions for exemption under this provision, failing which bid shall be rejected. **Declaration as per Annexure-1 to be mandatorily submitted along with exemption certificate by such bidders.** Traders / Dealers / Distributors / Stockist / Wholesalers are not entitled for exemption of Earnest Money Deposit (EMD) / Bid Security.

Note: The notification s.o.4926 (e) dated 18.10.2022 is applicable to the upward change took place in the status of Udyam Registered Enterprises only for availing the benefits of the schemes as per the policy or guidelines, not on erstwhile Udyog Aadhaar Memorandum(UAM). Any reference to Udyog Aadhaar Memorandum (UAM) certificate shall not be considered for such EMD exemption."

- 18.11 Subject to exemption permissible, offers without Earnest Money Deposit (EMD) / Bid Security will not be considered and will be summarily rejected.

19.0 PERIOD OF VALIDITY OF BIDS

- 19.1 Bids shall remain valid for the period specified in the IFB after the date of bid submission as prescribed by the Owner. Owner may reject the bid having shorter validity period as non-responsive.
- 19.2 In exceptional circumstances, the Owner may request the Bidder for an extension of the period of validity. The request and the responses thereto shall be made in writing. The bid security provided under ITB shall also be suitably extended. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request for extension of its bid validity will not be required nor permitted to modify its bid.

20.0 FORMAT AND SIGNING OF BID

- 20.1 The bid shall be typed or written in indelible ink. Each page of bid offer shall be stamped and signed by the Bidder or a person or persons duly authorized by competent authority in order to bind the bidder to the contract.
- 20.2 Any interlineations, erasures, or corrections shall be valid only if the person or persons signing the bid initial them. Overwriting will not be treated as correction and may lead to rejection of bid. A correction shall be considered if a part of text or figures or dates needing corrections are deleted and a separate text or figure or date, as the case may be, is written separately having proper link to the place of correction.
- 20.3 As bidding shall be done through e-tendering, digitally signed documents to be uploaded.

21.0 DEVIATIONS

- 21.1 Owner/ Consultant will appreciate submission of offer based on the terms and conditions in the enclosed GCC, SCC, ITB, Scope of Work, Technical Specification etc. to avoid delay seeking clarifications on technical/ commercial aspect of the offer.
- 21.2 **Deviations if any have to be listed only in the cover letter & Form 2** of the bid submitted by the bidder. Deviations listed anywhere else will not be considered and in case of award of the job to the bidder, the job has to be completed in accordance with the tender terms and conditions without any commercial implications to the Owner.



INSTRUCTIONS TO BIDDERS (ITB)

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- 21.3 Notwithstanding to the above, bids with the deviation(s) to the bid conditions shall be summarily rejected without any post bid reference to the bidder. However, Owner reserves the right to take the final decision in this regard, without assigning any reason

D. PREPARATION AND SUBMISSION OF BIDS

22.0 PREPARATION OF BIDS

- 22.1 Documents (duly signed by the authorized signatory) and/or pre-formatted excel files to be uploaded by the bidder on the portal which shall comprise of the following:

Covering Letter with

- i. Bidder's General Information Form 1
- ii. No deviation confirmation / Deviation Form as per Form 2
- iii. Format for Certificate from Statutory Auditor / Chartered Engineer for Details of Similar Goods/ Work/ Services Supplied/ Done During Past 7 Years as per Form 3
- iv. Certificate from the Statutory Auditor / Chartered Engineer regarding Supply of Goods/Works/Services as per Form 4
- v. Certificates as per Form 5
- vi. Confirmation that bidder is not banned by any Indian Government organization/ Government Undertaking from quoting as per Form 6
- vii. Declaration as per Form 7
- viii. Certificate as per Form 8
- ix. Letter of authority in favour of any one or two of Bidder's executives having authority to attend the un-priced and price bid opening as per Form 9
- x. Information regarding any current litigation in which the bidder is involved in Form 10.
- xi. Power of attorney of the signatory to the bid document on non-judicial stamp paper.
- xii. Un-priced Schedule of Rates (SOR) dully filled as "Quoted / not Quoted" against quoted/ not quoted segments (as a case may be), with indicating HSN/SAC code.
- xiii. Copy of GST, ESI, PF and PAN Registration Certificates
- xiv. EMD/ Bid security
- xv. Declaration of EMD / Bid security (In case applicable)
- xvi. Format for certificate from bank if bidder's working capital is inadequate as per Annexure – 2 (In case of applicable)
- xvii. Other documents as per Technical Volume of bid document

Note: All pages of the bid offer to be signed and stamped by an authorised representative (as described in bid document) of the bidder.

Bidder must ensure numbering of all pages submitted in bid document. Further total number of pages submitted in bid document must be mentioned on the covering note of bid submission.

- 22.2 The price bid shall contain Schedule of Rates dully filled in the prescribed format available on the e-portal.



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23.0 INSTRUCTIONS FOR ONLINE BID SUBMISSION

23.1 The bidders are required to submit soft copies of their bid electronically on the e-Wizard Portal (<https://igl.ewizard.in>) using valid Digital Signature Certificates. Below mentioned instructions are meant to guide the bidders for registration on the e-Wizard Portal, prepare their bids in accordance with the requirements and submitting their bids online on the e-Wizard Portal. For more information, detailed guides and FAQs, bidders may visit the e-Wizard Portal <https://igl.ewizard.in>

23.2 REGISTRATION PROCESS ON ONLINE PORTAL

- i. Bidder has to enrol on the e-Procurement module of the portal <https://igl.ewizard.in> by clicking on the link "Bidder Enrolment".
- ii. The bidder has to choose a unique username and assign a password for their accounts. Both these are case-sensitive.
- iii. Once the username and password are saved, even if the registration process is not completed in a single go, it can be continued where left. For resuming, click on "retrieve details" button on the bidder enrolment page.
- iv. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the e-Wizard Portal.
- v. Bidders will be asked to provide their refund bank account details. These details will only be used for EMD refund purpose only in case where EMD is paid through e-payment mode on the portal. These details may be updated anytime in the user profile after login.
- vi. Upon enrolment, bidder needs to register their valid Digital Signature Certificate (Class III Certificates with signing and encryption combo key usage) issued by any Certifying Authority recognized by CCA India with their profile. This step may be skipped while registration, the same will be prompted to be done during first login into the portal. Please note that login can only be done in presence of a valid digital signature.
- vii. Only one valid DSC should be registered by a bidder. This can be however be changed anytime in the user profile after login. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
- viii. Bidders must ensure that they have the latest version of Java installed in their local system to enable the portal to access their digital signatures. Refer section "System prerequisites" below for details.
- ix. The User ID of bidders will only be activated once they upload correct documents for verification (such as PAN, GST, etc.) and send email to helpdeskeuniwizarde@gmail.com requesting activation mentioning their user ID and attaching their registration payment acknowledgement in the mail.
- x. Once ID is activated, bidders can then log in to the site through the secured log-in by entering their user ID / password and their DSC / e-Token.
- xi. Foreign bidders are advised to refer "DSC details for Foreign Bidders" on the portal for Digital Signature requirements. Any type of DSC that has valid signing and encryption capabilities are allowed on the portal. Fields not relevant for foreign bidders are optional and can be skipped during registration process.



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23.3 SYSTEM PREREQUISITES

- i. Your system should have Java installed and configured for the portal before logging in to your ID, if not follow the below steps.
- ii. Go to <https://www.java.com> and click on “Download” and run the downloaded setup file.
- iii. Once fully installed, search in your start menu- “Configure Java” and run it.
- iv. Go to tab “Security” of the window, click on “Edit site list”. Click on “Add” and enter <https://igl.ewizard.in> in the new row. Click on “Add” then “Ok” and again “Ok”.

23.4 TENDER DOCUMENTS SEARCH

- i. Active tenders can be searched on the portal through various parameters including Tender ref no., description, date, etc.
- ii. After login, if the bidders are not able to see the desired tender on the published tenders page, they may need to update their profile through the Profile tab. On the update profile page, check mark all the procurement categories and save. All tenders should now be visible on their published tenders page.
- iii. Once the bidders have marked the tenders they are interested in, these tenders will be moved to the ‘Interested Tenders’ page. This would enable the Online Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- iv. After marking as interested, the bidders can proceed for bid submission.
- v. Bidder has to log into the site well in advance before the sale date and time of the tender in over. IGL or ITI Limited shall not be responsible for any last minute issues.
- vi. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

23.5 BID PREPARATION

- vii. Bidders, in advance, should upload the bid documents on the portal well within time as indicated in the tender document. Generally, they are to be in PDF format except some of the documents provided in excel formats (such documents have to be filled and uploaded in excel format only).
- viii. Bidders are required to upload all required documents such as certificates, purchase order details, forms, financial reports, etc. under “My Documents” link on the portal first. These can be later attached as part of their bid documents during bid submission.
- ix. Bidders can merge multiple PDF and upload in a single PDF file as long as it within the size limit of single file i.e. 5 MB.

23.6 BID SUBMISSION

- i. Bidder will be entirely responsible for any last minute issues and ITI Limited or IGL shall not be held responsible for such default. To prevent this, bidders are advised to upload the documents on the portal well within deadline.
- ii. For EMD, bidder has to select the mode of payment (BG/e-payment) and fill in the required details along with scanned copy. Exempted vendors can select ‘Exemption’ and upload valid certificate for the same.



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- iii. A standard SOR format in excel has been provided with the tender document to be filled by all the bidders. Bidders to note that they should necessarily submit their financial bids in the prescribed format only. Providing the same in any other format such as pdf, shall render the bid liable for rejection.
- iv. Bidders may need to update their encryption/cipher certificate in their Profile to enable the system to upload excel files. For this, go to the 'Profile' tab on the portal and click 'Capture cipher certificate' button on the update profile page. Follow the java application steps as instructed and save your profile.
- v. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- vi. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data, which cannot be viewed by unauthorized persons until the time of bid opening. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- vii. It is important to note that the bidder has to click on the 'Final Submit Bid button', to ensure that the Bid Submission Process is completed. Bids which aren't submitted successfully are considered as Incomplete/Invalid bids and are not considered for evaluation by the portal.
- viii. Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- ix. Bidders to note that in case they wish to modify/re-upload certain documents before bid submission deadline, they can do so by going to the bid submission page and clicking re-upload action button appearing in front of each uploaded document. **In no case should the bidder click on 'Withdraw' button. Please note that upon clicking withdraw button, bidder will not be allowed to participate in that tender again.** It is only meant in case bidders need to withdraw their participation from a specific tender.

23.7 ASSISTANCE TO BIDDERS

- i. Any queries relating to the content of the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority as indicated in the tender.
- ii. For e-Procurement technical support or any queries related to the process of online bid submission or queries relating to e-Wizard Portal in general may be directed to the 24x7 eWizard Helpdesk. The contact number for the helpdesk are 011-49606060, 23710092, 23710091. You may also contact Mr. Ashutosh (+91- 9355030621) from ITI Limited, in case of delay in resolution.
- iii. Escalations may be done to Mr. Amrendra (+91-8448288980) or Mr. Navneet Mishra (+91-9560364871).

23.8 EMAIL SUPPORT:

For any e-Procurement application related service requests and technical issues related to document uploads, encryption/decryption key issues, bidder login issues, new registration issues, key uploads, DSC key installation, bid submission, system users may please mail to



INSTRUCTIONS TO BIDDERS (ITB)

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helpdeskeuniwizarde@gmail.com with a copy to eprochelpdesk.41@gmail.com, ewizardamrendra@gmail.com and ewizardnavneet@gmail.com. Any issues encountered due to last minute actions by the bidders shall not be the responsibility of IGL or ITI Limited. Bidders are advised to use the portal in advance so that any issue can be resolved with adequate time before any deadline.

24.0 DEADLINE FOR SUBMISSION OF BIDS

- 24.1 The bid must be submitted on the specified e-tendering portal as specified in IFB not later than the time and date as specified in IFB. The online e-tendering portal will not allow any bid or part thereof whatsoever to be submitted after the due time on the due date.
- 24.2 The Purchaser may, in exceptional circumstances and at its discretion, on giving reasonable notice by uploading on website, email or any written communication to all prospective bidders who have been issued the bid document to extend the deadline for the submission of bids in which case all rights and obligations of the Purchaser and bidders, previously subject to the original deadline will thereafter be subject to deadline as extended.

25.0 LATE BIDS

- 25.1 Any bid received by the Owner/ Consultant after the deadline for submission of bids prescribed by the Owner/ Consultant will be rejected.

26.0 MODIFICATION AND WITHDRAWAL OF BIDS

- 26.1 The Bidder may modify or withdraw its bid after the bid's submission, but before the due date of submission as per provisions provided on the e-tendering portal. After the bid due date & time however, no modifications whatsoever are allowed in the bid.
- 26.2 No bid shall be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Bid Form. In case of request in written by the authorized signatory for withdrawal of a bid during this interval, the Bidder's bid security shall be forfeited.

E. OPENING AND EVALUATION OF BIDS

27.0 OPENING OF BIDS BY THE OWNER/ CONSULTANT

- 27.1 The Owner/Consultant will open all bids on the e-tendering portal, on the date (as specified in IFB), and at the place specified in the Tender.
- 27.2 Bids (and modifications) that are not opened and read out at bid opening shall not be considered further for evaluation, irrespective of the circumstances. Bidder's specific attention is drawn to this stipulation to enable the representative of the Bidder at the bid opening time to bring out to the attention for the Owner / Consultant any documents pertaining to its bid is not being acknowledged and relevant portions read out.
- 27.3 The Owner/Consultant will prepare a bid opening statement to be signed by all representatives present during bid opening, in case bid opening is held physically at IGL.

28.0 CLARIFICATION OF BIDS

- 28.1 During evaluation of the bids, the Owner / Consultant may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification shall be through e-tendering portal (clarification shall be sent to e-mail ID provided in Form F-1) and the response shall be in writing, and no change in the prices or substance of the bid shall be sought, offered, or permitted.



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29.0 PRELIMINARY EXAMINATION

- 29.1 The Owner/Consultant will examine the bids to determine whether they are complete, whether required sureties have been furnished, whether the documents have been properly signed and whether the bids are generally in order.
- 29.2 The Owner/Consultant may waive any minor informality, non-conformity, or irregularity in a bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder.
- 29.3 Prior to the detailed evaluation, pursuant to ITB, the Owner/Consultant will determine the substantial responsiveness of each bid to the bidding documents. For purposes of these Clauses, a substantially responsive bid is one, which conforms to all the terms and conditions of the Bid Documents without deviations.
- 29.4 If a bid is not substantially responsive, it will be rejected by the Owner/Consultant and shall not subsequently be made responsive by correction of the nonconformity by the Bidder.

30.0 REJECTION CRITERIA

- 30.1 Minor unconformities may be neglected and/or bidders may be required to rectify such minor unconformities.
- 30.2 Any deviation/unconformity on following conditions will result in summarily rejection of the bid:
- (i) Firm Price
 - (ii) EMD/Bid Security
 - (iii) Scope of Work
 - (iv) Specifications
 - (v) Price schedule in other than prescribed format or with insertion of any condition(s)
 - (vi) Delivery / Completion Schedule
 - (vii) Period of Validity of Bid
 - (viii) Price Reduction Schedule
 - (ix) Performance Bank Guarantee/ Security Deposit
 - (x) Guarantee/Warranty of Goods / Work
 - (xi) Arbitration / Resolution of Dispute
 - (xii) Force Majeure
 - (xiii) Applicable Laws
 - (xiv) Any other condition specifically mentioned in the tender documents elsewhere that non-compliance of the clause lead to rejection of the bid.
 - (xv) Non-submission of price bid in price bid envelope/cover-2.
 - (xvi) If the estimated price impact of the unquoted items is more than 10 % of the bidder's quoted price.
 - (xvii) Non-submission of declaration regarding holiday listing status.

Deviation to a clause if considered acceptable, with financial loading declared in tender document shall not be included in rejection criteria.

Prices if received in un-priced bid envelope / cover-1 shall not be considered for evaluation. Only the prices received in Price Bid Envelope/ Cover-2 shall be considered for evaluation



INSTRUCTIONS TO BIDDERS (ITB)

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31.0 OPENING OF PRICE BID

- 31.1 Bidders whose bids are found substantially responsive shall be informed about the date and time of opening of price bid.
- 31.2 The bid prices and discounts, if any stated in the price schedules will be announced during price bid opening.

32.0 EVALUATION AND COMPARISON OF BIDS

- 32.1 Evaluation will be carried out on **segment wise totality basis** for complete scope of work of each Segment separately.
- 32.2 Price bid of all techno-commercially qualified bidders will be opened. Bidders to note that they should get themselves very well acquainted with scope of work and site conditions so as to quote reasonable rates which are workable and sustainable for the entire duration of the contract
- 32.3 Bidders to **quote percentage discount/mark-up for SORs of each segment**. The Overall / basic unit rates shall be offered to the bidders (refer Attachment-1 i.e Estimated Cost) & bidders shall have to quote Excess (+) / At par /Less (-) in percentage on the total offered price for each segment. Quoted Excess (+) or At par or Less (-) in percentage will be applicable uniformly on all line items of SOR for calculating total evaluated price of each segment.
- 32.4 The discount rates for bidder with minimum evaluated value shall be considered segment wise as L-1 rates for Award and these rates will be offered to L-2, L-3, L-4, and so on. If any bidder refuses to match with L-1 discount rates, then same will not be considered for further evaluation and award for that segment.
- 32.5 In case more than one bidder end up with same minimum value after respective discounts, the ranking will be decided in the following order:
- (a) Bidder having higher turnover as per the audited financial results during preceding financial year. In case of tie in point (a) than point (b) shall be followed.
 - (b) Bidder having successfully executed similar work of higher value in a single order during last 7 years from the date of bid submission.
- 32.6 In case number of qualified bidders are more than required, then additional contractors may be considered for award of contract on need basis in future on IGL's sole discretion.
- 32.7 IGL reserves the right to negotiate the rates with L1 bidder before finalising the award.
- 32.8 Rates negotiated/accepted with evaluated L-1 bidder will become uniform rates for the complete SOR since single discount/mark-up would be quoted for entire SOR/Tender.
- 32.8.1 Other Conditions Related to Bid Evaluation**
- (i) Canvassing in any form will make the bid liable for rejection.
 - (ii) Unsolicited clarifications to the offer and/or change in prices during its validity period would render the bid liable for outright rejection.
 - (iii) Bidders are advised to ensure that their bids are complete in all respects and conform to our terms, conditions and Bid Evaluation criteria of bid. Bids not complying with Owner's requirement may be rejected without seeking any clarifications.
 - (iv) Bidder's will not be allowed to revise their price/bid for any subsequent clarification, compliance to bid conditions after submission of bid.



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- (v) Bid should be complete covering the individual item wise total scope of work indicated in the Bid documents.
- (vi) Price bid will be evaluated as per applicable GST and other taxes & duties as on date of Priced bid opening.

33.0 CONTACTING THE OWNER/ CONSULTANT

- 33.1 From the time of bid opening to the time of contract award, if any Bidder wishes to contact the Owner/ Consultant on any matter related to the bid, it should do so in writing.
- 33.2 Any effort by a Bidder to influence the Owner/ Consultant in its decisions on bid evaluation, bid comparison, or contract award may result in the rejection of the Bidder's bid.

F. AWARD OF CONTRACT

34.0 POST-QUALIFICATION

- 34.1 In the absence of pre-qualification, the Owner/ Consultant will determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated responsive bid is qualified to perform the contract satisfactorily, in accordance with the criteria listed in ITB.
- 34.2 The determination will take into account the Bidder's financial, technical, and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, as well as such other information as the Owner/Consultant deems necessary and appropriate.
- 34.3 An affirmative determination will be a prerequisite for award of the contract to the Bidder. A negative determination will result in rejection of the Bidder's bid.

35.0 AWARD CRITERIA

- 35.1 The Owner will place the order on the successful bidders whose bid has been determined to be substantially responsive and have been selected for award. Award will be made on the rates finalized with L-1 bidder.
- 35.2 Bidder can quote for all the segments but maximum two segments from different states viz Delhi-Haryana, UP-Haryana, Haryana-Rajasthan etc. will be awarded (If contractor meets BEC) as per following award criteria:
 - a. If bidder quoted more than 2 segments, then work will be awarded in the segments where the bidder's rank/position is highest among all the quoted segments. The bidder with lowest value will be considered as the highest rank (e.g. If a bidder has quoted in 4 segments and its rank is L-3 in segment-1, L-4 in segment-2, L-5 in segment-3 and L-10 in segment-4; then the bidder will be awarded work in Segment-1 & 3 only as they are lowest in rank and in different states).
 - b. In case Bidder's bid rank/position is same in more than 1 segment, then higher value segments (as per IGL's Cost estimate) will be considered for award.
 - c. In case insufficient bidders are qualified in particular segment then IGL reserves the right to offer remaining qualified bidders of other segments to match the L1 rate of that particular segment and shall be considered for award. (Offer shall be given to the additional bidders, as mentioned in point no. 32.6 above, of segment having the highest estimated value). Further, if even after the aforesaid process there are insufficient bidders in a particular



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segment, then the contract value will be distributed among the qualified bidders on pro rata basis.

- d. Bidder's status will be arranged in increasing order of their total evaluated price (L-1, L-2 & L-3..... and so on) for each segment separately.

35.3 Tentative 108 Nos. contractors have been envisaged for this project, based on present assessment of work.

35.4 All Contractors shall be distributed among 4 pools as follows;

Segments	Zone	Pool1	Pool2	Pool3	Pool4	Total Contractor
Segment 1	North -West Delhi	6	6	6	6	24
Segment 2	East- central-South Delhi	6	6	6	6	24
Segment 3	GB Nagar-Ghaziabad	6	6	6	6	24
Segment 4	Rewari-Gurugram-Karnal-Kaithal	2	2	2	2	8
Segment 5	Muzaffarnagar-Kanpur- Banda	4	4	4	4	16
Segment 6	Ajmer	3	3	3	3	12
Total						108

35.5 The distribution in pools will be based on following criteria:

35.5.1 Top 'n' contractors (as per table above) based on their bidding rank (as per point 35.2.d) under respective segments will be included in Pool 1. The contractors in remaining bidding ranks will be considered for next Pools.

35.5.2 After sorting the contractors of Pool-1, next top 'n' contractors under respective Segments in order of their bidding ranks as mentioned in point no. 35.2 (d), will be included in Pool-2.

35.5.3 After sorting contractors in Pool-1 and Pool-2, same cycle will carried out for Pool-3 and Pool-4.

35.5.4 Any additional techno-commercially qualified bidders as per point no. 32.6 can be awarded work in future based on site/target requirement as per Pool-4 criteria.



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35.6 Initially Maximum awarded value is as per the mentioned below table;

SEGMENT	POOL Value (INR Cr.)/per Contractor				Total Segment Value
	Pool-1	Pool-2	Pool-3	Pool-4	
Ratio	31%	23%	23%	23%	
1	14.03	10.41	10.41	10.41	271.58
2	14.30	10.61	10.61	10.61	276.77
3	12.59	9.34	9.34	9.34	243.70
4	10.48	7.77	7.77	7.77	67.59
5	11.69	8.67	8.67	8.67	150.82
6	14.80	10.98	10.98	10.98	143.20
Total					1153.66

However, actual award shall be made at the approved discounted/mark-up rates and in accordance with point no. 35.9, subject to vendor performance.

35.7 The allocation of zones/cities to contractors within their qualified segments shall be done as per their choice selection in order of their bidding ranks. However, IGL reserves the right to award any additional zone/city to a contractor or de-allocate an existing zone/city as per site requirement or contractor's performance.

35.8 Contractor shall be initially issued 25% value in the PO with the validity period of 2 years and subsequently PO value shall be increased by 25% (in three intervals) on the basis of the execution of work after EIC approval. The award of PO is proposed to be as follows:

Pool	Initial PO value incl.GST (in Rs.cr.)	1 st PO Amendment incl.GST (in Rs. Cr.)	2 nd PO Amendment incl.GST (in Rs. Cr.)	3 rd PO Amendment incl.GST (in Rs. Cr.)	Total Contract Value (in Rs. Cr.)	RFC Targets per month (No.)
Pool-1	3.5	3.5	3.5	3.5	14.03	400
Pool-2	2.6	2.6	2.6	2.6	10.41	250
Pool-3	2.6	2.6	2.6	2.6	10.41	250
Pool-4	2.6	2.6	2.6	2.6	10.41	250

Note:

- Above details are for reference considering segment-1 estimated value. Actual award values shall be decided as per L-1 discount/mark-up obtained.
- After consumption of initial maximum value, the additional value shall be awarded as defined above through 1st Amendment and so on.

35.9 Contractors to ensure percentage of value consumed as per percentage of time lapsed after LOA. In case executed value is less than required monthly target, IGL may reduce the contract value and allot the same to performing contractors.

35.10 Contractors to ensure value of work is executed within awarded/amended contract value; IGL will not be responsible for any such extra execution of work and same will not be tenable.



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- 35.11 In case contractors are less than required in any segment, maximum value of PO may be increased on Pro-rata basis.
- 35.12 Amendment of PO to be considered in cases where RFC targets till previous month have been achieved and 70 % PO value is consumed. Exception will be considered for contractors where shortfall in targets is attributed to reasons beyond the control of contractors.
- 35.13 Additional value up to 20% may be awarded to the contractors over & above the “Maximum awarded value” in case of consumption of the value (as per point no. 35.6 above) before contract validity. This increased value shall be compensated by the unconsumed value of other contractors in the order of lowest percentage of value consumption at the time of proposed value increase.

36.0 SPLIT OF AWARD

- 36.1 Tentative 108 Nos. contractors have been envisaged for this project, based on present assessment of work. In case number of qualified bidders are more than required, then additional techno-commercially qualified bidders may be considered for award of contract in future based on site /target requirement as per Pool-4 criteria.

37.0 OWNER'S RIGHT TO VARY QUANTITIES AT TIME OF AWARD

- 37.1 Owner reserves the right to increase or decrease the quantities specified in the Schedule of Rates during contract period, without any change in unit price or other terms and conditions.
- 37.2 Bidder shall note that the quantities mentioned against each activity in Schedule of Rates are tentative only and subject to change based on actual requirement. The **discount/mark-up** quoted by the bidders shall remain fixed and firm throughout the contract period i.e. no price adjustment shall be allowed after bid submission.

38.0 OWNER'S RIGHT TO ACCEPT OR REJECT ANY OR ALL BIDS

- 38.1 The Owner reserves the right to accept or reject any bid in full or part, to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to the affected Bidder or Bidders. Owner also reserves the right not to accept lowest **discount/mark-up** quoted by the bidder.

39.0 NOTIFICATION OF AWARD

- 39.1 Prior to the expiration of the period of bid validity, the Owner will notify the successful Bidder in writing by Letter of Acceptance (LOA) or registered letter or by cable, to be confirmed in writing by registered letter, that its bid has been accepted.
- 39.2 The date of LOA / First intimation from IGL will constitute effective date.
- 39.3 The bidder shall promptly, but not later than Seven (7) days of LOA / First intimation from IGL shall furnish its acceptance of award.
- 39.4 Upon the successful Bidder's furnishing of the performance Bank Guarantee pursuant to ITB Clause.
- 39.5 The Owner will discharge the bid security of unsuccessful Bidders as early as possible.
- 39.6 LOA / First intimation from IGL read in conjunction with bid documents shall be binding Contract.
- 39.7 IGL may withhold issue of PO in case old MDPE, I&C and NG related work PO closure including material reconciliation is pending for reason attributed to contractor whose validity has expired more than a year from bid submission date.



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40.0 CORRUPT OR FRAUDULENT PRACTICES

40.1 It is required that all concerned in the entire execution process to observe the highest standard of ethics during the said process. In pursuance of this policy, the Owner/Consultant:

- (a) defines for the purposes of this provision, the terms set forth below as follows:
 - (i) “corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
 - (ii) “fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition;
- (b) will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
- (c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a Bank-financed contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a Bank financed contract.

40.2 The Bidder warrants and undertakes to the Owner that the Bidder:

- a) shall not seek or offer gift, consideration or benefit of any kind, which constitutes illegal or corrupt practice, either directly or indirectly, as an inducement or reward for execution of the Purchase Order/Contract or for carrying out obligations under the Purchase Order/Contract;
- b) shall ensure that any person who performs or has performed services for or on behalf of Bidder shall comply with this Clause;
- c) has and shall maintain in place effective internal control mechanism to prevent the commission of illegal or corrupt practices, either directly or indirectly, by the Bidder;
- d) from time to time, at the reasonable request of the Owner, will confirm in writing that it has complied with its undertakings in these Clauses and shall provide any information reasonably requested by the Owner in support of such compliance;
- e) shall notify to the Owner as soon as practicable of any breach of any of the undertakings contained within this Clause of which it becomes aware. In the event, the Bidder or such persons engaged by him breaches the requirements under this Clause, the same will constitute a fundamental and material breach of the Tender/Contract/Purchase Order and consequences for such breach, including termination, shall follow.

40.3 Furthermore, Bidders shall be aware of the provision stated in General Conditions of Contract (GCC).



GENERAL CONDITIONS OF CONTRACT (GCC)

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SECTION - III

GENERAL CONDITIONS OF CONTRACT (GCC)

GENERAL CONDITIONS OF CONTRACT

1.0 DEFINITIONS

1.1 All the initial capitalised terms used in the Agreement shall have the meaning as ascribed to such term hereunder:

- (a) **'Agreement' or 'Contract'** means the agreement entered into between the Purchaser / Owner and the Supplier, including all attachments and appendices thereto and all documents incorporated by reference therein, as modified, reinstated or amended from time to time.
- (b) **'Completion Schedule' or 'Delivery Schedule'** means a schedule approved by the Owner for completion of all obligations of the Supplier under the Agreement.
- (c) **'Contract Documents'** mean all the documents referred to in the Agreement for discharging the requisite obligations by respective party.
- (d) **'Contract Price'** means the price payable to the Supplier under the Contract for the full and proper performance of all its contractual obligations.
- (e) **'Day', 'Month' or 'Year'** means calendar day, calendar month or calendar year.
- (f) **'Engineer In-charge'** means an authorized representative of the Purchaser / Owner, if any, to which the Purchaser / Owner has entrusted various tasks in relation to the carrying out of his Project and in particular the implementation of the relevant Agreement. The Engineer is fully empowered to represent the Purchaser / Owner. For avoidance of doubt, Consultant may be an Engineer. In case the Agreement does not specify the intervention by the Engineer, the rights and obligations are exercised and borne by the Purchaser / Owner, mutatis mutandis.
- (g) **'Effective Date'** means a date on which Supplier's obligations will commence and thereupon Delivery Schedule and/or Completion Schedule will be drawn up.
- (h) **'Goods'** means all of the equipment, machinery, and/or other materials which the Supplier is required to supply to the Purchaser / Owner under the Agreement.
- (i) **'GCC'** means the General Conditions of the Contract contained in this section.
- (j) **'Inspector'** means any person or outside Agency nominated by Purchaser / Owner to inspect equipment, stage wise as well as final, before despatch, at Supplier's works and/or on receipt at Site as per terms of the Agreement.
- (k) **'Notification of Award'** means date which is earlier of either a Fax of Intent (FOI) or Letter of Intent (LOI) or Letter of Award (LOA) issued to a successful bidder for award of the work pursuant to bidding process.
- (l) **'Purchaser' or 'Owner'** shall mean Indraprastha Gas Ltd. (IGL), a company incorporated in India having its registered office at IGL Bhawan, 4, Community Centre, Sector-IX, R.K.Puram, New Delhi-110022, India. The term OWNER includes its successors & assigns.
- (m) **'Services' or 'Ancillary Services'** means those services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training and other such obligations of the Supplier covered under the scope of the Agreement.
- (n) **'Site' or 'Purchaser's stores'** means the place or places named in tender document.



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- (o) **'SCC'** means the Special Conditions of the Contract forming a part of the Contract Documents.
- (p) **'Supplier' or 'Seller' or 'Contractor' or 'Vendor'** means the individual person or firm or body corporate supplying the Goods and/or Services under the Agreement.
- (q) **'FOT'** – means that the Goods or supply items or services shall be delivered and done at site(s) warehouses or places mentioned by the Purchaser on FOT (Free on Terminal) basis.

2.0 APPLICATION

- 2.1 These General Conditions of Contract shall apply to the extent that they are not superseded by provisions of the Contract Agreement.

3.0 CONTRACTOR TO INFORM

- 3.1 The Contractor / Supplier / Seller shall be deemed to have carefully examined all contract documents to his entire satisfaction. Any lack of information shall not in any way relieve the Contractor / Supplier / Seller of his responsibility to fulfil his obligation under the Contract.

4.0 SCOPE OF CONTRACT

- 4.1 Scope of the CONTRACT shall be as defined in the Purchase Order / Contract specifications, drawings and Annexure thereto. For provisions not covered under the Purchase Order / Contract, provisions of General Conditions of Contract (GCC) and Special Conditions of Contract (SCC) of the tender document against which the Purchase Order / Contract has been placed shall prevail.
- 4.2 Completeness of the equipment shall be the responsibility of the Seller. Any equipment, fittings and accessories which may not be specifically mentioned in the specifications or drawings, but which are usual or necessary for the satisfactory functioning of the equipment (successful operation and functioning of the equipment being Seller's responsibility) shall be provided by Seller without any extra cost.
- 4.3 The Seller shall follow the best modern practices in the manufacture of high grade equipment notwithstanding any omission in the specifications. The true intent and meaning of these documents is that Seller shall in all respects, design, engineer, manufacture and supply the equipment in a thorough workmanlike manner and supply the same in prescribed time to the entire satisfaction of Purchaser.
- 4.4 The Seller shall furnish 2 nos. copies in English language of Technical documents, final drawings, preservation instructions, operation and maintenance manuals, test certificates, spare parts catalogues for all equipment's to the Purchaser.
- 4.5 The documents once submitted by the Seller shall be firm and final and not subject to subsequent changes. The Seller shall be responsible for any loss to the Purchaser / Consultant consequent to furnishing of incorrect data/drawings.
- 4.6 All dimensions and weight should be in metric system.
- 4.7 All equipment to be supplied and work to be carried out under the Contract shall conform to and comply with the provisions of relevant regulations / Acts (State Government or Central Government) as may be applicable to the type of equipment / work carried out and necessary certificates shall be furnished.



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- 4.8 The Seller shall provide cross sectional drawings, wherever applicable, to identify the spare part numbers and their location. The size of bearings, their make and number shall be furnished.
- 4.9 Specifications, design and drawings issued to the Seller along with RFQ and Contract are not sold or given but loaned. These remain property of Purchaser / Consultant or its assigns and are subject to recall by Purchaser / Consultant. The Seller and his employees shall not make use of the drawings, specifications and technical information for any purpose at any time except for manufacture against the Contract and shall not disclose the same to any person, firm or corporate body, without written permission of Purchaser / Consultant. All such details shall be kept confidential.
- 4.10 Seller shall pack, protect, mark and arrange for despatch of equipment as per instructions given in the Contract.

5.0 INTERPRETATION OF CONTRACT DOCUMENTS

- 5.1 Notwithstanding the sub-divisions of the contract documents into separate sections and volumes every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the Contract so far as it may be practicable to do so.
- 5.2 Where any portion of the General Condition of Contract is repugnant to or at variance with any provisions of the Special Conditions of Contract then, unless a different intention appears the provisions of the Special Conditions of Contract shall be deemed to override the provisions of the General Conditions of Contract and shall to the extent of such repugnancy, or variations, prevail.

6.0 COUNTRY OF ORIGIN

- 6.1 For purpose of this Clause, 'origin' means the place where the Goods were mined, grown, or produced. Goods are produced when, through manufacturing, processing, or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 6.2 The origin of Goods and services may be different from the nationality of the Supplier.

7.0 STANDARDS

- 7.1 The Goods supplied under this Agreement shall conform to the standards mentioned in the Technical Specifications and when no applicable standard is mentioned, to the authoritative standards appropriate to the Goods' in country of origin. Such standards shall be the latest issued by the concerned institution.

8.0 CONFIDENTIALITY

- 8.1 The Supplier cannot, without agreement of the Purchaser, disclose nor enable third parties to benefit from the documents drawn up in the course of his obligations under the Agreement or information received from the Purchaser / Consultant / Engineer / Inspector.
- 8.2 Further, Supplier is not allowed to publish copy or transmit to third parties the documents that are transmitted to him by Purchaser or Consultant or Engineer or Inspector. The Purchaser or Consultant retains the right to claim damages from the supplier in the case where these documents have been used without such written consent.



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- 8.3 However, these obligations do not apply to documents for which it can be demonstrated that,
- Such documents were already public before these were communicated to the other party, or have become public since without any fault or negligence of the party concerned, or
 - Such documents were already in its possession without having obtained them directly or indirectly from the other party, or
 - Such documents were obtained from an independent source that had neither direct nor indirect secrecy commitment to the other party.

8.4 Regarding the application of this clause, the experts appointed by the Purchaser / Engineer are not considered as third parties, and for this reason they have to respect, towards the Supplier, the same obligations as the Purchaser in these matters.

8.5 Any document, other than the Agreement itself as enumerated in GCC Clause (a), shall remain the property of the Purchaser and shall be returned (all copies) to the Purchaser on completion of the Supplier's obligations under the Agreement.

8.6 The Seller shall not, without the Purchaser's / Consultant's prior written consent, disclose the Contract or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Seller in the performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only as far as may be necessary for purpose of such performance.

9.0 CONTRACT OBLIGATIONS

9.1 If after award of the contract, the Seller does not acknowledge the receipt of award or fails to furnish the performance guarantee within the prescribed time limit, the Purchaser reserves the right to cancel the contract and apply all remedies available to him under the terms and conditions of this contract.

9.2 Once a contract is confirmed and signed, the terms and conditions contained therein shall take precedence over the Seller's bid and all previous correspondence.

9.3 Any neglect or omission or failure on the part of the Contractor in obtaining necessary and reliable information upon the foregoing or any other matters affecting the Contract shall not relieve him from any risks or liabilities or the entire responsibility from completion of the works at the scheduled rates and times in strict accordance with the Contract.

9.4 Any change in layout due to site conditions or technological requirement shall be binding on the Contractor and no extra claim on this account shall be entertained.

10.0 MODIFICATION IN CONTRACT

10.1 All modifications leading to changes in the Contract with respect to technical and/or commercial aspects including terms of delivery, shall be considered valid only when accepted in writing by Purchaser / Consultant by issuing amendment to the Contract. Issuance of acceptance or otherwise in such cases shall not be any ground for extension of agreed delivery date and also shall not affect the performance of contract in any manner except to the extent mutually agreed through a modification of contract.

10.2 Purchaser / Consultant shall not be bound by any printed conditions or provisions in the Seller's Bid Forms or acknowledgment of Contract, invoices, packing list and other documents which purport to impose any conditions at variance with or supplemental to Contract.

11.0 DELAYS BY OWNER OR HIS AUTHORISED AGENTS

11.1 In case the Contractor's performance is delayed due to any act or omission directly attributable to Owner or his authorized agents, then the Contractor shall be given due extension of time for the completion of the Work, to the extent such omission on the part of the Owner has caused delay in the Contractor's performance of his Work against written request by contractor and after Owner's verification.

11.2 No adjustment in Contract Price shall be allowed for reasons of such delays and extensions granted, except when contractor is requested by Owner to maintain the agreed time schedule of completion by engaging additional Contractor's personnel for additional time beyond stipulated working hours as also on Sundays and Holidays and achieve the completion date / interim targets.

12.0 PATENT RIGHTS

12.1 The Supplier shall alone bear the liability and costs of any prejudicial consequence of any infringement of all or part of the patents, industrial trademarks, designs and models relating to the Goods. Therefore, the Supplier shall make the arrangements at his own expense with the holders and pay the royalties, obtain the necessary licenses and authorizations, failing which he agrees to modify the Goods to the extent needed to avoid any such infringement.

12.2 In case of legal action or proceedings for infringement against the Owner, the Supplier undertakes to:

- Stand up for the Owner in the defence of his rights and interests;
- Save Purchaser harmless of any legal, financial and other consequences as may result to him from the legal action or proceedings;
- Bear all the damages and interests as may be due to the holders of the patents, industrial trademarks, designs and models, in principal, costs and interests;
- Reimburse to the Purchaser, at the Purchaser's first request, the costs of any nature whatsoever, including the fees of lawyers, experts and technical advisers, etc. incurred due to or on the occasion of the legal action or proceedings;
- To modify if need to be and without delay, the incriminated Goods / equipment, or have it replaced, free of charge, by equivalent Goods / equipment free of any infringement. Supplier alone shall bear all the costs, risks and liability that result thereof including the costs of dismantling, erecting, adapting or modifying such Goods/ equipment and starting up, etc.

12.3 In case of legal action or proceedings for infringement brought against the Purchaser, the Supplier has the right to participate in the Owner's defence. Any transaction with the third party in such cases shall be discussed and jointly agreed by the parties, wherever feasible.

12.4 The modifications to be brought to the Goods must have the prior consent of the Purchaser. This consent cannot in any way lessen the obligations of the Supplier that result from the present article, also in cases when new legal action or proceedings are initiated following the modifications that were made.



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13.0 CONTRACT-CUM-EQUIPMENT PERFORMANCE BANK GUARANTEE

- 13.1 Within 21 days from the receipt of notification of award of the Contract / Purchase Order, the Seller shall furnish Performance Guarantee to the Purchaser in the form of Demand Draft or Bank Guarantee from any Nationalized / Scheduled bank, in the format provided in the Tender Document.
- 13.2 The performance guarantee shall be denominated in the currency of the Contract.
- 13.3 The Performance Bank Guarantee shall be valid for a duration of 90 days beyond the expiry of Contract period / Defect Liability Period / Warranty Period, whichever later. The claim period of the Performance Bank Guarantee (BG) shall be further one month beyond the validity of the BG. The Bank Guarantee will be discharged by Purchaser not later than 6 months from the date of expiration of the Seller's entire obligations, including any warranty obligations, under the Contract.
- 13.4 The CPBG shall be refunded after successful completion of the contract and after adjustment of any and all dues of the IGL which may arise during the execution of the contract and a confirmation that contractor has cleared all its dues pertaining to the contract and all liabilities etc., in addition indemnifying IGL against any future claims, if any.
- 13.5 The Company shall have the right to forfeit the security deposit in case of non-satisfactory performance of the contract.

14.0 INSPECTIONS AND TESTS

- 14.1 The Supplier will submit to Purchaser the Quality Assurance Plan (QAP) regarding design, manufacture and testing of all the items required under the Agreement within 15 days of Notification of Award. Purchaser will then review the QAP and inform the Seller, the stages when the Purchaser / Inspector / Engineer would witness the tests and/or inspect the Goods under manufacturing, beyond which the progress of the specified activity / manufacturing will not proceed, without written approval. Such points during the progress of work under the Agreement shall be called as Customer Hold Points (CHP's)
- 14.2 The Seller will inform Purchaser fifteen (15) Days in advance for readiness of material for all such identified CHP's.
- 14.3 The Purchaser or its representative shall have the right to inspect and / or to test the Goods to confirm their conformity to the requirements of the Agreement at no extra cost to the Purchaser. SCC and / or the Technical Specifications shall specify what inspections and tests the Purchaser requires and to the extent feasible, where they are to be conducted. All costs for such inspections and tests except the cost of travel, boarding and lodging of the Purchaser's representative / Inspector shall be to the account of the Supplier. The Purchaser shall notify the Supplier in writing, in a timely manner, of the identity of any such representatives, (if outside of Purchaser's organisation) retained by it for these purposes.
- 14.4 The inspections and tests may be conducted on the premises of the manufacturer or Supplier or its sub-supplier(s), at point of delivery, and / or at the Goods' final destination. If conducted on the premises of the manufacturer or Supplier or its sub-supplier(s), all reasonable facilities and assistance, including access to drawings and production data, shall be provided by the Supplier to the inspectors at no charge to the Owner.



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- 14.5 Should any inspected or tested Goods fail to conform to the Specifications, the Owner may reject the Goods, and the Supplier shall either replace the rejected Goods meeting the Specification requirements or make alterations necessary to meet Specification requirements free of cost to the Purchaser.
- 14.6 Nothing mentioned in this Inspection and Tests clause shall in any way release the Supplier from any warranty or other obligations under the Agreement.
- 14.7 Inspection & Rejection of Materials by consignees - When materials are rejected by the consignee, the supplier shall be intimated with the details of such rejected materials, as well as the reasons for their rejection, also giving location where such materials are lying at the risk and cost of the contractor/supplier. The supplier will be called upon either to remove the materials or to give instructions as to their disposal within 14 days and in the case of dangerous, infected and perishable materials within 48 hours, failing which the consignee will either return the materials to the contractor freight to pay or otherwise dispose them off at the contractor's risk and cost. The Purchaser shall also be entitled to recover handling and storage charges for the period, during which the rejected materials are not removed @ 5% of the value of materials for each month till the rejected materials are finally disposed-off.

15.0 ADDITIONAL TEST

- 15.1 The Purchaser can also request for additional tests which were not identified and specified in the QAP, but considers necessary to ensure the quality of the raw materials or of the manufacturer.
- 15.2 In any case, additional tests shall be designed so as to require a minimum of time. Provided further before starting these additional tests, the Supplier defines and justifies, to the Purchaser's satisfaction, the possible effects of the duration of these tests on the contractual time-limits / schedule(s).
- 15.3 The Supplier places at the disposal of the Purchaser, or of the chosen official or approved organization, the tools and/or items of general use, which belong to him as well as the staff necessary for the additional tests decided by the Purchaser.
- 15.4 Should these additional tests reveal unacceptable faults, taking into account the features asked for and the Specifications that entail the repair or rejection of the relevant item or components, the Supplier will be responsible of the ensuing delays, inasmuch as these tests have been made in the shortest possible time. He shall bear, in such case, any costs he has had to incur for the carrying out of the tests.
- 15.5 If, on the other hand, the additional tests do not reveal, in the opinion of the Purchaser, unacceptable faults as indicated above, the cost borne by the supplier for the carrying out of these tests will be invoiced to the Owner, after prior justification, and the Supplier may be entitled to reasonable extension of the time limit.

16.0 PACKING

- 16.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Agreement. The packing shall be sufficient to withstand, without limitation, rough handling during transit and tropical humid conditions as exposure to extreme temperatures, salinity and precipitation during transit, and open storage. Further the size and weights of the packing cases shall take into consideration, where



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appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

- 16.2 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Agreement, including additional requirements, if any, specified in the SCC, and in any subsequent instructions of the Purchaser .

17.0 DISPATCH INSTRUCTIONS

- 17.1 At least fifteen (15) Days before the expected dispatch date, the Supplier shall obtain authorization from the Purchaser / Consultant to go ahead with the dispatching, after ensuring compliance to other requirements of the Agreement.

18.0 DELIVERY AND DOCUMENTS

- 18.1 Delivery of the Goods shall be made by the Supplier in accordance with the Delivery Schedule specified in the Agreement. The details of shipping and/or other documents are to be furnished by the Supplier.
- 18.2 The delivery terms are binding and essential and consequently, no delay is allowed without the written approval of Purchaser / Consultant. Any request concerning delay will be void unless accepted by Purchaser / Consultant through a modification to the Contract.
- 18.3 Delivery time shall include time for submission of drawings for approval, incorporation of comments, if any, and final approval of drawings by Purchaser / Consultant
- 18.4 In the event of delay in delivery, Price Reduction Schedule shall apply.
- 18.5 The documentation, in English Language, shall be delivered in due time, in proper form and in the required number of copies as specified in the contract.
- 18.6 The Seller should comply with the Packing, Marking and Shipping Documentation Specifications enclosed.

19.0 TRANSPORTATION

- 19.1 Where the Supplier is required under the Scope of the Contract to transport the Goods to a specified place of destination or to Site, the Supplier shall transport to such place of destination or site, as the case may be, including insurance and storage, if required. The Contract Price will include costs of all such transportation.
- 19.2 The Supplier shall select such carrier which could deliver the Goods in requisite time. In such case, Supplier shall be required to check (i) Age of the carrier; (ii) scheduled and actual maintenance; (iii) payment of relevant fees; (iv) pending claims, if any; (v) past accident records etc., so as to ensure safe and timely transportation of the Goods.
- 19.3 In case delay occurs for reasons not attributable to Purchaser alone, the Supplier shall, if directed by Purchaser, adapt a specific way of delivery of Goods (air freight or likewise) at destination, the additional cost which will be borne by the Supplier. If such specific way of delivery is required by Purchaser to pre-pone the deliveries, nevertheless, Supplier will arrange the same and difference of justified transportation charges will also be borne by the Purchaser.



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- 19.4 Supplier has to make necessary arrangement to deliver and load/unload the Goods to IGL designated sites at his own arrangement after intimation of erection, installation, testing and commissioning by the IGL Engineer-In-charge.

20.0 GUARANTEE/ WARRANTY

- 20.1 The Supplier warrants that the Goods supplied under the Agreement are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract Documents. The Supplier further warrants that all Goods supplied under this Agreement shall have no defect, arising from design, materials, or workmanship (except when the design and / or material is required by the Purchaser's specifications and the Supplier has given his disclaimer of warranty obligations with respect to such requirement) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in the place of use / destination.
- 20.2 This warranty shall remain valid for at least twelve (12) months from the date of successful commissioning of individual equipment or Eighteen (18) Months after the date of last shipment whichever is earlier or as specified under the Special Conditions of Contract. However, if warranty period exceeds due to any defect observed in the equipment at site and the time taken in rectification and commissioning, the warranty will stand extended for at least another 12 months from the date of completion of rectification free of cost.
- 20.3 Bidder will assume responsibility for obtaining manufacturer's warranty for all bought out items and maintain sufficient stock of spares at each site to meet urgent requirements.
- 20.4 After the successful completion of Test run, Warranty phase will start and system taking over certificate shall be issued by the Owner.
- 20.5 The Owner shall promptly notify the Supplier in writing of any claims arising under this warranty.
- 20.6 Upon receipt of such notice, the Supplier shall, within a reasonable period, repair or replace the defective Goods or parts thereof, free of cost to the Purchaser, deliver at the appropriate destination. The Supplier may take over the replaced parts / Goods at the time of their replacement. No claim whatsoever shall lie on the Purchaser for the replaced parts / goods thereafter. In the event of any correction of defects or replacement of defective material during the warranty period, the warranty for the corrected / replaced Goods or item or material shall be extended to a further period of twelve (12) Months from the date of such repair/replacement if put to use immediately or eighteen (18) Months.
- 20.7 If the Supplier, having been notified, fails to remedy the defect(s) within a reasonable period, the Purchaser may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Agreement.

21.0 LATENT DEFECT

- 21.1 If any latent defect (a defect which could not have manifested itself in the normal course of inspection and testing as per relevant codes, test procedures and contract specifications and normal usage as per industry practice will be referred to as latent defect) surfaces within five years of putting the Goods or parts thereof into operation, the Supplier shall repair or replace such Goods or parts, as the case may be, within technically reasonable period to the satisfaction of the Purchaser and without any additional liability on the Purchaser, whatsoever.



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22.0 PAYMENT TERMS

- 22.1 The Seller's request(s) for payment shall be made to the Purchaser in writing accompanied by an invoice describing, as appropriate, the Goods delivered and services performed, and by shipping documents submitted, and upon fulfilment of other obligations stipulated in the Contract.
- 22.2 Payment will be made in the currency or currencies in which the Contract Price has been stated in the Seller's bid, as well as in other currencies in which the Seller had indicated in his bid that he intends to incur expenditure in the performance of the Contract and wishes to be paid. If the requirements are stated as a percentage of the bid price along with exchange rates used in such calculations these exchange rates shall be maintained.
- 22.3 General Notes:
- (a) All foreign currency payments to foreign bidder shall be released through an irrevocable Letter of Credit, which shall be opened through Government of India Nationalised Bank and hence shall not be confirmed. In case any bidder insists on confirmation, charges towards confirmation shall be borne by him. L/C shall be established within 30 days after receipt of unconditional acceptance of Fax of Intent together with Performance Guarantee as applicable.
 - (b) For dispatches on FOT dispatch point (in India) basis, the payment shall be through Purchaser's bank. Payment through Bank, wherever applicable, shall be released as per normal banking procedures.
 - (c) Payment shall be released within 45 days after receipt of relevant documents complete in all respects.
 - (d) All bank charges incurred in connection with payments shall be to Seller's account in case of Indian bidders and to respective accounts in case of foreign bidder.
 - (e) Unless otherwise specifically stated in bid document, all payments shall be made in the currency quoted.
 - (f) No interest charges for delay in payments, if any, shall be payable by Purchaser.
 - (g) In case of Indian bidder, variation, if any, on account of customs duty on their built-in-import content, as per terms of tender document, shall be claimed separately by bidder after receipt of goods at site(s). However, any price benefits to the Purchaser, on account of such variation as per terms specified in the tender document, shall be passed on to the Purchaser along with invoicing itself.
 - (h) Agency commission, if any, to Indian agent for foreign bidders, indicated in prices, shall be paid to the agent in equivalent Indian Rupees on receipt and acceptance of material at site.

23.0 PRICES AND PRICE BASIS

- 23.1 Prices charged by the Supplier for Goods delivered and Services performed under the Agreement shall be on firm price basis and not vary from the prices quoted by the Supplier in its bid, with the exception of any price adjustments authorized in the tender document. Prices quoted by the Bidder, shall remain firm and fixed and valid until completion of the Contract and will not be subject to variation on any account except as per provisions of the tender document only.

24.0 FALL CLAUSE

- 24.1 The price charged for the materials supplied under the order by the supplier shall in no event exceed the lowest price at which the supplier or his agent / principal / dealer, as the case may be, sells the materials of identical description to any Persons / Organizations including the Purchaser



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or any Department of the Central Govt. or any Department of a State Govt. or any Statutory Undertaking of the Central or State Govt. as the case may be, during the currency of the order.

24.2 If at any time during the said period, the supplier or his agent / principal / dealer, as the case may be, reduces the sale price, sells or offers to sell such materials to any persons / organizations including the Purchaser or any Department Of Central Govt. or State Govt. as the case may be, at a price lower than the price chargeable under the order, he shall forthwith notify such reduction or sale or offer of sale to the Purchase Authority who has issued this order and the price payable under the order for the materials supplied after the date of coming into force of such reduction or sale or offer of sale shall stand correspondingly reduced.

24.3 The above stipulation will, however, not apply to:

- (a) Exports by the Contractor / Supplier or
- (b) Sale of goods as original equipment at prices lower than the prices charged for normal replacement
- (c) Sale of goods such as drugs which have expiry dates.

24.4 The supplier shall furnish the following certificate to the concerned Paying Authority along with each bill for payment for supplies made against this order:

"I/We certify that there has been no reduction in sale price of the items / goods / materials of description identical to those supplied to IGL under the order herein and such items / goods / materials have not been offered/sold by me/us to any person / organizations including the Purchaser or any Dept. of Central Govt. or any Deptt. of State Govt. or any Statutory Undertaking of the Central or State Govt. as the case may be upto the date of bill / during the currency of the order whichever is later, at a price lower than the price charged to IGL under the order".

Such a certificate shall be obtained, except for quantity of items / goods / materials categories under exceptions mentioned above, of which details shall be furnished by the supplier.

25.0 ASSIGNMENT

25.1 The Supplier shall not assign, in whole or in part, any of its obligations to be performed under this Agreement to any third party, except with the Owner's prior written consent.

26.0 SUB-CONTRACTING

26.1 The Supplier shall notify the Owner in writing of all subcontracts awarded under this Agreement if not already notified in the Supplier's bid and incorporated in the Agreement. Such notification and incorporation shall not relieve the Supplier from any liability or obligation under the Agreement. Such sub-contract shall be limited to certain bought-out items and sub-assemblies, which are not in line of Supplier's manufacturing or proposed manufacturing unit of authorized Supplier.

26.2 Such purchases and subcontracted items shall have to be necessarily in full compliance with the terms and conditions of the Agreement and do not relieve the Supplier of any of his contractual obligations. The Supplier shall be solely responsible for any action, deficiency or negligence of his sub-contractors.

26.3 For any subcontract, the Purchaser is entitled to demand from the Supplier, for approval of the list sub-contractors the Supplier intends to involve and of the orders he may entrust to them. The Purchaser may further demand that proposals of competitors be produced for him to examine. Approval by the Owner cannot give rise to any legal bond between the Purchaser and the sub-contractors and leaves full responsibility only to the Supplier.



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26.4 In the event where the warranty agreed between the Supplier and his sub-Suppliers exceeds in scope or in period those required under the Agreement, the Supplier undertakes to make the Purchaser the full and direct beneficiary of such warranty.

27.0 TIME SCHEDULE & PROGRESS REPORTING

27.1 Time Schedule Network / Bar Chart

- (d) Together with the Contract confirmation, Seller shall submit to Purchaser, his time schedule regarding the documentation, manufacture, testing, supply, erection and commissioning of the Goods.
- (e) The time schedule will be in the form of a network or a bar chart clearly indicating all main or key events regarding documentation, supply of raw materials, manufacturing, testing, delivery, erection and commissioning.
- (f) The original issue and subsequent revisions of Seller's time schedule shall be sent to Purchaser.
- (g) The time schedule network / bar chart shall be updated at least every second month.

27.2 Progress Trend Chart / Monthly Report

- (h) Seller shall report monthly to Purchaser, on the progress of the execution of Contract and achievement of targets set out in time bar chart.
- (i) The progress will be expressed in percentages as shown in the progress trend chart attached to the Time Schedule specification.
- (j) The first issue of the Progress Trend Chart will be forwarded together with the time bar chart along with Contract confirmation.

27.3 Purchaser's / Consultant's representatives shall have the right to inspect Seller's premises with a view to evaluating the actual progress of work on the basis of Seller's time schedule documentation.

27.4 Irrespective of such inspection, Seller shall advise Consultant, with copy to Purchaser, at the earliest possible date of any anticipated delay in the progress.

27.5 Notwithstanding the above, in case progress on the execution of contract at various stages is not as per phased time schedule and is not satisfactory in the opinion of the Purchaser / Consultant which shall be conclusive or Seller shall neglect to execute the Contract with due diligence and expedition or shall contravene the provisions of the Contract, Purchaser / Consultant may give notice of the same in writing to the Seller calling upon him to make good the failure, neglect or contravention complained of. Should Seller fail to comply with such notice within the period considered reasonable by Purchaser / Consultant, the Purchaser / Consultant shall have the option and be at liberty to take the Contract wholly or in part out of the Seller's hand and make alternative arrangements to obtain the requirements and completion of Contract at the Seller's risk and cost and recover from the Seller, all extra cost incurred by the Purchaser on this account. In such event Purchaser / Consultant shall not be responsible for any loss that the Seller may incur and Seller shall not be entitled to any gain. Purchaser / Consultant shall, in addition, have the right to encash Performance Guarantee in full or part.



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28.0 DELAYS IN THE SUPPLIER'S PERFORMANCE

- 28.1 Delivery of the Goods and performance of Services shall be made by the Supplier in accordance with the time schedule prescribed by the Purchaser in the Delivery Schedule.
- 28.2 If at any time during performance of the Agreement, the Supplier or its subcontractor(s) encounters conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, with or without levy of Price Reduction Schedule, in which case the extension shall be ratified by the parties by amendment of Agreement.
- 28.3 Except as provided under GCC Clause – "Force Majeure" or for the reasons solely attributable to the Purchaser, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of Price Reduction Schedule (PRS) unless an extension of time is agreed upon pursuant to above sub-clause (ii) without the application of PRS.

29.0 PRICE REDUCTION SCHEDULE (PRS)

- 29.1 Time is the essence of the Contract. In case the Contractor fails to complete the Work within the Contractual Completion period, then, unless such failure is due to Force Majeure as defined herewith or due to Owner's defaults, the Contractor shall pay to the Owner, by way of compensation for delay and not as penalty, a sum @ ½% (half per cent) per complete week of delay of the value of the "supply portion for the quantity" OR "the work portion" that is delayed per complete week subject to maximum of 5% (Five Per Cent) of the total contract value.
- 29.2 The parties agree that this is a genuine pre-estimate of the loss/damage which will be suffered on account of delay/breach on the part of the Contractor and the said amount will be payable on demand without there being any proof of the actual loss or damages caused by such delay/breach. The decision of Owner in regard to the actual delay shall be final and binding on the Contractor. All sums payable by way of compensation shall be considered as reasonable compensation without reference to the actual loss or damage which shall have been sustained.
- 29.3 In case of delay in delivery on the part of Seller, the invoice/document value shall be reduced proportionately for the delay and payment shall be released accordingly. In the event the invoice value is not reduced proportionately for the delay, the Purchaser may deduct the amount so payable by Seller, from any amount falling due to the Seller or by recovery against the Performance Guarantee.

30.0 TERMINATION FOR DEFAULT

- 30.1 Except for the cases provided for in Clause "Force Majeure", if the Supplier fails to execute the work or any part thereof with such diligence as will ensure its completion within the time specified in the contract or extension thereof or fails to perform any of his obligation under the contract or in any manner commits a breach of any of the provisions of the contract it shall be open to the owner at its option by written notice to the supplier
- (k) TO DETERMINE THE CONTRACT in which event the Contract shall stand terminated and shall cease to be in force and effect on and from the date appointed by the Owner on that behalf, where upon the Contractor shall stop forthwith any of the Contractor's work then in progress, except such Work as the Owner may, in writing, require to be done to safeguard any

property or WORK, or installations from damage, and the Owner, for its part, may take over the work remaining unfinished by the Contractor and complete the same through a fresh Contractor or by other means, at the risk and cost of the Contractor, and any of his sureties if any, shall be liable to the Owner for any excess cost occasioned by such work having to be so taken over and completed by the Owner over and above the cost as worked out in terms of the contract.

- (I) WITHOUT DETERMINING THE CONTRACT to take over the work of the Contractor or any part thereof and complete the same through a fresh Contractor or by other means at the risk and cost of the Contractor and any of his sureties are liable to the Owner for any excess cost over and above the cost as worked out in terms of the contract, occasioned by such works having been taken over and completed by Owner.

30.2 Before determining the Contract, provided in the judgment of the Owner, the default or defaults committed by the Contractor is/are curable and can be cured by the Contractor if an opportunity is given to him, then the Owner may issue notice in writing calling the Contractor to cure the default within such time specified in the notice.

30.3 The Owner shall also have the right to proceed or take action as per above, in the event that the Contractor becomes bankrupt, insolvent, compounds with his creditors, assigns the Contract in favour of his creditors or any other person or persons, or being a company or a corporation goes into voluntary liquidation, provided that in the said events it shall not be necessary for the Owner to give any prior notice to the Contractor.

30.4 Termination of the Contract as provided for above shall not prejudice or affect the rights of the Owner which may have accrued up to the date of such termination.

31.0 OWNER MAY DETERMINE / TERMINATE CONTRACT

31.1 Owner shall, at any time, be entitled to determine and terminate the Contract, in whole or in part for any cause whatsoever. A notice in writing from the Owner to the Contractor shall be issued giving 30 (Thirty) days' time for such determination including the reason thereof.

31.2 The Contractor upon receipt of such notice shall discontinue the Work on the date and to the extent specified in the notice, make all reasonable efforts to obtain cancellation of all orders and contracts to the extent they are related to works terminated and upon terms satisfactory to Owner, stop all further sub-contracting or purchasing activity related to the works terminated and assist the Owner in maintenance, protection and disposition of the works acquired under the Contract by the Owner.

32.0 TERMINATION FOR INSOLVENCY

32.1 The Purchaser, may at any time, terminate the Contract by giving written notice to the Seller, without compensation to the Seller, if the Seller becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Purchaser.

33.0 TERMINATION FOR OWNER'S CONVENIENCE

33.1 The Owner, by written notice sent to the Contractor, may terminate the Agreement, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Owner's convenience, the extent to which performance of the Contractor under the Agreement is terminated, and the date upon which such termination becomes effective.



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33.2 The Goods that are complete and ready for shipment / dispatch as on the date of Contractor's receipt of notice of termination shall be accepted by the Owner on the terms and prices mutually agreed at that time.

33.3 For the remaining Goods, the Owner may elect:

- (m) To have any portion completed and delivered at the Agreement terms and prices and / or
- (n) To cancel the remainder and pay to the Contractor an agreed amount for partially completed Goods and Services and for materials and parts previously procured by the Contractor; and/or
- (o) To pay any reasonable and demonstrable otherwise non-recoverable expenses incurred by the Contractor.

33.4 IGL reserves the right to award the contract for a shorter duration than the specified or foreclose it with adequate advance notice not less than 30 days due to change in its business requirement.

34.0 FORCE MAJEURE

34.1 For purposes of this clause, 'Force Majeure' means an event beyond the control of the Supplier or Purchaser and not involving the Supplier's fault or negligence and not foreseeable, all having impact on the performance of the respective obligations as detailed hereinafter. Such events may include, but are not restricted to:

- a) War, whether declared or not, civil war, unrest and revolution, piracy, terrorism, sabotage;
- b) Natural disasters such as tornadoes, earthquakes, tidal waves, floods, destruction by lightning, etc.
- c) Explosions, fires, destruction of machinery, plant and installations of any nature
- d) Arbitrary action, if any of the Government of India or a relevant State;
- e) Refusal by government authority of Government of India to grant the necessary permits needed to carry out the Agreement, provided such refusal is not the result of the doing of the parties.
- f) Boycotts, strikes and lock-outs of any nature, disruptive, occupation of plant and premises, work stoppages occurring at the premises of the party requesting to be relieved of its liability, so long such cause is not effected by such party's controlled administration or employees.

34.2 Should any one or more of the events referred to in this clause occur, affecting the performance of the obligations of either of the parties, under the Agreement, such party shall notify to the other party the existence of a cause for force majeure as soon as it has knowledge of such event but not later than fifteen (15) Days from such date the event has arisen. The notification shall contain the details regarding the nature, starting date, presumed end date, as well as the estimated effects of the case of force majeure or other cause of force majeure on the obligations of the party which has incurred the event.

34.3 As soon as the cause for exoneration has ended, the party, the performance of which has been affected shall notify, in writing, to the other party the precise date of the end of the cause of force majeure and the extent, with justification, to which it has actually been affected in the performance of its obligations. It adds to this statement the necessary certificates issued by an authorised entity.

34.4 Any case of force majeure suspends the carrying out of the obligations affected. However, the party which claims force majeure shall show every diligence towards reducing as much as feasible the effects thereof. It is exonerated only for the minimum period, which may (in no event exceed the period of existence of the force majeure itself) have actually occurred as a result of the force majeure.



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34.5 The parties may request that the Agreement be deemed cancelled if it's carrying out has become totally impossible.

35.0 SETTLEMENT OF DISPUTES

35.1 The rules of procedure for arbitration proceedings shall be as per Indian Arbitration and Conciliation Act 1996 or as amended.

35.2 If any dispute or difference arising between the Parties in respect of or concerning or connected with the interpretation or implementation of this Agreement or otherwise arising out of this Agreement, the parties hereto shall promptly and in good faith negotiate with a view to bring out and amicable resolution and settlement.

35.3 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Owner or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given.

35.4 Indraprastha Gas Limited will nominate three independent persons who can be the Sole Arbitrator and intimate the same to Vendor. The Vendor needs to choose one person from the said nominees as Sole Arbitrator. If Vendor fails to choose the arbitrator within thirty (30) days from receipt of a nomination by Indraprastha Gas Limited, Indraprastha Gas Limited will have right to choose the Sole Arbitrator.

35.5 The Arbitration proceedings shall be held in Delhi and shall be conducted in English Language. The decision of such arbitration shall be binding and conclusive upon the Parties. The Parties to the arbitration shall equally share the costs and expenses of any such arbitration.

35.6 It is hereby clarified that the Courts at Delhi alone shall have jurisdiction to try and entertain any and all suits or other proceedings in respect of, relating to or otherwise arising out of this Agreement.

35.7 Notwithstanding any reference to arbitration herein, the parties shall continue to perform their respective obligations under the Agreement unless they otherwise agree. The WORK under the CONTRACT shall continue during the Arbitration proceedings and no payment due or payable to the Seller shall be withheld on account of such proceedings.

36.0 LIMITATION OF LIABILITY

36.1 Except in cases of wilful negligence or wilful misconduct, and in the case of infringement, the Supplier shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits provided that this exclusion shall not apply to any obligation of the Supplier to pay Price Reduction to the Purchaser and the aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.



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37.0 PUBLICITY AND ADVERTISEMENT

- 37.1 Seller shall not without the written permission of Purchaser / Consultant make a reference to Purchaser / Consultant or any Company affiliated with Purchaser / Consultant or to the destination or the description of goods or services supplied under the contract in any publication, publicity or advertising media.

38.0 GOVERNING LANGUAGE

- 38.1 The agreement shall be written in English language unless specified otherwise in the SCC. All correspondence and other documents pertaining to the agreement which are exchanged by the parties shall be written in the same language. Printed literature in other language shall only be considered, if it is accompanied by an English translation. In case, any document/brochure etc. is written in any other language then its English translation shall govern.

39.0 APPLICABLE LAW

- 39.1 The Contract shall be governed and interpreted in accordance with laws of India and Courts at Delhi shall have exclusive jurisdiction.

40.0 NOTICES

- 40.1 Any notice given by one party to the other pursuant to this Agreement shall be sent to the other party in writing by registered mail and confirmed in writing to the other party's address specified in the Agreement.
- 40.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

41.0 TAXES, DUTIES AND LEVIES

- 41.1 The Contractor agrees to and does hereby accept full and exclusive liability for the payment of any and all Taxes, Duties now in force and hereafter increased, imposed or modified from time to time in respect of Works and materials and all contributions and taxes for unemployment compensation, insurance and old age pensions or annuities now or hereafter imposed by any Central or State Government authorities which are imposed with respect to or covered by the wages, salaries, or other compensations paid to the persons employed by the Contractor. The Contractor shall be responsible for the compliance with all obligations and restrictions imposed by the Labour Law or any other law affecting employer-employee relationship. The Contractor further agrees to comply and to secure the compliance of all Sub-Contractors with all applicable Central, State, Municipal and local law and regulation, and requirement of any central, State or Local Government agency or authority. Contractor further agrees to defend, indemnify and hold Owner harmless from any liability or penalty which may be imposed by the Central, State or Local authorities by reason of any violation by Contractor or Sub-Contractor of such laws, regulations or requirements and also from all claims, suits or proceedings that may be brought against the Owner arising under, growing out of, or by reason of the work provided for by this Contract, by third parties, or by Central or State Government authority or any administrative sub-division thereof.
- 41.2 Owner shall directly pay the Customs Duty and Tax to concerned Authorities in case of foreign bidders.
- 41.3 Owner shall make from contractor's bills such tax deductions as are required as per rules and regulations in force from time to time.



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- 41.4 Bidder shall be entirely responsible for scope of work, all taxes, GST, license fees, any other duty on services or any other tax payable and/ or other levies etc. imposed by Central, state, municipal and local law and regulatory agency or authority. The rate in SOR is inclusive of all the above referred taxes/duties.
- 41.5 Any statutory variation in GST within the contractual period for the SOR items shall be to IGL's account. However, in case the contractual completion period gets extended for reasons solely attributable to contractor, the statutory variation shall be limited to contractual completion period only.
- 41.6 Any new taxes & duties, if imposed by the State / Central Govt. of India after due date of bid submission but before the Contractual Delivery Date, shall be paid / reimbursed to the contractor on submission of copy of notification(s) issued from State / Central Govt. Authorities along with submission of documentary evidence for proof of payment of such taxes / duties to State / Central Govt. Authorities and after ascertaining it's applicability with respect to the contract.
- 41.7 Returns and details required to be filled under GST laws & rules should be timely filed by Supplier of Goods / Service Provider with requisite details to enable the Owner to avail tax credits including input tax credit. Payments to Service Provider claiming GST amount will be made provided the above formalities are fulfilled. Further, IGL may seek copies of challan and certificate from Chartered Accountant of Supplier / Service Provider for deposit of GST collected from Owner. Any loss or non-availability of input tax credit by the Owner due to non-compliance of applicable tax laws (including but not limited to GST laws in force or otherwise) or for any reason which is not attributable to IGL, then IGL shall not be obligated or liable to pay or reimburse GST charged in the invoice(s) and an amount equivalent to any tax liability accruing to the Owner and/or to the extent of any loss accrued to the Owner together with all penalties, costs, liabilities, dues, fees and interest if any, shall be deducted from the payment due to the Vendor or shall be reimbursed by the Vendor, as the case may be, till such default is either rectified or made good by the Vendor and the Owner is satisfied that it is in a position to claim valid input tax credit within the time-lines as per applicable laws.
- 41.8 Supplier of Goods / Service Provider providing taxable service shall issue an Invoice / Bill, as the case may be as per rules / regulation of GST. GST, if applicable, shall be paid after verifying GST Registration number. Each item's cost and GST as applicable shall be provided in all the invoices along with GST registration no. & HSN/SAC codes for the services provided.
- 41.9 In case of statutory variation in GST, other than due to change in turnover, payable on the contract value during contract period, the Supplier of Goods / Services (Service Provider) shall submit a copy of the 'Government Notification' to evidence the rate as applicable on the Bid due date and on the date of revision. In case GST is not applicable to the vendor at the time of Contract / Order placement, as per turnover criteria, GST due to change in turnover is not payable. If applicable in future, the same shall be borne by vendor.
- 41.10 In case of delay in completion period beyond the contractual date, for reasons attributable to contractor, any increase in these rates or any new taxes and duties introduced during the period beyond the contractual completion date shall be borne by the contractor, whereas any decrease shall be passed on to IGL.
- 41.11 The base date for the purpose of applying statutory variation shall be the Bid Due Date.



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- 41.12 Claim for payment of GST / Statutory variation, should be raised within two (02) months from the date of issue of 'Government Notification' for payment of differential GST, otherwise claim in respect of above shall not be entertained for payment of arrears.
- 41.13 Beyond the contract period, in case IGL is not entitled for input tax credit of GST, then any increase in the rate of GST beyond the contractual delivery period shall be to Service Provider's account whereas any decrease in the rate GST shall be passed on to the Owner.
- 41.14 Beyond the contract period, in case IGL is entitled for input tax credit of GST, then statutory variation in applicable GST on supply and on incidental services, shall be to IGL's account.
- 41.15 IGL will prefer to deal with registered supplier of goods / services under GST. All Vendors shall have GST registration in the concerned State from where he intends to supply the goods. Therefore, bidders are requested to get themselves registered under GST, if not registered yet.
- 41.16 In case CBEC (Central Board of Excise and Customs) / any equivalent Central Government agency / State Government agency brings to the notice of IGL that the Supplier of Goods / Service Provider has not remitted the amount towards GST collected from IGL to the government exchequer, then IGL shall have the right to put that Supplier of Goods / Service Provider under Holiday List.
- 41.17 Bidders are required to strictly consider the following key points while preparing the bid document as the following shall be applicable in all awarded Contracts and Purchase Orders:
- (p) If prior to the placement of award, vendor realizes that the actual applicable rates of taxes are higher than the GST rates quoted in the bid against any particular HSN Code, then the vendor shall do reverse calculation and reduce the "basic unit price" of the product / service accordingly to match the "total price inclusive of taxes" of that product / service.
- Whereas, in case the vendor realizes that the actual applicable rates of taxes are lower than the GST rates quoted in the bid against any particular HSN Code, then the vendor shall reduce the "GST rate" of the product / service accordingly without changing the "basic unit price" of that product / service and the invoices shall be raised as per the actual applicable GST.
- (q) The tax rates shall only be changed under statutory variation if there is a change in the GST rates after the due date of bid submission as per government notification in the applicable HSN code which is quoted in the bid only and not in any other HSN Code. The differential tax amount will be paid / recovered depending upon whether the revised rate notified by government has increased / decreased as compared to the existing rates.

42.0 TIME FOR PERFORMANCE

- 42.1 The effective date of Contract shall be the date of Notification of Award (Fax of Intent) or as mentioned therein. The completion period specified in the Bid Document shall be reckoned from such date of effectiveness.
- 42.2 Contractor shall furnish bar charts specifying intermediate milestones to achieve the final completion period as per contract. The bar chart agreed shall be for reference purpose only & shall in no way release the contractor's responsibility to complete the work within the completion period.



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43.0 TRANSFER OF TITLE

- 43.1 The title of Ownership in respect of equipment, materials etc. supplied by Contractor for incorporation in permanent works for execution of contract shall pass on to Owner on the date of issue of completion certificate.
- 43.2 However, Owner shall have the lien on all such equipment, materials, etc. at any time during the performance of the contract after the date on which Owner releases any advance payment towards the said equipment, materials, etc. and contractor shall thereafter be bound to use the same only for the purpose intended under the contract.
- 43.3 Ownership of goods supplied by domestic / foreign seller will transfer to purchaser on receipt of Goods at IGL stores.

44.0 CONTRACTOR REMAINS LIABLE TO PAY COMPENSATION IF ACTION NOT TAKEN UNDER CLAUSE ENTITLED TERMINATION FOR DEFAULT

- 44.1 In any case in which any of the powers conferred upon the Owner by the clause entitled "Termination for Default" hereof shall have become exercisable and the same had not been exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any further case of default by the Contractor for which by any clause or clauses hereof he is declared liable to pay compensation amounting to the whole of his Performance guarantee and the liability of the Contractor for past and future Compensation shall remain unaffected.
- 44.2 In the event of the Owner putting in force the power vested in him under the preceding clause he may, if he so desires, take possession of all or any tools, and plants, materials and stores in or upon the works or the site thereof belonging to the Contractor or procured by him and intended to be used for the execution of the Work or any part thereof paying or allowing for the same in account at the Contract prices or in case of these not being applicable at current market prices to be certified by the Engineer-In-Charge may give notice in writing to the Contractor or his authorized agent, requiring him to remove such tools, plant, materials or stores from the premises (within a time to be specified in such notice), and in the event of the Contractor failing to comply with any such requisition, the Engineer-In-Charge may remove them at the Contractor's expense or sell them by auction or private sale on account of the Contractor and at his risk in all respects without any further notice as to the date, time or place of the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the Contractor.

45.0 CHANGE IN CONSTITUTION

- 45.1 The prior approval, in writing, of the Owner shall be obtained before any change is made in the constitution of the contractor. If prior approval is not obtained, the Contract shall be deemed to have been allotted in contravention of Clause entitled "sub-letting of works" hereof and the same action may be taken and the same consequence shall ensure as provided in the said clause.

46.0 MEMBERS OF THE OWNER NOT INDIVIDUALLY LIABLE

- 46.1 No Director, or Official or employee of the Owner shall in any way be personally bound or liable for the acts or obligations of the Owner under the Contract or answerable for any default or omission in the observance or performance of any of the acts, matters or things which are herein contained.

47.0 CONTRACTOR TO INDEMNIFY THE OWNER

- 47.1 The Contractor shall indemnify the Owner and every member, officer and employee of the Owner, also the Engineer-In-Charge and his staff against all actions, proceedings, claims, demands, costs and expenses whatsoever arising out of all actions, proceedings, claims, demands, costs and expenses which may be made against the Owner for or in respect of or arising out of any failure by the Contractor in the performance of his obligations under the Contract. The Owner shall not be liable for or in respect of consequence of any accident or injury to any workmen or other person in the employment of the Contractor or his Sub-Contractor and Contractor shall indemnify and keep indemnified the Owner against all such damages and compensations and against all claims, damages, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereof.
- 47.2 Should the Owner have to pay any money in respect of such claims or demands as aforesaid the amount so paid and the costs incurred by the Owner shall be charged to and paid by the Contractor and the Contractor shall not be at liberty to dispute or question the right of the Owner to make such payments notwithstanding the same may have been made without the consent or authority or in law or otherwise to the contrary.

48.0 SAFETY REGULATIONS

- 48.1 In respect of all labour, directly or indirectly employed in the Work the Contractor shall at his own expense arrange for all the safety provisions and abide by all labour laws, safety codes, and all fire and statutory regulation and keep owner indemnified in respect thereof.

49.0 OWNER MAY DO PART OF WORK

- 49.1 Upon failure of the Contractor to comply with any instructions given in accordance with the provisions of this Contract the Owner has the alternative right, instead of assuming charge of entire Work, to place additional labour force, tools, equipment's and materials on such parts of the Work, as the Owner may designate or also engage another Contractor to carry out the Work. In such cases, the Owner shall deduct from the amount which otherwise might become due to the Contractor, the cost of such Work and materials with fifteen percent (15%) added to cover all Owners charges and should the total amount thereof exceed the amount due to the Contractor, the Contractor shall pay the difference to the Owner.

50.0 POSSESSION PRIOR TO COMPLETION

- 50.1 The Engineer-In-Charge shall have the right to take possession of or use any completed or partially completed Work or part of the Work. Such possession or use shall not be deemed to be an acceptance of any work completed in accordance with the Contract agreement. If such prior possession or sue by the Engineer-In-Charge delays the progress of Work, equitable adjustment in the time of completion will be made and the Contract agreement shall be deemed to be modified accordingly.

51.0 DEFECTS IN WORK

51.1 DEFECTS PRIOR TO TAKING OVER

If at any time, before the Work is taken over, the Engineer-In-Charge shall:

- (r) Decide that any work done or materials used by the Contractor or by any Sub-Contractor is defective or not in accordance with the Contract, or that the works or any portion thereof are

defective, or do not fulfil the requirements of Contract (all such matters being hereinafter, called "Defects" in this clause), and

- (s) As soon as notice is given to the Contractor in writing of the said decision, specifying particulars of the defects alleged to exist or to have occurred, then the Contractor shall at his own expenses and with all speed make good the defects so specified.

In case Contractor shall fail to do so, the Owner may take, at the cost of the Contractor, such steps as may in all circumstances, be reasonable to make good such defects. The expenditure so incurred by the Owner will be recovered from the amount due to the Contractor. The decision of the Engineer-in-Charge with regard to the amount to be recovered from the Contractor will be final and binding, on the Contractor. As soon as the WORK have been completed in accordance with the Contract (except in minor respects that do not affect their use for the purpose for which they are intended and except for maintenance thereof and have passed the tests on completion, the Engineer-In-Charge shall issue a certificate (hereinafter called Completion Certificate) in which he shall certify the date on which the Work have been so completed and have passed the said tests and the Owner shall be deemed to have taken over the Work on the date so certified. If the Work has been divided into various groups in the Contract, the Owner shall be entitled to take over any group or groups before the other or others and there upon the Engineer-In-Charge shall issue a Completion Certificate which will, however, be for such group or groups so taken over only. In such an event if the group/section/part so taken over is related to the integrated system of the work, notwithstanding date of grant of Completion Certificate for group/section/part, the period of liability in respect of such group/section/part shall extend 12 (twelve) months from the date of completion of Work.

51.2 DEFECTS AFTER TAKING OVER:

In order that the Contractor could obtain a Completion Certificate he shall make good, with all possible speed, any defect arising from the defective materials supplied by the Contractor or workmanship or any act or omission of the Contractor that may have been noticed or developed, after the works or groups of the works has been taken over, the period allowed for carrying out such Work will be normally one month. If any defect be not remedied within a reasonable time, the Owner may proceed to do the Work at Contractor's risk and expense and deduct from the final bill such amount as may be decided by the Owner.

If by reason of any default on the part of the Contractor a Completion Certificate has not been issued in respect of any portion of the Work within one month after the date fixed by the Contract for the completion of the Work, the Owner shall be at liberty to use the Work or any portion thereof in respect of which a completion certificate has not been issued, provided that the Work or the portion thereof so used as aforesaid shall be afforded reasonable opportunity for completing these works for the issue of Completion Certificate.

52.0 REPLACEMENT OF DEFECTIVE PARTS AND MATERIALS

- 52.1 If during the progress of the Work, Owner shall decide and inform in writing to the Contractor, that the Contractor has manufactured any plant or part of the plant unsound or imperfect or has furnished plant inferior to the quality specified, the Contractor on receiving details of such defects or deficiencies shall at his own expenses within 7 (seven) days of his receiving the notice, or otherwise within such time as may be reasonably necessary for making it good, proceed to alter, re-construct or remove such work and furnish fresh equipment upto the standards of the specifications. In case the Contractor fails to do so, Owner may on giving the Contractor 7 (seven) days' notice in writing of his intentions to do so, proceed to remove the portion of the Work so complained of and at the cost of Contractor perform all such works or furnish all such equipment's provided that nothing in the clause shall be deemed to deprive the Owner of or affect any rights under the Contract, the Owner may otherwise have in respect of such defects and deficiencies.



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52.2 The Contractor's full and extreme liability under this clause shall be satisfied by the payments to the Owner of the extra cost, of such replacements procured including erection/installation as provided for in the Contract; such extra cost being the ascertained difference between the price paid by the Owner for such replacements and the Contract Price portion for such defective plants and repayments of any sum paid by the Owner to the Contractor in respect of such defective plant. Should the Owner not so replace the defective plant the Contractor's extreme liability under this clause shall be limited to the repayment of all such sums paid by the Owner under the Contract for such defective plant.

53.0 DEFENCE OF SUITS:

53.1 If any action in court is brought against the Owner or an officer or agent of the Owner, for the failure, omission or neglect on the part of the Contractor to perform any acts, matters, covenants or things under the Contract, or damage or injury caused by the alleged omission or negligence on the part of the Contractor, his agents, representatives or his Sub-Contractor's, or in connection with any claim based on lawful demands of Sub-Contractor's workmen, suppliers or employees, the Contractor, shall in such cases indemnify and keep the Owner and/or their representatives harmless from all losses, damages, expenses or decrees arising out of such action.

54.0 PACKING, FORWARDING AND SHIPMENT

54.1 The Contractor, wherever applicable, shall, after proper painting, pack and crate all items in such a manner as to protect them from deterioration and damage during rail and road transportation to the Site and storage at the Site till the time of erection. The Contractor shall be held responsible for all damages due to improper packing.

54.2 The Contractor shall notify Owner of the date of each shipment from his works and expected date of arrival at the Site for the information of Owner.

54.3 The Contractor shall also give all shipping information concerning the weight, size and content of each packing including any other information Owner may require.

54.4 Fragile articles shall be packed with special precaution and shall bear the marking like 'Fragile Handle with Care and/or 'this side up' etc. Items shipped in bundle must be securely tied with steel wire or straps at suitable intervals.

54.5 All delicate surfaces on equipment/materials shall be carefully protected and painted with protective paint/compound and wrapped to prevent rusting and damage.

54.6 Attachments and parts of equipment and small pieces shall be packed in wooden cases with adequate protection inside the case and wherever possible should be sent along with the major equipment. Each item shall be tagged so as to identify it with the main equipment and part number and reference number shall be indicated.

54.7 All protrusions shall be suitably protected and openings shall be blocked by wooden covers.

54.8 Wherever required, equipment/material shall be packed in polythene bags and silica gel or similar dehydrating compound shall be put inside the bags for protecting them.

55.0 DEDUCTIONS FROM THE CONTRACT PRICE

- 55.1 All costs, damages or expenses which Owner may have paid or incurred for which under the provisions of the Contract, the Contractor is liable/will be liable, will be deducted from contractors bills or from any moneys due or becoming due to the Contractor.

56.0 COMPLETION CERTIFICATE

Application for Completion Certificate:

- 56.1 When the Contractor fulfils his obligation under the contract he shall be eligible to apply for Completion Certificate in respect of the Work by submitting the completion documents along with such application for Completion Certificate.
- 56.2 The Engineer-In-Charge shall normally issue to the Contractor the Completion Certificate within one month after receiving an application thereof from the Contractor after verifying from the completion documents and satisfying himself that the Work has been completed in accordance with and as set out in the construction and erection drawings and the Contract Documents.
- 56.3 The Contractor, after obtaining the Completion Certificate, is eligible to present the final bill for the Work executed by him under the terms of Contract.
- 56.4 Issue of Completion Certificate:
- 56.5 Within one month of the completion of the Work in all respects, the Contractor shall be furnished with a certificate by the Engineer-In-Charge of such completion, but neither Completion Certificate shall be given nor shall the Work be deemed to have been executed until all scaffolding, surplus materials and rubbish is cleared off the Site completely. The Work will not be considered as complete and taken over by the Engineer-In-Charge, until all the Temporary Work, labour and staff colonies etc. Constructed are removed and worksite cleared to the satisfaction of the Engineer-In-Charge.
- 56.6 If the Contractor shall fail to comply with the requirements of this clause on or before the date fixed for the completion of the Work, the Engineer-In-Charge may at the expense of the Contractor remove such scaffolding, surplus materials and rubbish and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the Contractor shall forthwith pay the amount of all expenses so incurred and shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except for any sum actually realised by the sale thereof.

57.0 FINAL DECISION AND FINAL CERTIFICATE

- 57.1 Upon the expiration of the Defect Liability Period and subject to the Engineer-In-Charge being satisfied that the WORK has been duly completed by the Contractor and performed all his obligations under the Contract, the Engineer-In-Charge shall (without prejudice to the rights of Owner to retain the provisions of relevant clause thereof) otherwise give a certificate herein referred to as the Final Certificate to that effect and the 'Contractor shall be not considered to have fulfilled the whole of his obligations under the Contract until Final Acceptance Certificate shall have been given by the Engineer-In-Charge notwithstanding any previous entry upon the Work and taking possession, working or using of the same or any part thereof by the Owner.



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58.0 CERTIFICATE AND PAYMENTS ON EVIDENCE OF COMPLETION

- 58.1 Except the Final Certificate no other certificates or payment against a certificate or on general account shall be taken to be an admission by Owner of the due performance of the Contract or any part thereof or of occupancy or validity of any claim by the Contractor.

59.0 REPEAT ORDER

- 59.1 Purchaser reserves the right, within 6 months of order to place repeat order upto 50% of the total order value without any change in unit price or other terms and conditions.

60.0 INSURANCE

- 60.1 Contractor shall at his own expense arrange secure and maintain insurance with reputable insurance companies to the satisfaction of the Owner as follows:

- 60.2 Contractor at his cost shall arrange, secure and maintain insurance as may be necessary and to its full value for all such amounts to protect the works in progress from time to time and the interest of Owner against all risks as detailed herein. The form and the limit of such insurance, as defined herein together with the under writer works thereof in each case should be as acceptable to the Owner. However, irrespective of work acceptance, the responsibility to maintain adequate insurance coverage at all times during the period of Contract shall be that of Contractor alone. Contractor's failure in this regard shall not relieve him of any of his responsibilities and obligations under Contract.

- 60.3 Any loss or damage to the equipment, during ocean transportation, port/custom clearance, inland and port handling, inland transportation, storage, erection, testing and commissioning till such time the work is taken over by Owner, shall be to the account of Contractor. Contractor shall be responsible for preferring of all claims and make good for the damage or loss by way of repairs and/or replacement of the parts of the work damaged or lost. Contractor shall provide the Owner with a copy of all insurance policies and documents taken out by him in pursuance of the Contract. Such copies of documents shall be submitted to the Owner immediately upon the Contractor having taken such insurance coverage. Contractor shall also inform the Owner at least 60 (Sixty) days in advance regarding the expiry cancellation and/or changes in any of such documents and ensure revalidation/renewal etc., as may be necessary well in time.

- 60.4 Statutory clearance, if any, in respect of foreign supply required for the purpose of replacement of equipment lost in transit and/or during Testing & Commissioning, shall be made available by the Owner. Contractor shall, however be responsible for obtaining requisite licenses, port clearances and other formalities relating to such import. The risks that are to be covered under the insurance shall include, but not be limited to the loss or damage in handling, transit, theft, pilferage, riot, civil commotion, weather conditions, accidents of all kinds, fire, war risk (during ocean transportation only) etc. The scope of such insurance shall cover the entire value of supplies of equipment, plants and materials to be imported from time to time.

- 60.5 All costs on account of insurance liabilities covered under Contract will be to Contractor's account and will be included in Value of Contract. However, the Owner may from time, during the currency of the Contract, ask the Contractor in writing to limit the insurance coverage risk and in such a case, the parties to the Contract will agree for a mutual settlement, for reduction in Value of Contract to the extent of reduced premium amounts.



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60.6 Contractor as far as possible shall cover insurance with Indian Insurance Companies, including marine Insurance during ocean transportation.

61.0 COMPLIANCE OF LAWS

61.1 The contractor deploying contract labour shall obtain license from appropriate licensing authority as per prevailing rules & regulation and as modified from time to time during contract period.

61.2 The contractor (which shall include the contracting firm / company) shall be solely liable to obtain and to abide by all necessary licenses from the concerned authorities as provided under the various Labour Laws / legislations including labour license from the competent authority under the Contract Labour ("Regulation & Abolition") Act 1970 and Acts made thereafter.

61.3 The Contractor shall also be bound to discharge obligations as provided under various statutory enactments including the Employees Provident Fund and Miscellaneous Provisions Act 1952, ESI Act 1948, Contract Labour ("Regulation & Abolition") Act 1970, Minimum Wages Act 1948, payment of wages Act 1936, Workmen's Compensation Act 1923 and other relevant Acts, Rules & Regulations in force from time to time.

61.4 The Contractor shall be responsible for necessary contributions towards PF, Family Pension, ESIC or any other statutory payments to Government Agencies as applicable under the laws in respect of the contract and of personnel deployed by the contractor for rendering services to Owner and shall deposit the required amount with the concerned statutory authorities on or before due dates. The contractor shall obtain a separate PF number from the concerned Regional Provident Fund Commissioner and submit necessary proof of having deposited the employees as well as the Owner's contribution to the Provident Fund. The contractor shall also be responsible for payment of any administration / inspection charges thereof, wherever applicable, in respect of personnel deployed by him relating to the work of Owner.

61.5 The Contractor shall not engage / deploy any person of less than 18 years under this contract, and the person(s) to be deployed should be physically and mentally fit.

61.6 The installations where job is to be carried out are live and have hydrocarbon environment. Contractor shall comply with all safety and security rules and regulations and other rules laid down by Owner for its operation. Contractor shall follow best Engineering practice and relevant international safety standards. It shall be duty / responsibility of the Contractor to ensure the compliance of fire safety, security and other operational rules and regulations by his personnel. Disregard to these rules by the Contractor's personnel will lead to the termination of the Contract in all respects and shall face penal / legal consequences.

61.7 Personnel protective items like safety helmets, safety shoes, hand gloves, eye protection, cotton working overalls / dresses (not synthetic materials) and other required materials for the safety of the contractor's personnel shall be arranged by the contractor himself. However firefighting equipment shall be arranged by Owner.

61.8 The Contractor shall arrange for life insurance for all his personnel deployed on the job as per the relevant Acts, rules and regulations, etc. In case by virtue of provisions of Workers Compensation Act, 1923 or any other law in force, Owner has to pay compensation for a workman employed by the Contractor due to any cause whatsoever, the amount so paid shall be recovered from the dues payable to the Contractor and/or security deposit with Owner. General third party insurance for CNG Station shall be arranged by Owner.



GENERAL CONDITIONS OF CONTRACT (GCC)

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62.0 THE ENGINEER-IN-CHARGE

- 62.1 Issue the contractor from time to time during the running of the Contract such further instructions as shall be necessary for the purpose of proper and adequate execution of the Contract and the Contractor shall carry out and bound by the same.
- 62.2 During the currency of this Contract, Owner can increase and / or decrease the number of the services required & quantity of work /services shown in from the Schedule of Rates.
- 62.3 Order the Contractor to remove or replace any workmen whom the Owner considers incompetent or unsuitable and opinion of the Owner representative as to the competence of any workman engaged by the contractor shall be final and binding on the Contractor. Key personnel can be deployed at site only after getting approval from the Owner.

63.0 INDEMNITY

- 63.1 Contractor shall exclusively be liable for non-compliance of the provisions of any act, laws rules and regulations having bearing over engagement of workers directly or indirectly for execution of Contract and the Contractor hereby undertake to indemnify the Owner against all actions, suits, proceedings, claims, damages demands, losses, etc. which may arise under Minimum Wages Act 1948, payment of wages Act 1936, Workmen's Compensation Act 1923, Personnel Injury (Compensation Insurance) Act, ESI Act, Fatal accident Act, Industrial Dispute Act, Shops and Establishment Act, Employees Provident Fund Act, Family Pension and deposit Linked Insurance schemes or any other act or statutes not herein specifically mentioned but having direct or indirect application for the persons engaged under this contract.

64.0 LABOUR LAWS

- 64.1 No labour below the age of 18 (eighteen) years shall be employed on the Work.
- 64.2 The Contractor shall not pay less than what is provided under law to labourers engaged by him on the Work.
- 64.3 The Contractor shall at his expense comply with all labour laws and keep the Employer indemnified in respect thereof.
- 64.4 The Contractor shall pay equal wages for men and women in accordance with applicable labour laws.
- 64.5 If the Contractor is covered under the Contract labour (Regulation and Abolition) Act, he shall obtain a licence from licensing authority (i.e. office of the labour commissioner) by payment of necessary prescribed fee and the deposit, if any, before starting the Work under the Contract. Such fee/deposit shall be borne by the Contractor.
- 64.6 The Contractor shall employ labour in sufficient numbers either directly or through Sub-Contractor's to maintain the required rate of progress and of quality to ensure workmanship of the degree specified in the Contract and to the satisfaction of the Engineer-In-Charge.
- 64.7 The Contractor shall furnish to the Engineer-In- Charge the distribution return of the number and description, by trades of the work people employed on the works. The Contractor shall also submit on the 4th and 19th of every month to the Engineer-In-Charge a true statement showing in respect of the second half of the preceding month and the first half of the current month (1) the accidents that occurred during the said fortnight showing the circumstances under which they happened and

the extent of damage and injury caused by them and (2) the number of female workers who have been allowed Maternity Benefit as provided in the Maternity Benefit Act 1961 on Rules made thereunder and the amount paid to them.

- 64.8 The contractor shall comply with the provisions of the Payment of Wage Act 1936, Employee Provident Fund Act 1952, Minimum Wages Act 1948, Employers Liability Act 1938, Workmen's Compensation Act 1923, Industrial Disputes Act 1947, the Maternity Benefit Act 1961, Contract Labour Regulation and Abolition Act 1970, Employment of Children Act 1938 and any modifications thereof or any other law relating thereto and rules made thereunder from time to time.
- 64.9 The engineer-in-charge shall on a report having been made by an Inspecting Officer as defined in Contract Labour (Regulation and Abolition) Act 1970 have the power to deduct from the money due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non- fulfilment of the Conditions of the Contract for the benefit of workers, non-payment of wages or of deductions made from his or their wages which are not justified by the terms of the Contract or non-observance of the said regulations.
- 64.10 The contractor shall indemnify the employer against any payments to be made under and for the observance of the provisions of the aforesaid acts without prejudice to his right to obtain indemnity from his Sub-Contractor's. In the event of the contractor committing a default or breach of any of the provisions of the aforesaid acts as amended from time to time, of furnishing any information or submitting or filling and form/ register/ slip under the provisions of these acts which is materially incorrect then on the report of the inspecting officers, the contractor shall without prejudice to any other liability pay to the employer a sum not exceeding rs.50.00 as liquidated damages for every default, breach or furnishing, making, submitting, filling materially incorrect statement as may be fixed by the engineer-in- charge and in the event of the contractor's default continuing in this respect, the liquidated damages may be enhanced to rs.50.00 per day for each day of default subject to a maximum of one percent of the estimated cost of the work put to tender. The engineer-in-charge shall deduct such amount from bills or contract performance security of the contractor and credit the same to the welfare fund constitute under these acts. The decision of the engineer-in-charge in this respect shall be final and binding

Implementation of Apprentices Act, 1961:

- 64.11 The contractor shall comply with the provisions of the apprentices act, 1961 and the rules and orders issued thereunder from time to time. If he fails to do so, his failure will be a breach of the contract and the engineer-in-charge may, at his discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions, of the act.

Contractor to indemnify the employer:

- 64.12 The contractor shall indemnify the employer and every member, office and employee of the employer, also the engineer-in-charge and his staff against all actions, proceedings, claims, demands, costs and expenses whatsoever arising out of or in connection with the matters referred to in clause 102.0 and elsewhere and all actions, proceedings, claims, demands, costs and expenses which may be made against the employer for or in respect of or arising out of any failure by the contractor in the performance of his obligations under the contract document. The employer shall not be liable for or in respect of or arising out of any failure by the contractor in the performance of his obligations under the contract document. The employer shall not be liable for or

in respect of any demand or compensation payable by law in respect or in consequence of any accident or injury to any workmen or other person. In the employment of the contractor or his sub-contractor the contractor shall indemnify and keep indemnified the employer against all such damages and compensations and against all claims, damages, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

64.13 Payment of claims and damages: should the employer have to pay any money in respect of such claims or demands as aforesaid the amount so paid and the costs incurred by the employer shall be charged to and paid by the contractor and the contractor shall not be at liberty to dispute or question the right of the employer to make such payments notwithstanding the same, may have been made without the consent or authority or in law or otherwise to the contrary.

64.14 In every case in which by virtue of the provisions of section 12, sub-section (i) of workmen's compensation act, 1923 or other applicable provision of workmen compensation act or any other act, the employer is obliged to pay compensation to a workman employed by the contractor in execution of the work, the employer will recover from the contractor the amount of the compensation so paid, and without prejudice to the rights of employer under section 12, sub-section (2) of the said act, employer shall be at liberty to recover such amount or any part thereof by deducting it from the contract performance security or from any sum due to the contractor whether under this contract or otherwise. The employer shall not be bound to contest any claim made under section 12, sub-section (i) of the said act, except on the written request of the contractor and upon his giving to the employer full security for all costs for which the employer might become liable in consequence of contesting such claim.

Health and sanitary arrangements for workers:

64.15 In respect of all labour directly or indirectly employed in the works for the performance of the contractor's part of this agreement, the contractor shall comply with or cause to be complied with all the rules and regulations of the local sanitary and other authorities or as framed by the employer from time to time for the protection of health and sanitary arrangements for all workers.

64.16 The contractor shall provide in the labour colony all amenities such as electricity, water and other sanitary and health arrangements. The contractor shall also provide necessary surface transportation to the place of work and back to the colony for their personnel accommodated in the labour colony.

65.0 EVALUATION OF PERFORMANCE

65.1 Performance against the contract awarded (if any) shall be evaluated on half yearly basis or earlier on need basis as per approved IGL policy which is also available at IGL website.

66.0 CONTRACTOR SAFETY MANUAL

66.1 The contractor / vendor needs to ensure all the safety conditions as mentioned in the Contractor Safety manual which can be downloaded from IGL website.



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67.0 WHISTLE- BLOWER POLICY

- 67.1 Indraprastha Gas Limited (IGL) has implemented whistle-blower policy as part of the vigil mechanism to comply with the regulatory requirements laid down by the Companies Act 2013 and Clause 49 of the SEBI's Listing Agreement. With the implementation of vigil mechanism, the company provides a platform to its vendors and suppliers to come forward and raise their genuine concerns without any fear of retaliation and victimization.
- 67.2 The policy is designed to deal with concerns raised in relation to the specific issues which are not in the interest of the company. The company has appointed an independent third party service provider to manage the operations of whistle-blower hotline.
- 67.3 Detailed Policy is available on IGL website, www.iglonline.net.



SPECIAL CONDITIONS OF CONTRACT (SCC)

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SECTION-IV SPECIAL CONDITIONS OF CONTRACT (SCC)



SPECIAL CONDITIONS OF CONTRACT (SCC)

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SPECIAL CONDITIONS OF THE CONTRACT (SCC)

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of the Contract. The corresponding clause number of the GCC is indicated in parentheses.

1.0 DEFINITIONS

GCC 1.1(c) : The Consultant is: VCS Quality Services Pvt. Ltd. & other consultants deployed by owner.

Bid Documents: shall mean documents issued to the bidder pursuant to IFB and listed in ITB Clause 7.

GCC 1.1 (h): Effective Date: shall mean the date on which Contractor's obligations will commence and that will be the date of first intimation of award / Letter of Acceptance.

2.0 INTERPRETATIONS

- 2.1 Where any portion of the GCC is repugnant to or at variance with any provisions of the SCC then, unless a different intention appears, the provisions of the SCC shall be deemed to govern the provisions of the GCC and SCC provisions shall prevail to the extent of such repugnancy, or variations exist.
- 2.2 In Contract Documents unless otherwise stated specifically, the singular shall include the plural and vice versa wherever the context so requires.
- 2.3 Notwithstanding the sub-division of the Contract Documents into separate sections and volumes every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the Agreement so far as it may be practicable to do so.
- 2.4 All headings, subtitles and marginal notes to the clauses of the GCC, SCC or to the Specifications or to any other part of Bid Document are solely for the purpose of giving a concise indication and not a summary of the contents thereof, and they shall never be deemed to be part thereof or be used in the interpretation or construction thereof.
- 2.5 The terms fully capitalized and/or initial capitalized shall be interchangeable and shall have the meaning as assigned to fully capitalized term or initial capitalised term.
- 2.6 CMS (Construction Management Services) Agency shall be deployed by IGL for construction management services
- 2.7 All Work Orders to be read as Contract/ PO as per context.

3.0 INSPECTIONS AND TESTS

The SCC provisions shall supplement GCC Clause 14 as detailed below.

- 3.1 During execution of work, the works shall be inspected by the Owner or its authorised representative for acceptance of the same.



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- 3.2 For contractor's supplied items, Third Party Inspection report shall be submitted by the contractor.
- 3.3 The Owner/ Consultant or its representative shall have the right to inspect and/ or to test the material to confirm their conformity to the specifications
- 3.4 If any inspected or tested material fail to conform the specifications, the Owner/ Consultant may reject them and the Contractor shall either replace the rejected materials or make all the alterations necessary to meet the specifications, free of cost to the Owner/ Consultant.
- 3.5 Contractor shall hire Third Party Inspection Agency (TPIA) for carrying out the inspection of contractor supplied material as per approved ITP. TPIA charges shall be borne **by contractor**. Name of approved TPIA are as under:
1. Det Norske Veritas (DNV)
 2. Germanischer Lloyd Industrial Services GmbH
 3. Bureau Veritas (India) Pvt. Ltd.
 4. Moody International (India) Pvt. Ltd. (Industry Services Division)
 5. SGS India Pvt. Ltd.
 6. Certification Engineer International Limited (CEIL)
 7. TUV SUD South Asia Pvt. Ltd.
 8. ABS Industrial Verification (India) Pvt. Ltd.
 9. Lloyd Register of Industrial Services
 10. IRCLASS Systems and Solutions Private Limited
 11. Tata Projects Limited
 12. International Certification Services Pvt. Ltd.
 13. TUV India Pvt. Ltd., Industrial Services Division
 14. Intertek India Pvt. Ltd. (Industry Services Division)
 15. Quality Austria Central Asia Pvt. Ltd.
 16. Edlipse Engineering Global Pvt. Ltd.
 17. TUV-Rheinland
- Note:**
- (a) Contractor shall obtain IGL/IGL Consultant's approval before finalizing the TPIA.
- (b) In addition to the above list, TPIA agency approved in Technical Standards and Specifications including Safety Standards of PNGRB can be considered.
- 3.6 The Owner/ Consultant or its representative shall have the right to inspect and/ or to test the material to confirm their conformity to the specifications.
- 3.7 If any inspected or tested material fail to conform the specifications, the Owner/ Consultant may reject them and the Contractor shall either replace the rejected materials or make all the alterations necessary to meet the specifications, free of cost to the Owner/ Consultant.



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4.0 STATUTORY VARIATIONS IN TAXES

The entire work covered under this contract shall be treated as works contract services. Unit rates mentioned in Schedule of Rates are inclusive of all applicable taxes & duties including freight, Insurance, Transit Insurance etc. except Goods & Service Tax (GST) on completed works as defined in the tender document. Any statutory variation in the GST on completed works during the scheduled completion period only shall be considered by the owner against documentary evidence.

5.0 PAYMENT TERMS AND MODE OF PAYMENT

GCC clause 22.0 is modified as below:

5.1 1st running bill (RA bill) shall be processed only after submission of statutory documents like Workmen Compensation (WC) policy, Insurance policies (Open transit policy), labour license, BOCW registration, Contractor All Risk (CAR) policy, Contract Performance Bank Guarantee (CPBG), GST registrations of NCT Delhi, UP, Haryana & Rajasthan etc. Running bill shall be processed only after submission of RPFC/ESI challans of previous months. Final bill shall be processed only after submission of RPFC/ESI and BOCW Challan.

5.2 The Payment terms for Execution of Work shall be as follows:

The contractor shall submit material reconciliation statement. Contractor will raise the RA bill on monthly basis and RA bill should be claimed within 25th of each month otherwise 5% of RA bill amount shall be withheld and it is to be released in final bill. Payment shall be made on certification of bill by Engineer- in-Charge as follows:

a) **PE and Related (Method: Open Cut & Trenchless i.e. HDD, with or without casing) including project service line**

- i) 50% on completion of laying work in continuous stretches of minimum 500 mtrs. Including jointing of pipeline, backfilling and compaction for the complete stretch and submission of DPR/WPR, scanned as well as physical graphs and free issued material booking statement.
- ii) 25% on testing of completed network and submission of "As Built, As Graph Drawings", colour ABD / AG drawing subject to installation of permanent markers in the network area including submission of detailed GIS mapping as per scope of work.
- iii) 20% on commissioning (gas charging) of the network subject to installation of valve chambers and network area handover to owner.
- iv) Balance 5% on purchase / work order closure and submission of all documents as per contract for the work executed till final bill submission and reconciliation of free issued material.

b) **Service Line in O&M area**

- i) 70% on completion of laying, jointing, backfilling, compaction and submission of DPR & Graphs, On testing of completed network, submission of colour ABD / AG drawing subject to Installation of permanent markers including submission of details of GIS mapping.



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- ii) 25% On commissioning and handover to IGL
 - iii) Balance 5% on purchase / work order closure and submission of all documents as per contract for the work executed till final bill submission and reconciliation of free issued material.
- c) Installation of Marker (Plate marker, Pole marker, Stone Marker) & Valve Chamber / Ramp**
- i) 70% on supply & installation
 - ii) 25% after commissioning and handover to IGL
 - iii) 05% on purchase / work order closure and submission of all documents as per contract for the work executed till final bill submission and reconciliation of free issued material.
- d) GI and Related Work**
- LMC (Project related connection rates, SOR No. 12.1)**
- i) 65% after installation of GI / Copper pipes including all fittings, regulators, valves, clamping, cementing of holes, painting and testing of installation and material consumption booking and updating of meter no. against BP in CRM/SAP.
 - ii) 30% after testing and commissioning of GI, copper installation on gas & submission of RFC card.
 - iii) Balance 5% on purchase / work order closure and submission of all documents as per contract for the work executed till final bill submission and reconciliation of free issued material.
- Note:**
- a) After completion of 65% of the work, 100% payment may be released with retention of 35%. The balance amount will be paid as and when recommendation is received for payment.
 - b) The 100% material will be booked for the line laid at the time of booking of invoice for execution.
- LMC (O & M area connection rates, SOR No. 12.2)**
- a) 95% after installation of GI pipes including all fittings, regulators, valves, clamping, cementing of holes, painting and testing of installation and material consumption booking and updating of meter no. against BP in CRM/SAP and IGL App, after testing and commissioning of GI, copper installation on gas & submission of RFC card.
 - b) Balance 5% on purchase / work order closure and submission of all documents as per contract for the work executed till final bill submission and reconciliation of free issued material.



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Non LMC, Extra Length of LMC & LMC Connection rates applicable on existing risers

- i) 80% after installation of GI / Copper pipes including all fittings, regulators, valves, clamping, cementing of holes, painting and testing of installation and material consumption booking and updating of meter no. against BP in CRM/SAP.
- ii) 15% after testing and commissioning of GI, copper installation on gas & submission of RFC card.
- iii) Balance 5% on purchase / work order closure and submission of all documents as per contract for the work executed till final bill submission and reconciliation of free issued material.

Notes:

- a) After completion of 80% of the work, 100% payment may be released with retention of 20%. The balance amount will be paid as and when recommendation is received for payment.
- b) The 100% material will be booked for the line laid at the time of booking of invoice for execution.

e) Liasoning Work

Payment for the liasoning work shall be made as follows:

- i) 60% payment for the actual length of network laid
- ii) 35% after release of security deposit from statutory authority in the form of cash or BG.
- iii) Balance 5% on purchase / work order closure and submission of all documents as per contract for the work executed till final bill submission and reconciliation of free issued material

f) For Restoration Work

- i) 80% after completion of restoration and certification by consultants / Third Party Inspection agency nominated by IGL.
- ii) 15% after obtaining NOC from respective local authorities / Third party agencies designated by land owning agencies / Resident Welfare Associations / PMC Recommendation in exceptional cases etc.
- iii) Balance 5% on purchase / work order closure and submission of all documents as per contract for the work executed till final bill submission and reconciliation of free issued material

g) CS Pipe & Fitting, Supply, Fabrication & Installation work

- i) 95% after installation, testing & commissioning of MRS & internal piping work.
- ii) Balance 5% on purchase / work order closure and submission of all documents as per contract for the work executed till final bill submission and reconciliation of free issued material.

h) Other Works (Not Covered Above)



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- i) 95% progressively on completion of individual item work as certified in monthly progress bill.
- ii) Balance 5% on purchase / work order closure and submission of all documents as per contract for the work executed till final bill submission and reconciliation of free issued material.

5.3 The Payment shall be released through RTGS only.

5.4 Contractor to note that they can raise RA bills up to 90% of total awarded value of individual Purchase/ Work Order, balance amount will be paid on closure of Purchase / Work Order.

5.5 An amount equal to 5% of RA bill amount shall be retained towards performance of work (where contractor has submitted 5% BG amount) to cover defect liability period of individual order which will be released after expiry of defect liability period.

5.6 Contractor has to lay all service lines in registered/interested customers during MDPE pipe. In case due to exigency of work, gas charging has to be done and service lines work still pending of registered/interested customers, then differential amount of Service line in O&M and Project shall be withheld till laying of balance service line.

5.7 DEFECT LIABILITY PAYMENT

- a) The Contractor warrants that the work carried out under the Agreement are meeting the requirement of the Bid document and will rectify/ repair any defective work on receipt of instructions from Owner/ Consultant.
- b) The Owner shall promptly notify the Contractor in writing of any claims/recovery arising under this warranty.
- c) Upon receipt of such notice, the Contractor shall, within a reasonable period, repair or replace the defective Goods or parts thereof, free of cost to the Owner. No claim whatsoever shall lie on the Owner for the replaced parts/ goods thereafter. In the event of any correction of defects or replacement of defective material during the warranty period, the warranty for the corrected / replaced Goods or item or material shall be extended to a further period of twelve (12) Months from the date of such repair/replacement if put to use immediately or eighteen (18) Months. Defect liability period shall be 12 months from the date of handing over of the system to IGL. In case of GI/Cu/MLC/CS work related SOR, the defect liability period shall be 12 months from the date of installation or 4 months from the date of commissioning the connection, whichever is later. In case of PE related works and other works, the period shall be 12 months from the date of commissioning of the network.
- d) If the Contractor, having been notified, fails to remedy the defect(s) within a reasonable period, the Owner may proceed to take such remedial action as may be necessary, at the Contractor's risk and expense and without prejudice to any other rights which the Owner may have against the Contractor under the Agreement.

5.8 RELEASE OF 5% AMOUNT / BG WITHHELD FOR DEFECT LIABILITY PERIOD

- a) **For GI related works:** 04 months after commissioning/ pneumatic testing (where gas is not available in pipe line due to reasons not attributed to contractor) or after closure of



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contract whichever is later. Any cost arising out of any defect during or till 120 days of commissioning of installed GI/Cu/MLC pipeline shall be adjusted against the withheld amount of other service.

- b) Any cost arising, out of any gas loss (as credited to customer) and/or out of any defect during or till 120 days of commissioning of installed GI/Cu/MLC pipeline shall be adjusted against the withheld amount of other services.
- c) **For PE related works and other works:** 04 months after commissioning/ pneumatic testing (where gas is not available in pipe line due to reasons not attributed to contractor) or after closure of contract whichever is later.
- d) Any cost arising, out of any repair / replacement/ gas loss (as credited to customer) and/or out of any defect during or till 120 days of commissioning of installed MDPE pipeline shall be adjusted against the withheld amount of other services.

6.0 PAYMENT METHODOLOGY

- 6.1 The contractor shall raise invoices on monthly basis for works carried out duly certified by Engineer-in- Charge in triplicate. The contractor to ensure that the invoices of completed work should be raised & duly certified by Engineer-in-charge within one month to avoid any statutory penalties on delay in paying taxes.
- 6.2 The payments to the Contractor will be released within 45 days from the date of receipt of invoice, duly certified by EIC as per the terms and conditions of the Contract.
- 6.3 Owner will release payment as per SCC clause 5.

7.0 COMPENSATION FOR IDLE TIME

- 7.1 The Owner shall make every reasonable effort to have free issue materials and right - of - use (ROU) available so as not to delay laying activities. No Idle time claim shall be entertained under any circumstances.

8.0 PRICE REDUCTION SCHEDULE (PRS)

GCC clause 29.0 is modified as below:

- 8.1 In case there is delay in delivery of goods / completion of the work/services attributable to the supplier / contractor / service provider, the supplier / contractor / service provider shall pay as compensation for delay and not as penalty in form of price reduction as detailed here under.
- 8.2 If the supplier / contractor / service provider fails to deliver any or all of goods or performance of the work/service within the time period(s) specified in the Order/Contract, IGL shall without prejudice to any other remedy(s) under the Order/Contract, reduce the order value by a sum calculated as mentioned below:
 - Price Reduction will be applicable @ $\frac{1}{2}\%$ per week of delay or part thereof in supply/completion of work subject to a maximum (ceiling) of 5% of total order value for orders of goods, works and services.
 - The portion of the supply / services completed in all respect shall not be considered for applying PRS, if delivered within the contractual delivery period. The remaining



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supply/services, which has been completed beyond the contractual period, shall attract PRS @½% for the value of the supply/service in respect of which default in delivery has taken place subject to maximum of 5% of the total order value (inclusive of taxes).

- The parties agree that this is a genuine pre-estimate of the loss/damage which will be suffered on account of delay/breach on the part of the Contractor and the said amount will be payable on demand without there being any proof of the actual loss or damages caused by such delay/breach. The decision of Owner in regard to the actual delay shall be final and binding on the Contractor. All sums payable by way of compensation shall be considered as reasonable compensation without reference to the actual loss or damage, which shall have been sustained.

- 8.3 In case of delay in performance / delivery on the part of Contractor, the invoice / document value shall be reduced proportionately for the delay and payment shall be released accordingly. In the event the invoice value is not reduced proportionately for the delay, the Purchaser may deduct the amount so payable by Contractor, from any amount falling due to the Contractor or by recovery against the Performance Guarantee

9.0 ALTERATIONS IN SPECIFICATIONS, DESIGN AND EXTRA WORKS

- 9.1 The ENGINEER-IN-CHARGE shall have to make any alterations in, omission from, additions to or substitutions for, the Schedule of Rates, the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the WORK and the CONTRACTOR shall be bound to carry out the such altered/ extra/ new items of WORK in accordance with any instructions which may be given to him in writing signed by the ENGINEER-IN- CHARGE, and such alterations, omissions, additions or substitutions shall not invalidate the CONTRACT and any altered, additional or substituted work which the CONTRACTOR may be directed to do in the manner above specified as part of the WORK shall be carried out by the CONTRACTOR on the same conditions in all respects on which he agreed to do the main WORK. The time of completion of WORK may be extended for the part of the particular job at the discretion of the ENGINEER-IN-CHARGE, for only such alterations, additions or substitutions of the WORK, as he may consider as just and reasonable. The rates for such additional, altered or substituted WORK under this clause shall be worked out in accordance with the following provisions: -

For Item Rate Contract

- (a) If the rates for the additional, altered or substituted WORK are specified in the CONTRACT for the WORK, the CONTRACTOR is bound to carry on the additional, altered or substituted WORK at the same rates as are specified in the CONTRACT.
- (b) If the rates for the additional, altered or substituted WORK are not specifically provided in the CONTRACT for the WORK, the rates will be derived from the rates for similar class of WORK as are specified in the CONTRACT for the WORK. The opinion of the ENGINEER-INCHARGE, as to whether or not the rates can be reasonably so derived from the items in this CONTRACT will be final and binding on the CONTRACTOR.



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- (c) If the rates for the altered, additional or substituted WORK cannot be determined in the manner specified in sub-clause (a) and (b) above, then the CONTRACTOR shall, within 7 days of the date of receipt of order to carry out the WORK, inform the ENGINEER-IN-CHARGE of the rates which it is his intention to charge for such class of WORK, supported by analysis of the rate or rates claimed, and the ENGINEER-IN-CHARGE shall determine the rate or rates on the basis of the prevailing market rates, labour cost at schedule of labour rates plus 10% to cover contractor's supervision, overheads and profit and pay the CONTRACTOR accordingly. The opinion of the ENGINEER-IN-CHARGE as to current market rates of materials and the quantum of labour involved per unit of measurement will be final and binding on the CONTRACTOR.
- (d) Where the item of work will be executed through nominated specialist agency as approved by the ENGINEER-IN-CHARGE, then the actual amount paid to such nominated agency supported by documentary evidence and as certified by ENGINEER-IN-CHARGE shall be considered plus 10% (ten percent) to cover all contingencies, overhead, profits to arrive at the rates.

10.0 HEALTH SAFETY AND ENVIRONMENT (HSE)

- 10.1 The Contractor will strictly adhere to Health Safety and Environment policy as stated in Technical Specifications Vol. II of II of this Bid document and/ or the policies followed by the Owner.
- 10.2 All the safety rules and regulations prevailing and applicable from time to time at the installations as directed by OWNER will be strictly adhered to by the Contractor.
- 10.3 Contractor has to ensure the safety of man and machine all the times. Damages to equipment due to bad workmanship/negligence will be recovered as per the decision of Engineer-in-Charge, which will be final and binding upon the contractor.
- 10.4 The contractor shall supply all the protective safety equipment like helmets / hard head hats, gumboots / safety shoes, hand gloves, safety belts, eye protection, ear protection etc. to his workmen at his own cost as required by operations.
- 10.5 Carrying / striking of matches, open flames, lighters or smoking or other such acts, which may cause fire hazards at the work site / in the terminals / installations, is strictly prohibited.
- 10.6 Tobacco/ Ghutka chewing or other such acts, are strictly prohibited at the site.
- 10.7 In addition to the PRS clause, penalties for violation of HSE shall be imposed as per "PENALTIES" clause of SCC.
- 10.8 Contractor shall follow IGL's Safety Manual. Contractor may refer the Safety Manual which is available at IGL's web site.

11.0 PROVIDENT FUND

- 11.1 The Contractor shall strictly comply with the provisions of Employees Provident Fund Act applicable in India and register them with Regional Provident Fund Commission (RPFC) before commencing the work. The Contractor shall deposit employees and Owners



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contributions to the RPFC every month. The Contractor shall furnish along with each running bill, the challan / receipt for payment made to the RPFC for the preceding months.

- 11.2 In case the RPFC's challan / receipt, as above, is not furnished, Owner shall deduct 5% (Five percent) of the payable amount from Contractor's running bill and retain the same as a deposit such retained amount shall be refunded to Contractor on production of RPFC Challan /receipt for the period covered by the related running bill.
- 11.3 In case it is observed that contractor fails to submit requisite RPFC Challans along with bills more than once during the tenancy of the contract and submits subsequently a token penalty per instance may be imposed by owner as per clause 24.

12.0 POWER AND WATER CONNECTION

- 12.1 The Owner/ Consultant will not provide any power and water during construction period. Contractor shall apply and obtain necessary power and water connection from relevant authority and will pay its uses charges or arrange the same from the other sources.

13.0 CONSTRUCTION AIDS, EQUIPMENTS, TOOLS & TACKLES

- 13.1 CONTRACTOR shall be solely responsible for making available for executing the WORK, all requisite CONSTRUCTION EQUIPMENTS, Special Aids, Barges, Cranes and the like, all Tools, Tackles and Testing Equipment and Appliances, including Customs of such equipment etc. as required. In case of Customs of the same the rates applicable for levying of Custom Duty on such Equipment, Tools, & Tackles and the duty drawback applicable thereon shall be ascertained by the CONTRACTOR from the concerned authorities of Government of India. It shall be clearly understood that OWNER shall not in any way be responsible for arranging to obtain Custom Clearance and/or payment of any duties and/or duty draw backs etc. for such equipment so imported by the CONTRACTOR and the CONTRACTOR shall be fully responsible for all taxes, duties and documentation with regard to the same.

14.0 CONDITIONS FOR ISSUE OF MATERIALS

- 14.1 Whenever any material is issued by Owner, following conditions in addition to other conditions as specified in the contract shall be applicable.
- 14.2 Necessary indents will have to be raised by the Contractor as per procedure laid down by the Engineer in- charge from time to time, when he requires the above material for incorporation in permanent works.
- 14.3 Materials will be issued only for permanent works and not for temporary works, enabling works etc. unless specifically approved by the Engineer-in-charge and the same shall not be taken into account for the purpose of materials reconciliation.
- 14.4 The contractor shall bear all other cost including lifting, carting from issue points to work. Site/ contractor's store, custody and handling etc. and return of surplus/ serviceable scrap materials to Owner's storage points to be designated by the Engineer-in-charge etc. No separate payment for such expenditure will be made.
- 14.5 No material shall be allowed to be taken outside the plant without a gate pass.



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- 14.6 The contractor shall be responsible for proper storage, preservation and watch & ward of the materials.
- 14.7 All free issue material shall be issued to contractor against submission of indemnity bond against each PO (as per Annexure – 3 attached in bid document) for 150% value of the initial PO value.
- 14.8 In case manufacturing defect found in free issue material, same shall be communicated to Engineer-In-Charge within one month from the date of issue of material and material shall be return to IGL store within 45 days from the date of issue of material. In case contractor fail to return the defective materials to IGL store, penalty equal to twice of landed cost of defective materials shall be imposed by Engineer in Charge & his decision will be final & binding on the contractor.
- 14.9 The contractor shall be responsible for misplacement of meters. In the event of misplacement, a penalty of INR 20,000/- per domestic meter will be imposed
- 14.10 Contractor to ensure that all free issue material shall be installed within a maximum period of 30 days from the date of issue.
- 14.11 Unconsumed free issue material value at any point of time against any PO should not exceed 20% of the initial PO Value.
- 14.12 FIM will be issued to contractor against PO only after receipt of CPBG & Indemnity bond.

15.0 BUILDING AND OTHER CONSTRUCTION WORKERS (BOCW), ACT 1996

- 15.1 Applicability – the said act is applicable to every establishment which employs or had employed on any day often preceding twelve months, 10 or more building workers in any 'Building or other construction work' (Building or other construction work means the construction, repairs, maintenance or demolition of or in relation to building , streets, roads, railways, tramways, airfields, drainages, embankment, transmission and distribution of power, water works, oil and gas installations, pipeline etc.(refer section 2(d) of the act). It does not include any building and other construction work to which the factory act 1948 and the mines act 1952 is applicable).
- 15.2 BOCW cess shall be deposited on invoice amount of monthly RA bill.

16.0 CONTRACTOR'S OBLIGATION AT SITE

- 16.1 Contractor shall establish site office in the respective areas, allotted to them with adequate facilities like three tables, six chairs, telephone, computer with mailing (internet), printer (including consumables), file rack etc. for effective communication and documentation.
- 16.2 In addition to above, contractor shall provide separate space with facilities like two tables, six chairs, two computers with mailing (internet), printer with consumables, file racks, AC etc. and one office boy within the site office for IGL & CONSULTANT for effective monitoring & documentation of the project.
- 16.3 Contractor shall provide as and when required a wagon(s) suitable for soil removal, for the delivery or reinstatement materials and for the transport of pipe to and from site.



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- 16.4 Contractor shall provide transport for their technical staff and operatives to move from site to site, and to move tools and equipment from site to site, this vehicle will also be fitted with a tow bar suitable for the towing of a mobile air compressor or pipe trailer.
- 16.5 Contractors shall make appropriate arrangements to ensure that their supervisor(s) are adequately mobile and can attend sites or meetings with IGL, other authorities or customers as required, without any undue delay.
- 16.6 Contractors shall provide cell phones to their supervisors for day-to-day communication with IGL and site representatives of IGL.
- 16.7 Contractor shall employ a Project Manager / Coordinator, Billing engineer and site engineers on company roll. Contractor shall submit Electronic Challan cum Return (ECR) of PF deposit of all employees deployed on IGL site as proof that employees are on company pay role. The Project Manager / Coordinator must have qualification of B. tech/ Diploma in Mech / Civil Engineering with min. 3 years for degree and 5 years for diploma, Billing engineer must be Graduate with minimum 3 years' experience & Site Engineers must have minimum Diploma in Mechanical Engineering with 3 years of work experience in gas pipe line job. Data Entry Operator qualification should be DCA/BCA of experience 1 years.
- 16.8 Contractor shall employ one Safety officer to look after the site activities with proper work permits and ensure all the HSE compliances. Safety officer must have 1 year work experience with B.Tech degree (Mechanical/Civil/Electrical/Fire & Safety or 3 Years work experience with diploma in Mechanical/Civil/Electrical/Fire & Safety. He must attend the regular safety meetings as per the IGL requirement and provide training to the site manpower.
- 16.9 Project Manager/ Coordinator shall be single point of contact for all the works and must represent company in the meetings. However, for all monthly review meetings, Owner of the contractor company shall have to be present as and when called by IGL/Consultant.

Pool-wise minimum manpower deployment is tabulated below;

Man Power	Pool - 1	Pool – 2, 3 & 4
Project Manager	1	1
Billing Engineer	1	1
Site Engineer MDPE	5	3
Site Engineer GI	5	3
Data Entry Operator	2	2
store In-charge	1	1
Supervisor (NG)	2	1
NG Callers	3	2
Safety Officer per segment	1	1

- 16.10 Any change in key persons working at site shall be informed to the Owner promptly
- 16.11 Owner will not allow switching/swapping of key personnel of any contractor working at site from one contractor to another during the continuity of the contract.



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16.12 Contractor shall deploy Equipment, Tools & tackles etc., at site as defined in tender documents.

16.13 1 No. commercial vehicle (four wheeler with driver) shall deployed at site. It shall be well equipped with tools and tackles for attending online connections, VIP cases/ urgent installation and on-going execution work.

17.0 IT RELATED RESOURCES:

17.1 Contractor is required to arrange for Smartphones/Tablets for its teams/supervisor/Plumbers which would be required to capture the connection details through field mobility software provided by IGL. The tentative requirement for smartphone shall be as follows:

- 4GB RAM.
- 5.3 inch Screen (minimum).
- 4G/5G (2300 MHz) Connectivity (4G for video uploads).
- GPS Chip (for Location Tracking) with A-GPS (for accuracy during absence of internet).
- GHz Quad Core Processor.
- 8MP+ Back Camera.
- 5MP+ Front Camera.
- 3,500+ mAh Battery Size.
- Android Version 6.0 and above.

17.2 Contractor shall arrange a high speed scanner at his office to ensure scanning and uploading of documents prepared on site as per IGL requirement.

17.3 Contractor shall arrange to provide the optical code scanner with option for connectivity with smartphone to ensure automatic scanning and meter serial no. capturing in the smartphone application.

18.0 RECONCILIATION OF OWNER SUPPLIED MATERIALS

18.1 The Contractor is responsible for completing the "Material Used" section of the worksheet for each job completed. This record will be used for the reconciliation of material at the end of the job or contract.

18.2 The full replacement or repair costs of all damages items will be recharged to the contractor.

18.3 It is mandatory that the contractor is required to undertake and submit inventory details of free issue and purchased materials on fortnightly basis to Owner/ Owner's representative as per the approved format of the owner. The inventory details shall be in correlation with the Daily progress chart and material reconciliation sheet. Material reconciliation statement of all free issue materials shall be carried out on every month & reconciliation statement shall be submitted to IGL/Consultant.

18.4 After the final reconciliation is carried out, the variances in materials issued against materials used and returned, will be assessed. All unused, scrap materials and salvageable materials



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shall be the property of the Owner and shall be returned by the Contractor category-wise at his cost to the Owner's designated store yard (s). In case the Contractor fails to do so or exceeds the limits of allowances specified below for scrap/ serviceable materials, then recovery for such quantities not returned as well as returned in excess of permitted limit by the Contractor will be done at the penal rate i.e. 200% (Double of landed cost) at the time of final bill/ closing of contract by Engineer-in-charge shall be effected from the Contractor's bill (s) or from any other dues of the Contractor to the Purchaser. Contractor shall be responsible for the adjustment and measurement of the surplus materials to be returned to the store. Contractor shall also be responsible for suitable segregation of returned materials into separate stacks of serviceable and scrap materials. Wherever certain material is covered under Contractor's scope of supply whether part or in full for any item of work covered under SOR, no allowance towards wastage/ scrap etc. shall be accounted for during execution stage.

Item	Scrap	Unaccountable wastage
Gas Meters	0%	0%
Regulators	0%	0%
Gas Isolation, Appliance Valves	0%	0%
MDPE Pipes	1% (Less than the length defined below)	0.01%
HDPE Pipes	1% (Less than 2 Mtr.)	0.01%
PE Fittings	0%	0%

Note:

"Pipe length less than 5.0 m for Dia- 125mm & 180mm shall be considered as non-returnable scrap. Pipe length less than 10 m for Dia- 20mm/32mm/63mm shall be considered as non-returnable scrap."

- 18.5 Material consumption will be recorded on area wise basis. Material issued from the IGL stores shall be consumed, recorded and returned using the same IGL item code.
- 18.6 Any payments due to the Contractor may be withheld to cover these charges.
- 18.7 All waste materials, part lengths of pipe and other partly used items are the property of IGL and must be returned to the stores with the appropriate documentation so that they can be considered as part of the material reconciliation.

19.0 COMPLIANCE WITH LAW

- 19.1 Contractor shall abide by all prevailing Laws of India including but not limited to:

- Apprentices Act.
- Contract labour (Regulation & Abolition) Act.
- Employers Liability Act.
- Environment Protection Act.
- Factory Act.
- Industrial Dispute Act.
- Minimum Wages Act.
- Payment of Wages Act.
- Workman Compensation Act.



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- j) Building and Other Construction Workers (Regulation of Employment and Condition of service) Act, 1996
- k) Any other Statute, Act, Law as applicable.

20.0 INSURANCE

The SCC provisions shall supplement GCC Clause 60 as detailed below.

- 20.1 Contractor shall at his own expense arrange, secure and maintain insurance with reputed insurance companies to the satisfaction of the Owner as may be necessary and to its full value for all such amounts to protect the works in progress and his personnel from time to time and the interest of Owner against all risks as detailed in bid document. The form and the limit of such insurance as defined herein together with the under writer works thereof in each case should be as acceptable to the Owner. However, irrespective of work acceptance, the responsibility to maintain adequate insurance coverage at all times during the period of Contract shall be that of Contractor alone. Contractor's failure in this regard shall not relieve him of any of his responsibilities and obligation under the Contract.

Any loss or damage to the work/ material, during transportation, storage, erection and completion of work till such time the WORK is taken over by OWNER, shall be to the account of CONTRACTOR. CONTRACTOR shall be responsible for preferring of all claims and make good for the damage or loss by way of repairs and/or replacement of the parts of the Work damaged or lost. CONTRACTOR shall provide the OWNER with a copy of all insurance policies and documents taken out by him in pursuance of the CONTRACT. Such copies of document shall be submitted to the OWNER immediately upon the CONTRACTOR having taken such insurance coverage. CONTRACTOR shall also inform the OWNER at least thirty days in advance regarding the expiry cancellation and/or changes in any of such documents and ensure revalidation/renewal etc., as may be necessary well in time.

All costs on account of insurance liabilities covered under CONTRACT will be to CONTRACTOR's account and will be included in VALUE OF CONTRACT. However, the OWNER may from time to time, during the currency of the CONTRACT, ask the CONTRACTOR in writing to limit the insurance coverage risk and in such a case, the parties to the CONTRACT will agree for a mutual settlement, for reduction in VALUE OF CONTRACT to the extent of reduced premium amounts.

CONTRACTOR as far as possible shall cover insurance with Indian Insurance Companies.

(a) EMPLOYEES STATE INSURANCE ACT:

The CONTRACTOR agrees to and does hereby accept full and exclusive liability for the compliance with all obligations imposed by the Employee State Insurance Act 1948 and the CONTRACTOR further agrees to defend, indemnify and hold OWNER harmless for any liability or penalty which may be imposed by the Central, State or Local authority by reason of any asserted violation by CONTRACTOR or SUB-CONTRACTOR of the Employees' State Insurance Act, 1948, and also from all claims, suits or proceeding that may be brought against the OWNER arising under, growing out of or by reasons of the work provided for by this CONTRACTOR, by third parties or by Central or State Government authority or any political sub- division thereof.



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The CONTRACTOR agrees to fill in with the Employee's State Insurance Corporation, the Declaration Forms, and all forms which may be required in respect of the CONTRACTOR's or SUB- CONTRACTOR's employees, who are employed in the WORK provided for or those covered by ESI from time to time under the Agreement. The CONTRACTOR shall deduct and secure the agreement of the SUB-CONTRACTOR to deduct the employee's contribution as per the first schedule of the Employee's State Insurance Act from wages and affix the Employee's Contribution Card at wages payment intervals. The CONTRACTOR shall remit and secure the agreement of SUB-CONTRACTOR to remit to the State Bank of India, Employee's State Insurance Corporation Account, the Employee's contribution as required by the Act. The CONTRACTOR agrees to maintain all cards and Records as required under the Act in respect of employees and payments and the CONTRACTOR shall secure the agreement of the SUBCONTRACTOR to maintain such records. Any expenses incurred for the contributions, making contributions or maintaining records shall be to the CONTRACTOR's or SUB-CONTRACTOR's account.

The OWNER shall retain such sum as may be necessary from the total VALUE OF CONTRACT until the CONTRACTOR shall furnish satisfactory proof that all contributions as required by the Employees State Insurance Act, 1948, have been paid. This will be pending on the CONTRACTOR when the ESI Act is extended to the place of work.

(b) WORKMEN COMPENSATION AND OWNER'S LIABILITY INSURANCE:

Workmen Compensation and Owner's Liability Insurance shall be taken by the CONTRACTOR at its own cost covering all its employees who are engaged in the performance of this CONTRACT. If any of the work is sublet, the CONTRACTOR shall require the SUB-CONTRACTOR to provide workman's Compensation and Owner's liability insurance for the latter's employees if such employees are not covered under the CONTRACTOR's Insurance.

The policy shall indicate:

1. Contract No.
2. Complete scope of work
3. Site/ location details
4. Details of workmen to be insured
5. Validity period of the insurance coverage

(c) In addition to the above, bidder shall take mandatory insurance covering accidents/Body injury/Death/Property damage etc of the workmen and Third party described as follows:

C.1) Workmen's Insurance – to the limit to which compensation may be payable under the laws of the Republic of India ; but not less than the limits specified below.

C.2) Third Party Insurance – body injury and property damage to the limit specified below:



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The limits aforesaid shall be as follows:

The sum assured shall be 5% of the total contract value and not be less than Rs.50,00,000/- (Rupees Fifty lacs only) for all accidents / death. The policy shall be for not less than Rs.10,00,000/- (Rupees ten lakhs only) for each accident / death; and Provided that the limits specified above shall operate only as a specification of minimum limits for insurance purpose, but shall not anyway limit the Contractor's liability in terms of this clause to the limit(s) specified.

Should the CONTRACTOR fail to take out and/or keep afoot insurance as provided for in the foregoing sub-clauses, the OWNER shall be entitled (but without obligation to do so) to take out and/or keep afoot such insurance at the cost and expense of the CONTRACTOR and without prejudice to any other right or remedy of the OWNER in this behalf to deduct the sum(s) incurred therefor from the dues of the CONTRACTOR

(d) TRANSIT INSURANCE

Open transit policy of all items to be transported by the CONTRACTOR to the SITE of WORK, shall be taken by the CONTRACTOR and monthly declaration of the materials to be transported or transported to be declared to the insurance agency. This will include the materials to be supplied by the CONTRACTOR to IGL site and or any free issue materials issued by IGL, to be transported to site for execution of work. The cost of transit insurance should be borne by the CONTRACTOR and the quoted price shall be inclusive of this cost. Transit insurance shall be 20% of contract value inclusive of GST.

The policy shall indicate:

1. Contract No.
2. Complete scope of work
3. Site/ location details
4. Details of workmen to be insured
5. Validity period of the insurance coverage

(e) CONTRACTOR'S ALL RISK INSURANCE POLICY (CAR)

The contractor shall take all risk insurance policy at its own cost to cover physical loss or damage to the works at the site occurring prior to acceptance of work or part thereof taken over by the owner at its sole discretion with an extended maintenance coverage for the contractor's liability including Third Party Liability in respect of any loss or damage during the warranty period. Endorsements to the policy shall include coverage for faulty workmanship and materials.

Contractor will be required to take insurance coverage of minimum 1.5 times of initial awarded value of the pool to cover the cost of free issue material/items issued by the Owner and the cost of materials being procured by the CONTRACTOR.

The policy shall indicate:

1. Contract No.



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2. Complete scope of work
3. Site/ location details
4. Type of risks covered
5. Validity period of the insurance coverage

The contractor shall take all risk insurance policy at its own cost to cover physical loss or damage to the works at the site occurring prior to acceptance of work or part thereof taken over by the owner at its sole discretion with an extended maintenance coverage for the contractor's liability in respect of any loss or damage during the warranty period. Endorsements to the policy shall include coverage for faulty workmanship and materials.

The policy shall indicate complete scope of work, site, location details of work, type of risks covered and validity of the insurance

(f) PRADHAN MANTRI SURAKSHA BIMA YOJANA:

Contractors has to take Pradhan Mantri Suraksha Bima Yojana for all the contractual employees working under him.

(g) ANY OTHER INSURANCE REQUIRED UNDER LAW OR REGULATIONS OR BY OWNER:

CONTRACTOR shall also carry and maintain any and all other insurance(s), which he may be required under any law or regulation from time to time without any extra cost to OWNER. He shall also carry and maintain any other insurance which may be required by the OWNER

21.0 STATUTORY APPROVALS

- 21.1 Contract shall submit the Statutory Policy within 30 days from award. General permissions shall be obtained by the Purchaser. However, working approval from any authority required as per statutory rules and regulation of Central/ State Government/ Local Bodies shall be the Contractor's responsibility unless otherwise specified in the bid document. The application on behalf of the Purchaser for submission to relevant authorities along with copies of required certificates complete in all respects shall be prepared and submitted by the Contractor well ahead of time so that the actual construction/ commissioning of the work is not delayed for want of the approval/ inspection by concerned authorities.
- 21.2 The Contractor shall be responsible for arranging the inspection of the work by the authorities and necessary co-ordination and liaison work. However, Owner will reimburse the statutory fees paid by the contractor at actual on production of documentary evidence.
- 21.3 Any change/ addition required to be made to meet the requirements of the statutory authorities shall be carried out by the Contractor without additional cost to Owner. The inspection and acceptance of the work by statutory authorities shall however, not absolve the Contractor from any of his responsibilities under this Contract.



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22.0 SITE CLEANING

- 22.1 Contractor shall clean and keep clean (Housekeeping and cleanliness) the work site always to the satisfaction of the Engineer-in-charge for easy access to work site and to ensure safe passage, movement and working.
- 22.2 The Contractor shall dispose of the unserviceable materials, debris etc. to any area, as decided by the Engineer-In-Charge.
- 22.3 No extra payment shall be paid on this account.

23.0 WORKMANSHIP

- 23.1 Regarding work completion, the decision of the Engineer-in-Charge will be final and binding.
- 23.2 The work executed and material supplied shall be to the satisfaction of Engineer-in-Charge and contract price shall include for any incidental and contingent work although not specifically mentioned in the contract but is necessary for its completion in an efficient and workman like manner.
- 23.3 The Engineer-in-Charge or his authorized representative shall approve the quality of all the materials used by contractor from time to time.

24.0 PENALTIES

IGL shall have right to levy following penalties on the Contractor and deduct applicable amount from the Contractor's Running Bills:

- 24.1 In case proper barricading, along the trench and pits, as per technical specification for Laying of MDPE Pipes, is not provided, the work shall be immediately suspended till such time proper barricading, as per the technical specification is provided and penalty will be levied as per SCC clause 24.3.
- 24.2 In case required numbers of safety equipment's like Safety Harness belts, helmets, fluorescent jackets etc. as per the Technical Specifications and Special conditions of the contract of the tender, could not be provided by the contractor during execution, work shall be suspended and penalty will be levied as per SCC clause 24.3.
- 24.3 Either of the case as in Clause 24.1 & 24.2 above shall attract penalty of Rs. 5000/- per instance on issuance of site-memo. On delay in compliance of site memo per instance shall attract additional penalty of Rs. 10000/- per day. Subsequent non-compliance within 5 days shall lead to a deduction of up to 5% from RA bill at the discretion of the EIC and may also lead to black listing of the contractor for future jobs.
- 24.4 In case contractor working without valid work permit work shall be suspended for the day and penalty of Rs. 2000/- per instance shall be levied with a notice to contractor.
- 24.5 In case of complete compliance of HSE norms throughout the contract period the contractor shall be issued a letter of appreciation by the Owner on recommendation by the consultant.
- 24.6 Approval of fusion technician to be taken prior the work being carried out.
- 24.7 In case it is noticed and confirmed by the Consultants/Third party Agencies/ IGL Site-in charge that any fusion jointing is being carried out by personnel other than approved/qualified



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technicians as per the Technical Specifications for laying of PE pipelines and technical specification for installation of GI/Copper Pipes, Rs. 2000/- per joint shall be levied with a notice to contractor and the person supervising the work shall be suspended from IGL sites.

- 24.8 In case of non-submission of material consumption statement on fortnightly basis & material reconciliation statement on monthly basis, Rs 10,000 per instance of delay shall be levied from the running bill.
- 24.9 In case of delay in submission of **Monthly Progress Report** by contractors @ Rs. 5000 per instance. (MPR to be submitted by contractor by 03rd of every month)
- 24.10 In case of usage of contractor's supplied-material procured from vendor other than IGL approved list or without inspection and prior approval EIC/sited in charge, Rs. 20,000/- per instance shall be levied to the contractor from running bill. Such fittings/material shall be replaced by contractor at his own cost within the time frame fixed by Site In-charge
- 24.11 In case of non-compliance of statutory provisions penalty will be imposed by the owner as detailed below:
- Contractor's failure to submit RPFC/ ESI challans of previous month along with the bills during the validity of the contract, Owner shall **withhold 5% (Five percent)** of payable amount from the contractor's running bill and retain the same as a deposit. Such retained amount shall be refunded to contractor on production of RPFC challan/ receipt in immediate subsequent month after deducting penalty. In case of non-submission of challans for a particular month, a penalty of Rs. 5000/- per month of delay **shall be imposed for that particular month**. This penalty will be applicable even if contractor has deposited dues with applicable interest and penalties.
 - Delay of more than 21 days from the date of contract in obtaining / submitting WC cover or taken for shorter duration will result into penalty of **Rs. 5000/- per week** of delay or part thereof.
 - Delay of more than 21 days from the date of contract in obtaining / submitting the required insurance policies (CAR policy, OT policy etc.) as specified in the tender document will result into a penalty of **Rs. 5000/- per week** or part thereof, per policy.
 - The contractor must obtain labour licence before start of work at NCT of Delhi, UP, Haryana & Rajasthan. Delay of more than 30 days from the date of work order in submitting the labour licence shall attract a penalty of Rs. 5000/- per week or part thereof and may also lead to black listing of the contractor for future jobs.
 - Contractor has to submit CPBG as per terms of contract within 21 days from the date of Letter of Acceptance / Notification of Award. For any delay beyond 21 days in submitting CPBG of requisite amount as well as timely extension of value and / or time period shall attract a penalty of 5000/- per week or part thereof.
- 24.12 Contractor shall complete all the activities defined in clause no. 16.13 within 30 days from date of LOA, contractor shall be liable for penalty of Rs. 2000/- per day.



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- 24.13 Contractor shall complete all the activities defined in clause no. 16.1 & 16.2 above within 30 days from the date of LOA. On failure to fulfil the requirement, contractor shall be liable for a penalty of Rs. 2000 per day.
- 24.14 Contractor shall deploy minimum required manpower as defined in clause no. 16.7. On failure to fulfil the requirement, contractor shall be liable for a penalty of Rs. 2000 per day.
- 24.15 In case required numbers of equipment Tools & Tackles as per the lists enclosed with the Technical Specifications for laying of PE Pipelines and technical Specification for installation of GI/Copper pipes, could not be provided by the contractor at the time of need, a notice shall be issued to the contractor by IGL/PMC Site- In-charge and Rs 5000 per week or part thereof shall be levied as penalty till such time the equipment, Tools & Tackles are available for completion of the work.
- 24.16 In case contractor does not settle claims for using the electricity from societies/individual residents then the same shall be settled as per clause 4.2 of PTS – Installation of above ground GI/COPPER Piping & Fitting of Vol. II of II.
- 24.17 In case contractor fails to start execution of MDPE allocated work (including follow-up for permission, laying work, etc.) within 30 days excluding the time lapsed in issuing cheque/payment for road restoration charges, IGL shall with-held up to 5% of amount of such allocated work from contractor's RA bill(s) if reasons are attributable to contractor. IGL reserves the right to offload the allocated work, if delay is attributable to contractor.
- 24.18 Such with-held amount may be released/deducted after PRS analyses recommendation from PMC as per SCC Clause 8.1. PRS will not be deducted, in case the reason is not attributable to contractor.
- 24.19 All Policies & CPBG shall be submitted only once within specified timeframe as stipulated in below table after award of contract and no further amendment shall be acceptable.

Related penalties are tabulated below;

Description	Pool 1	Pool 2	Pool 3	Pool 4	Penalty (in case of delay submission)
CAR Policy (sum of insured amount of 1.5 times of initial PO value)	5,25,00,000 (sum assured)	3,90,00,000 (sum assured)	3,90,00,000 (sum assured)	3,90,00,000 (sum assured)	delay of more than 21 days from date of contract then penalty shall be imposed INR 5000.00 per week or part thereof.
WC Policy	more than 20 manpower	more than 20 manpower	more than 20 manpower	more than 20 manpower	delay of more than 21 days from date of contract then penalty shall be imposed INR 5000.00 per week or part thereof.



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Description	Pool 1	Pool 2	Pool 3	Pool 4	Penalty (in case of delay submission)
OT Policy (sum of insured amount - 20% of Initial PO value)	70,00,000 (sum assured)	52,00,000 (sum assured)	52,00,000 (sum assured)	52,00,000 (sum assured)	delay of more than 21 days from date of contract then penalty shall be imposed INR 5000.00 per week or part thereof.
Labour License	against the contract	against the contract	against the contract	against the contract	delay of more than 30 days from date of contract then penalty shall be imposed INR 5000.00 per week or part thereof.
ESI and PF	As per manpower deployed at site (Organization chart)	As per manpower deployed at site (Organization chart)	As per manpower deployed at site (Organization chart)	As per manpower deployed at site (Organization chart)	In case of non submission of challan and name wise details @5% of RA bill amount shall be withheld
BOCW cess deposit	1% of invoice value	1% of invoice value	1% of invoice value	1% of invoice value	@2% of RA bill of amount shall be withheld
Insurance	Not Less than 10 Lakh per incident as per clause no. 20.1 (C) and the sum assured shall be 5% of the total contract value and not be less than Rs.50,00,000/				Delay of more than 21 days from date of contract then penalty shall be imposed INR 5000.00 per week or part thereof.
**BG value 5% of annualized contract value (5% to be retained against each RA bill till defect liability period)	35,08,000/-	26,03,000/-	26,03,000/-	26,03,000/-	Delay of more than 21 days from date of contract then penalty shall be imposed INR 5000.00 per week or part thereof.



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Description	Pool 1	Pool 2	Pool 3	Pool 4	Penalty (in case of delay submission)
*BG value 10% of annualized contract value	70,16,000/-	52,06,000/-	52,06,000/-	52,06,000/-	Delay of more than 21 days from date of contract then penalty shall be imposed INR 5000.00 per week or part thereof.

Segment-1 as reference

**Note: Bidder can adopt 5% or 10% of BG, refer Clause No. 32.1*

24.20 Awarded contract may be Cancelled, in case contractor fail to submit above policies/CPBG/Labour licence etc. within 30 days of issue of contract.

25.0 PENALTIES FOR SHORTFALL OF ACHIEVING TARGETS

25.1 RFC Penalty (Domestic connection) & Incentive –

- a. Penalty for shortfall of target: Minimum of - 100% available registrations allocated progressively up to 10th of every month OR 400 RFCs per month for Pool 1 and 250 RFCs per month for Pool 2, Pool 3 and Pool 4 @ Rs. 375 per shortfall.
- b. Penalty for delaying beyond TAT: SLA TAT to be applied for first 2 categories (Outside Kitchen – 20 days; Non-LMC part pending – 40 days from the date of allocation of registrations to contractors. In case the contractor doesn't perform RFC and IGL needs to offload and re-allocate the same to other contractor, then penalty shall be calculated on the basis of no. of days beyond TAT up till offloading date. This penalty shall be implemented after development & implementation of vendor portal in CRM.

Penalty of Rs. 375 fortnightly delay beyond TAT up to maximum 50% of connection rate.

- c. The penalty shall not be applicable in case the reason for delay is not attributable to contractor only against submission of consent forms for such cases.
- d. Incentive: Above target per month @ Rs. 375 per additional RFC.
- e. Contractors to arrange minimum no. of connections per month for the respective pools to achieve the target otherwise penalty shall be applicable as point a. above.

25.2 Service Line Penalty (Domestic connection) & Incentive –

- a. Penalty for shortfall of Service Line Target: Minimum 100% of progressive allocations up to 10th of every month OR 120 Service lines per month for Pool-1 and 60 Service lines per month Pool-2, Pool-3 and Pool-4 @ Rs. 1000 per shortfall. However, in case of any restrictions on permissions, then relaxation for that particular month shall be informed by IGL site in-charge. Further, in case of any shortfall not attributable to the contractor, then same has to be certified by IGL site in-charge/IGL representative.



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- b. Incentive: Above target per month @ Rs. 1000 per additional Service Line.
- c. These Penalty/Incentive is applicable only in the O&M area (where area has been commissioned six months ago)

25.3 Delay in completion of NG Conversion –

- a. Penalty for shortfall of NG target: Minimum of 100% progressive allocations up to 10th every month OR 400 NGs per month for Pool 1 and 250 NGs per month for Pool 2, Pool 3 and Pool 4 @ Rs. 100 per shortfall.
- b. Incentive: Above target per month @ Rs. 100 per additional NG.

In case of any cash taken from customer during NG conversion, penalty shall be imposed @INR 10,000.00 per case.

In case the contractor doesn't perform NG conversion and IGL needs to offload and re-allocate the same to other contractor, then penalty shall be calculated on the basis of no. of days as per above scenarios up till offloading date.

The penalty shall not be applicable in case the reason for delay is not attributable to contractor only against submission of consent forms for such cases.

Vendor suppose to do the leak test while performing NGC and In case of any leakage within 30 days of NG conversion in downstream of the meter, penalty shall be imposed @INR 250per case plus the cost of extra metering claimed by the customer due to leakage.

The Penalty will be deducted from the RA bill.

26.0 COMPLETION DOCUMENT

26.1 Contractor in three sets shall submit the following documents in hard binder, as a part of completion documents:

- a) Copies of the Inspection reports, welding, lowering etc, HDD Profiles, Approved construction drawing, As-built drawing, Pre testing, final Hydrostatic and other Test reports.
- b) Consumption statements of PE Line Pipes certified by Owner's Site Engineer.
- c) Material Reconciliation.
- d) All other requirements as specified in the respective specifications.
- e) Completion Certificate issued by Owner's Site Engineer.
- f) completion certificate shall be issued only after commissioning of all MDPE/GI work and closure of contract on recommendations of IGL construction management consultant.
- g) No claim and No dues certificate by the Contractor as annexure – 4 attached.
- h) Recovery statement, if any.
- i) Statement for reconciliation of all the payments and recoveries made in the progress bills.
- j) Copies of deviation statement and order of extension of time, if granted.



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- k) Copies of all documents related to statutory requirements like Labour License, CAR Policy, WCP, EPF, ESI challans etc.
- l) Any other contractual documents required on completion.
- m) Soft copy of Isometric drawing and other relevant documents.

27.0 TIME LIMIT FOR CLAIMS

- 27.1 Under no circumstances whatsoever, shall the contractor be entitled to any compensation from Owner on any account unless the contractor shall have submitted claim pertaining to the contract in writing to the Engineer-in-Charge within 30 days of cause of such a claim occurring. Contractor shall be deemed to have waived off its writes rights to claim the same, if the claim is not raised within this period.

28.0 PRICE VARIATION

- 28.1 Rates for SOR items shall be reviewed as per following given points a & b for change in price of GI pipes & GI fittings which are in the scope of the contractor. These rates shall be valid for all the orders placed within this period.

- a) When WPI for Galvanized Iron piping are published for the month of December 2025, variation if above +/- 5% shall be applicable for works executed from 1st January 2026 onwards.
- b) When WPI for Galvanized Iron piping are published for the month of December 2026, variation if above +/- 5% shall be applicable for works executed from 1st January 2027 onwards.

- 28.2 Following methodology shall be adopted:

- a) The impact of variation of Galvanized iron piping shall be based on comparison of index value of Wholesale Price Index (WPI) being published by Government of India.
- b) The starting reference index value shall be for the month prior to the month of bid submission.
- c) The unit rates of identified item shall be reviewed for the months as mentioned in clause 28.1 (a) and 28.1 (b). The new index shall be compared with the initial (starting) index and any variation in the prevailing all-inclusive unit rates of identified SOR items shall be varied accordingly provided variation in the two values is +/- 5% or more.
- d) No variation in the basic rate of GI fittings/Pipes due to Zinc prices shall be considered

The extent of variation in the individual SOR items shall be as defined in the table below. The revision in rates shall be applicable for the work order(s) which are under execution as per scheduled completion only during the period of proposed review and revision.

S. No.	SOR Item No.	Item Description	Loading due to % variation of Index (GI)
	11	Non LMC	
1	11.1	Supply & installation powder coated 1/2" GI Pipe from	30%



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S. No.	SOR Item No.	Item Description	Loading due to % variation of Index (GI)
		TF to regulator.	
2	11.2	Supply & Installation of powder coated 1/2" GI Riser from regulator isolation valve to appliance for G+3 Apt and Individual kothi /Bungalow	30%
3	11.3	Supply & installation of powder coated 3/4" GI Riser from regulator isolation valve to lateral isolation valve for Apt more than G+3 floors.	30%
12		LMC	
4	12.1.1	PNG CONNECTIONS IN PROJECT AREA	30%
		Installation of meter.	
5	12.1.2	LMC part installation (GI+MLC+cu)	30%
6	12.2.1	Supply and installation from existing riser - Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2 m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter. Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4m. Payment against additional length of (GI + Cu) shall be as per item 13 of SOR.	30%
7	12.2.2	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 13 of SOR.	30%
12.2.3		Powder coated GI and Cu installations for pipes more than 4m per connection in SOR 12.1.1 & 12.1.2 and 12.2.1 & 12.2.2	
8	12.2.3.1	1/2" Powder coated GI	30%
9	12.2.3.2	12mm Copper Pipe - Inside kitchen location only	Nil
15		Non LMC	
10	15.1	Installation of welded riser 1/2 inch up to isolation valve	30%



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S. No.	SOR Item No.	Item Description	Loading due to % variation of Index (GI)
11	15.2	Installation of welded riser 3/4 inch up to isolation valve	30%
12	15.3	Installation of welded riser 1 inch up to isolation valve	30%
13	15.4	Installation of welded riser 2 inch up to isolation valve	30%
16		LMC	
14	16.1.1	PNG CONNECTIONS IN PROJECT AREA	30%
		For Project Area - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4 m	
		Note-Payment against additional length of (GI / Cu) shall be against item 18 of SOR	
15	16.1.2	Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 18 of SOR.	30%
16	16.2.1	PNG CONNECTIONS IN O&M AREA (ON EXISTING RISER)	30%
		For O & M Area - Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2 m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter. Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4m	
		Note-Payment against additional length of (GI / Cu) shall be against item 18 of SOR.	
17	16.2.2	Supply and installation from existing riser to appliance along with meter installation - Supply and installation	30%



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S. No.	SOR Item No.	Item Description	Loading due to % variation of Index (GI)
		from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 18 of SOR.	
	17	Powder coated GI and Cu installations for pipes more than 4 m per connection in SOR 16.1.1, 16.1.2 & 16.2.1, 16.2.2	
18	17.1	1/2" Powder coated GI	30%
19	17.2	12mm Copper Pipe - Inside kitchen location only	Nil

29.0 MATERIAL TO BE SUPPLIED BY THE CONTRACTOR

- 29.1 Contractor will place timely orders on Owner's specified manufacturers/agencies so as to receive the material in accordance with the execution of project activities. The orders to be placed by the contractor shall incorporate certain clauses with respect to delivery schedule, guarantee/warranty, inspection and despatch clearance by Owner. The items and quantities shall be in accordance with the work to be executed and shall be verified by Owner for its appropriations.
- 29.2 All material will be manufactured as per approved Quality Assurance Plan (QAP) only to be specified by Owner. Material will be inspected by owner's approved third party inspection (TPIA), the charges of which shall be borne by contractor.
- 29.3 After approval of QAP, Contractor will submit a schedule production plan mentioning qty's of production along with inspection call at-least one week in advance from the date of commencement of production.
- 29.4 Contractor will submit a written request to Owner for dispatch clearance of material. For this purpose, he will be required to submit detailed material test inspection report and release note issued by the TPIA. On getting the dispatch clearance, the contractor will arrange material dispatch to the designated project site(s).
- 29.5 Contractor shall arrange for proper storage of his material distinctly separate from free-issued material. Contractor shall require appraising Owner regarding cover area, lock & key arrangement of its safe custody, resources marked safe and proper receiving, stocking, issuing, and maintaining all verifying records on regular basis.
- 29.6 Contract shall invariably submit copies of order placed by them on various agencies for sourcing material and shall ensure submission of invoices, challans/packing lists, LR Copy, material inspection report and guarantee/warranty certificate for each lot of material received at Owner's site.



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- 29.7 All material should be covered under warranty for satisfactory performance for maximum period of defect liability of executed work. Any defect noticed during defect liability period shall be promptly attended as faulty material must be contractor's responsibility to take-up the matter with material supplier. Any delay on account of non-availability of ordered material or replacement of faulty material shall not be waived by the reason of material having ordered to and inspected by Owner's recommended agencies. Faulty material must be contractor's responsibility to take-up the matter with material supplier. Any delay on account of non-availability of ordered material or replacement of faulty material shall not be waived by the reason of material having ordered to and inspected by Owner's recommended agencies.
- 29.8 In case of non-availability of required material to be provided by the contractor and the material being available with IGL, it can be issued to the contractor on chargeable basis. The charges payable by the contractor shall be in advance and at the last PO rate plus 15% overhead charges. However, any delay on account of non-availability of material shall be to contractor's account for applicability of PRS clause.
- 29.9 Before award of works order/ starting of work at allotted site, contractor shall provide details of stores and site office established by him for the intended work. Failing which the allocation of work may be deferred by Owner. Also, the contractors shall submit details of tools& tackles under his procession required for execution of the work. Owner shall verify all these aspects before allocating work to the contractor.
- 29.10 The networking work includes Horizontal Directional Drilling (HDD) at various locations by means of HDD machines of appropriate capacities. Contractor advised to apprise himself of all such requirements and confirm in writing to the owner of having HDD machines with him or having tie-up with some reputed contractor. Any delay during the executing due to non-availability of HDD machine shall not be accepted by Owner.
- 29.11 Contractor will not transfer any free issue as well as his supplied material to any other site/ any other contractor without prior written approval of the Engineer- In-charge

30.0 STC TRAINING

- 30.1 STC Training is compulsory for each contractual manpower, which is in scope of the contractor. STC training shall be provided by authorized Training Institute listed below;

Sl. No.	Name	Address	Email Id	Contact Person
1.	M/s Delhi Institute of Fire Engineering	G-579, Raj Nagar-II, behind Dada Dev Mandir Mela Ground, Sector-7, Dwarka, New Delhi-110077	contactdife@gmail.com	1. Manish Goyal (Mob-9312245493)
2.	M/s Centre for Fire Safety Management & Training	Plot No. 975, Khasra No. 298, Metro Pillar No. 506-507, Next to Hanuman Mandir, Mundka, Delhi-110041	admin@cfsmt.org	Mr. Baldev Arora- 99101 54568



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3.	M/s Makwana's Engineering and Technical Services	Ground Floor, Matruchhya, Gulmohor Lane, Near IDEMI, Everard Nagar, Chunubhatti (E), Mumbai-400 022	lalitm@gmail.com	Lalit R. Makwana (Mob- 9324495439)
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31.0 SUB-CONTRACTING

The SCC provisions shall supplement GCC Clause 26 as detailed below

Sub-contracting / Subletting without approval may withhold all payments and future allocations.

32.0 CONTRACT CUM EQUIPMENT PERFORMANCE BANK GUARANTEE

32.1 Within twenty-one (21) Days of receipt of the Letter of Acceptance / Notification of Award, the successful bidder shall furnish to the Purchaser the Contract-Cum-Equipment Performance Bank Guarantee (CPBG) 10% annualized total contract value to be submitted by contractors. Total order value will be inclusive of all taxes, duties and charges towards transportation, unloading etc. up to IGL site/store The BG breakup will be as follow:

- i) 5% of annualized value to be submitted initially at the time of award of contract.
- &
- ii) 5% to be withheld as defect liability with each RA bill.

OR

10% to be submitted initially at the time of award. (In this case, point (ii) above i.e. "5% withheld against each RA bill till defect liability period" is not applicable).

Note: The above CPBG and statutory policies are inclusive of any future amendments in contract

- 32.2 While issuing Bank Guarantee, issuing applicant must mention receiver's details as ICICI Bank IFSC- ICIC0000007, Branch CONNAUGHT PLACE, DELHI, in BG text at which SFMS IFIN 760 message to be sent by issuing bank, to establish the authenticity of given BG.
- 32.3 All bank guarantees will also have 30 day's claim period beyond expiry date.
- 32.4 The proceeds of the Contract-Cum-Equipment Performance Bank Guarantee shall be payable to the Purchaser as compensation for any loss or damage resulting from the Supplier's failure to complete its obligations under the Agreement.
- 32.5 The Contract-Cum-Equipment Performance Bank Guarantee shall be denominated in the currency of the Contract/ Letter of award.
- 32.6 A bank guarantee issued by a nationalized bank or a scheduled Indian bank or by the branch of a reputable international bank located in India and registered with RBI.



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- 32.7 The Contract Performance Guarantee will be discharged by the Owner and returned to the Supplier not later than thirty (30) days following the date of completion of all the Supplier's performance obligations under the Contract, including any warranty obligations.
- 32.8 The Contract-Cum- Equipment Performance Bank Guarantee should be kept valid for 90 days beyond the completion of defect liability period / contract performance period. Additional one month claim period shall be included in CPBG.
- 32.9 Address of Bank (Issuing Branch as well as Delhi Branch) 3.0 Contact Person name (Issuing Branch as well as Delhi Branch)
- 32.10 Telephone Numbers of contact persons of bank(Issuing Branch as well as Delhi Branch)

33.0 FALL CLAUSE

GCC clause 24 i.e. Fall Clause is not applicable.

34.0 GENERAL

- 34.1 All personnel of the contractor entering the work premises shall be properly and neatly dressed and shall wear uniform badges while working on premises of the Purchaser including work sites. Non-compliance of this clause shall attract a penalty of Rs. 1000 per instance.
- 34.2 Contractor shall provide all labour and necessary supervision to carry out the work as per the scope of work as defined in tender document, which forms part of this contract in accordance with the conditions of the contract laid down in this part of contract read in conjunction with General Conditions of Contract.

35.0 ORDER / CONTRACT CLOSURE

- 35.1 One of the essential requirements after the execution of order by the supplier and completion of work by contractor is the closure of the order / contract, when both the parties formally declare that there are no outstanding dues and the supplies have been made / work has been accomplished in accordance with the provisions of the Purchase Order / contract.
- 35.2 The following essential elements have to be ascertained in accordance with the agreed terms and conditions.
- (i) The supplies conform to the specifications contained in the Purchase Order. Correspondingly, the work has been performed at site in accordance with the specifications contained in the contract and the same have been taken over by IGL.
 - (ii) The time schedule permitted for completion of supplies / execution of work has been adhered to and there are no time over-runs. If any extensions in time were necessary as a result of delay by either of the parties, the contractual provisions pertaining to such delays have been satisfactorily implemented. For example, in the event the delays were attributable to the supplier / contractor and the Purchase Order / contract provided for applicability of price reduction and the same have been applied and amounts due, recovered.
 - (iii) Payments in accordance with the provisions of the Purchase Order / contract based on necessary inspections / joint measurements have been made and any and all bank guarantees for performance / security to cover the guarantees and warranties as are



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provided for in the Purchase Order / contract have all been obtained from the supplier / contractor.

- (iv) All materials issued to the contractor as free issue or on the basis of an issue price contained in the contract have been reconciled and any excess material issued have been returned to the stores and duly accounted for. Any excess consumption and any scraps generated in accordance with the provisions of the contract and or any excess scrap generated have also been duly accounted for and recoveries if any made from the contractor.
- (v) In the event any shortages or damages were noticed in the materials received, necessary replacements have either been received or claims lodged for replacement of such materials in so far as the liability of the supplier can be specified in that context. Similarly, for the damages and or defects noticed in the works executed by the contractors, necessary rectifications have been carried out to the satisfaction of IGL and recovery if any made in that regard from the contractor.
- (vi) For any additional works executed by contractor necessary measurements have been carried out, in case such works did not form part of schedule of rates, necessary analyses of the rates have been obtained and accepted based on contractual provisions / market rates and the payment effected to the contractor duly acknowledged by him.

35.3 The contractor shall submit to IGL, any claim arising out of the contract or otherwise within a period of 30 days from the date of cause of action of the said claim. The contractor shall be deemed to have waived its rights to claim the same, if not raised within 30 days of cause of action of said claim. The said claim, if not raised within 30 days, cannot be taken up at any forum by the contractor including arbitration. This provision shall be incorporated in the bid documents as terms & conditions of contract.

35.4 Contractor will be required to submit final bill along with all relevant documents including material reconciliations to the owner within 60 days' period of the completion of work. IGL will ensure closure of the contract within 30 days of receipt of requisite documents / order closure recommendation from Project Management Consultant (PMC) / EIC.

36.0 WHISTLE-BLOWER POLICY

GCC clause 67.0 is modified as below:

- 36.1 Indraprastha Gas Limited (IGL) has implemented whistle-blower policy as part of the vigil mechanism to comply with the regulatory requirements laid down by SEBI (LODR) Regulations, 2015. With the implementation of vigil mechanism, the company provides a platform to its vendors and suppliers to come forward and raise their genuine concerns without any fear of retaliation and victimization.
- 36.2 The policy is designed to deal with concerns raised in relation to the specific issues which are not in the interest of the company. The company has appointed an independent third-party service provider to manage the operations of whistle-blower hotline.

37.0 CORRESPONDING ADDRESS



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37.1 OWNER:

- A. HOD (C&P and Stores)
Indraprastha Gas Limited,
IGL Bhawan, 4, Community Centre,
Sector – IX, R. K. Puram,
New Delhi 110 022
Telephone : +91 (011) 46074661
Fax no. : +91 (011) 26171863
Email : adeshsinghal@igl.co.in, ajitesh.kushwaha@igl.co.in
- B. CONSULTANT:
VCS Quality Services Pvt Ltd.
Unit no. 1116 - 1121, Tower 4, 11th Floor, Assotech Business Cresterra,
Plot No. 22, Sector 135, Expressway Noida-201301, U.P
Telephone: +91 9105709079/ 9899812852/8076548002/8010489356
Email: hk.sharma@vcsprojects.com; rachna.shukla@vcsprojects.com;
rajesh.sharma@vcsprojects.com; sachin.sinigh@vcsprojects.com



FORMS & FORMATS

IGL/ET2/CP/CP18519

SECTION - V

FORMS & FORMATS



FORMS & FORMATS

IGL/ET2/CP/CP18519

Form 1

BIDDER'S GENERAL INFORMATION

(Information must be provided on bidder's letterhead)

1-1 Bidder Name: _____

1-2 Number of Years in Operation: _____

1-3 Address of Registered Office: _____

City _____ District _____

State _____ PIN _____

1-4 Operation Address
(If different from above): _____

City _____ District _____

State _____ PIN _____

1-5 Telephone Number: _____
(Area Code) (Telephone Number)

1-6 Mobile Number, if any _____

1-7 E-mail address: _____

1-8 Website: _____

1-9 Fax Number: _____
(Area Code) (Telephone Number)

1-10 ISO Certification, if any {If yes, please furnish details} _____

1-11 Bank's Name : _____

1-12 Bank's Branch : _____

1-13 Branch Code : _____



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1-14 Bank account number : _____

1-15 IFSC Code: _____

1-16 MICR Code: _____

1-17 Type of Firm: Proprietary/ Partnership/ PVT/Public Ltd.: _____

1-18 If others, please specify _____

1-19 **Details of Directors/ Proprietors/ Partners** _____

(Kindly attach separate sheets giving details for name of directors / proprietors and their stakes) along with the supporting documents.

1-20 PAN No.: _____

1-21 EPF No.: _____

1-22 GST Registration no.
(If registered) _____

1-23 If unregistered (Reason)

- a) Turnover threshold
- b) Providing exemption goods/services
- c) Others (specify)

(SIGNATURE OF BIDDER WITH SEAL)

Note:

- 1 The above required information is required on the bidder's letterhead.
- 2 Bidders have to submit supporting documents for the above details including the following:
 - a. PAN card copy
 - b. GST certificate copy (of the same state as the office address mentioned above)
 - c. Cancelled cheque of the bank account mentioned above



FORMS & FORMATS

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Form 2 DEVIATION FORM (On Bidder's letter head)

M/S INDRAPRASTHA GAS LIMITED,
NEW DELHI.

Notes

- 1) BIDDER may give here a consolidated list of deviations / clarifications / comments for all sections of the bid documents which for an appropriate offer are considered unavoidable by him.
- 2) Deviations / clarifications mentioned elsewhere in the offer shall not be binding on the IGL and any such deviations if indicated elsewhere other than this form will render the offer non-responsive and shall liable to be rejected.
- 3) BIDDER shall state the reason for the deviations in the remark column.
- 4) Only the deviations listed herein, in conjunction with the original Tender shall constitute the contract document for the award of the job to the BIDDER.
- 5) Any clarification raised by the Purchaser/ Consultant should be resolved within 10 days failing which the bid is liable for rejection.

Sec No./ Cls. No.	Page No.	Requirements as per tender	Deviation by Bidder	Clarification/ Comments by Bidder	Remarks
1)					
2)					
3)					
4)					
5)					
6)					

The bidder confirms that all clauses of the tender document, which are not listed above are fully complied by the bidder.

(Signature of the bidder)



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Form 3

FORMAT FOR CERTIFICATE FROM STATUTORY AUDITOR / CHARTERED ENGINEER FOR DETAILS OF SIMILAR GOODS/ WORK/ SERVICES SUPPLIED/ DONE DURING PAST 7 YEARS

(Applicable in all cases where bidder's accounts are audited by Statutory Auditor)

Sr. no.	Description of the goods/ works/ services	LOA/ PO/ WO no. & date	Full proposal, address & phone nos. of client Name, designation & address of engineer/officer-in-charge(for cases other than purchase)	Value of Contract/ Order (Specify Currency amount)	Date of Commence ment of work/ services or supply of goods	Scheduled completion time(month s) delivery schedule	Date of actual completion/ supply	Reasons for delay in execution, if any	Project cost
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)

Place:

Date:

[Sign. Of authorized signatory of bidder]

Name:

Designation:



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Instructions:

1. Copies of letter of awards/ order/ work orders and completion certificate (in case of works/services) or IRN/ Proof of delivery (in case of supplies, if applicable) to be enclosed.

Note: Completion certificate shall clearly mention the LOA/ PO/ WO no. along with the total awarded value and total executed value separately (under a single Contract/ PO/ WO/ LOA), otherwise completion of such contract/ order shall not be considered for evaluation.

2. The supply/ work/ services completed earlier than 7 years shall not be indicated here.
3. The list of supply/ work/ services not of similar nature shall not be indicated here. Failing to comply aforementioned instructions may lead to rejection of bid.
4. Bidders are expected to provide details in respect of each order in this Annexure. The orders cited must comply with the bid evaluation criteria specified in Tender Document. Details provided in this section is intended to serve as a backup for information provided in Offer/ Quotation. Bidder should also refer to the instructions below.
5. A separate sheet should be filled for each LOA/ work order/ purchase order.
6. Certificate from the bidder's statutory auditors must be furnished in the format below for LOA/ Work Order/ Purchase Order mentioned above (separately for each orders)

It may be noted that in the absence above certificates, the details would be considered inadequate and could lead to the bid being considered ineligible for further evaluation.



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Form 4

CERTIFICATE FROM THE STATUTORY AUDITOR / CHARTERED ENGINEER REGARDING SUPPLY OF GOODS/WORKS/SERVICES

Based on its books of accounts and other published information authenticated by it, {this is to certify that LOA/ PO/ WO no. dated.....was awarded to (Name of the bidder) by..... (Name of the client) to execute..... (Name of the supply/ work/ service). The Supply/ works/ services commenced on (Date) was/ is likely to be completed on (Date, if any). It is certified that the total value of contract/order executed by..... (Name of bidder) was (Specify currency & amount) and executed value was (Specify currency & amount).

Name of Audit / CE Firm:
[Signature of authorized signatory]

Chartered Accountant/ Engineer:

Date:
Designation
Seal:
Membership no.
UDIN (in case of Auditor)

Name:

Form 5
CERTIFICATE FOR FINANCIAL CAPABILITY OF THE BIDDER
FORMAT FOR STATUTORY AUDITOR'S / CHARTERED ACCOUNTANT
(For supply of Goods/Works/Services)

We have verified the Annual Accounts and other relevant records of M/s. _____
 (Name of bidder) and certify the following:

ANNUAL TURN OVER OF LAST 3 YEARS:

Year	Amount (Currency)
Year 1: 20__ - __	
Year 2: 20__ - __	
Year 3: 20__ - __	

FINANCIAL DATA FOR LAST AUDITED FINANCIAL YEAR:

Description	Year 20__ - __
	Amount (Currency)
1. Currency Assets	
2. Current liabilities	
3. Working capital (Current assets-current liabilities)	
4. Net worth (Paid up share capital and free reserves & surplus)	

Name of Audit Firm:
 Chartered Accountant
 Date:
 Membership No.
 UDIN:

[Signature of Authorized signatory]
 Name:
 Designation: Seal:

Instructions:

1. The financial year would be the same as one normally followed by the bidder for its Annual Report.
2. The bidder shall provide the audited annual financial statements as required for this Tender Document. Failure to do so would result in the bidder being considered as non-responsive.
3. For the purpose of this Tender document (i) Annual Turnover shall be "Sale value/ Operating income" (ii) Working capital shall be "Current Assets less Current Liabilities" and (iii) Net Worth shall be "Paid up share capital and Free reserves & Surplus".

(SIGNATURE OF BIDDER WITH SEAL)



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Form 6 DECLARATION

(On Bidder's letter head)

Indraprastha Gas Limited,
IGL Bhawan, 4 Community Centre,
Sector – IX, R. K. Puram,
New Delhi – 110022

We confirm that we are not under any liquidation, court receivership or similar proceedings.

We also confirm that we have not been banned or delisted by any government ministry / MOPNG / Delhi Government / Promoter) / any government (national, state or local), PSU, PSU-JV and/or other government entities from quoting.

SEAL AND SIGNATURE OF BIDDER



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Form 7
DECLARATION OF TENDER DOCUMENT PURCHASED/ DOWNLOADED
(On Bidder's letter head)

No.

Date:

Indraprastha Gas Limited,
IGL Bhawan, 4 Community Centre,
Sector – IX, R. K. Puram,
New Delhi – 110022

Sub:

Sir,

We hereby confirm that we have read each page of the subject tender document (s) along with Corrigendum & Reply to bidder's queries thoroughly and understood the complete Scope of Work and other terms & conditions. We hereby also confirm that tender terms & conditions are acceptable to us and any deviation other than mentioned in deviation form is not to be taken into account. Also, no alterations have been made to the original tender document (s) as provided by IGL.

Yours faithfully,

Signature
Name & Designation
For and on behalf of



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Form 8

COVERING LETTER ON LETTER HEAD FOR STATUTORY AUDITOR / CHARTERED ACCOUNTANT / CHARTERED ENGINEER

To,

Date:

Subject: Certificate regarding

Dear Sir,

We..... (Name of the Statutory Auditor/ Chartered Accountant / Chartered Engineer) are the Statutory Auditor/ Chartered Accountant/ Chartered Engineer of M/s. (Name of the bidder).

We hereby confirm that we have issued following certificate:

- 1.
- 2.
- 3.

Thanking You,

Place:
Date:
Membership No.
Encl.: As above

(Signature)
Name of Authorized Signatory



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Form 9 PRO FORMA FOR LETTER OF AUTHORITY

No.

Date:

Indraprastha Gas Limited,
IGL Bhawan, 4 Community Centre,
Sector – IX, R. K. Puram,
New Delhi – 110022

Sub: Bidding Document for

Sir,

We _____ hereby authorize following representative(s) to attend the Un-priced Bid opening and Priced Bid opening against above Bidding Document:

- | | | |
|----|--------------------------|-----------------|
| 1. | Name & Designation _____ | Signature _____ |
| 2. | Name & Designation _____ | Signature _____ |

We confirm that we shall be bound by all and whatsoever our representative(s) shall commit.

Yours faithfully,

Signature
Name & Designation
For and on behalf of

Note: This letter of authority should be on the letterhead of the bidder and should be signed by a person competent and having the power of attorney to bind the bidder.

SEAL OF THE COMPANY



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Form F-10

Details of litigation (on Bidder's letter head)

Bidder shall furnish details of litigation cases of the bidder during the last 5 years if any, in this Form.
In case of no such litigations, to be submitted clearly marked "NIL".

SEAL AND SIGNATURE OF BIDDER



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Form 11

BID BOND PROFORMA / PROFORMA FOR EMD

Bank Guarantee No.:

Date:

To
M/S INDRAPRASTHA GAS LIMITED,
NEW DELHI.

TENDER NO. _____ FOR SUPPLY OF _____

WHEREAS..... (HEREINAFTER CALLED 'THE Bidder' has submitted his Bid dated..... for work of (Herein after called 'The Bid') KNOW ALL MEN by these presents that WE (hereinafter called 'The Bank') are bound unto INDRAPRASTHA GAS LIMITED, IGL Bhawan, 4, Community Centre, Sector – IX, R. K. Puram, New Delhi 110 022 (herein after called 'IGL') in the sum of for which payment well and truly made to IGL, the BANK binds itself its successor and assigns by these presents. Sealed with the Common Seal of the said BANK this day of 2025.

THE CONDITIONS of this obligation are:

1. If the Bidder withdraws his Bid during the period of Bid validity specified by the Bidder on the Bid Form; or
2. If the Bidder, having been notified of the acceptance of his bid by IGL during the period of bid validity
 - a) Fails or refuses to execute the Contract Form, if required: or
 - b) Fails or refuses to furnish the PERFORMANCE SECURITY in accordance with the Instructions to the Bidder.

We undertake to pay IGL up to the above amount upon receipt of its first written demand, without IGL having to substantiate its demand, provided that in its demand IGL will note the amount claimed by it is due to it owing to the occurrence of one or both of the two conditions specifying the occurred condition or conditions.

The Guarantee will remain in force up to and including 60 days after the period of bid validity and any demand in respect thereof should reach the BANK not later than the above date.

(Signature of the BANK)

(Signature of the Witness)

Name & address of Witness:

Date:



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Form 12

FORMAT FOR BIDDER'S PRE-BID QUERIES

Indraprastha Gas Limited,
IGL Bhawan, 4 Community Centre,
Sector – IX, R. K. Puram,
New Delhi – 110022

Subject: Tender No. for

Sl. No.	Reference of Bidding Document				Bidder's Query
	Sec No.	Page No.	Clause No.	Description	

Note: The Pre-Bid Queries may be sent by e-mail before due date for receipt of Bidder's queries.



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Annexure - 1

DECLARATION OF BID SECURITY / EMD (on Bidder's Letter Head)

To

Indraprastha Gas Ltd (IGL)

Subject:

Tender No:

Dear Sir,

After examining / reviewing provisions of above referred tender documents (including all corrigendum/ Addenda), we M/s _____ (**Name of Bidder**) have submitted our offer/ bid no. _____.

We, M/s _____ (**Name of Bidder**) hereby understand that, according to your conditions, we are submitting this Declaration for Bid Security.

We understand that we will be put on blacklist / holiday list / information letter indicating the nature of default shall be sent to Ministry of Micro, Small and Medium Enterprises (as per policies of IGL in this regard), if we are in breach of our obligation(s) as per following:

- a. have withdrawn/modified/amended, impairs or derogates from the tender, my/our bid during the period of bid validity specified in the form of Bid; or
- b. having been notified of the acceptance of our Bid by the IGL during the period of bid validity:
 - i. fail or refuse to execute the Contract, if required, or
 - ii. fail or refuse to furnish the Contract Performance Bank Guarantee, in accordance provisions of tender document.
 - iii. fail or refuse to accept 'arithmetical corrections' as per provision of tender document.
- c. having indulged in corrupt/fraudulent /collusive/coercive practice as per procedure.

Place:

Date:

Signature of Authorize Signatory

Name:

Destination:

Seal



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Annexure - 2

**FORMAT FOR CERTIFICATE FROM BANK
IF BIDDER'S WORKING CAPITAL IS INADEQUATE**
(To be provided on Bank's letter head)

Date:

To,

Indraprastha Gas Limited,
IGL Bhawan, 4 Community Centre,
Sector – IX, R. K. Puram,
New Delhi – 110022

Dear Sir,

This is to certify that M/s (name of the bidder with address)
(hereinafter referred to as Customer) is an existing customer of our Bank.

The Customer has informed that they wish to bid for IGL's RFQ/Tender no.
dated for(Name of the supply/work/services
/consultancy) and as per the terms of the said RFQ/Tender they have to furnish a certificate from
their Bank confirming the availability of line of credit.

Accordingly M/s (name of the Bank with address) confirms availability of
line of credit to M/s (name of the bidder) for at least an amount of Rs.

It is also confirmed that the net worth of the Bank is more than Rs. 100 Crores (or Equivalent USD)
and the undersigned is authorized to issue this certificate.

Yours truly

for (Name & address of Bank)

(Authorized signatory)

Name of the signatory:

Designation:

Stamp

**PERFORMA OF INDEMNITY BOND FOR SUPPLY OF MATERIALS BY
PURCHASER/ OWNER**

(To be executed on non-judicial stamp paper of appropriate value)

WHEREAS INDRAPRASTHA GAS LIMITED, NEW DELHI (INDIA) (hereinafter referred to as "IGL") which expression shall unless repugnant to the context includes their legal representatives, successors and assigns having their registered office at 4, Community Center, Sector-9, R. K. Puram, New Delhi has entered into an Contract with _____ (hereinafter referred to as the CONTRACTOR which expression shall unless repugnant to the context include their legal representatives, successors and assigns) for _____ on the terms and conditions as set out, inter-alia, in the Contract No. _____ Dated _____ and PO no. _____ dated _____ and various documents forming part thereof hereinafter collectively referred to as the "CONTRACT" which expression shall include all amendments, modifications and/or variations thereto.

AND WHEREAS

- i) IGL has agreed to supply to the CONTRACTOR, equipment, plants and materials (finished, semi-finished and raw) for the purpose of EXECUTION of the said CONTRACT by the CONTRACTOR (the equipment, plants and materials to be supplied by IGL to the CONTRACTOR, hereinafter for the sake of brevity referred to as the "said materials") and pending execution by the CONTRACTOR of the CONTRACT incorporating the said materials, the said materials shall be under the custody and charge of the CONTRACTOR and shall be kept, stored, altered, worked upon and/or fabricated at the sole risk and expense of the CONTRACTOR.
- ii) As a pre-condition to the supply of the said materials by IGL to the CONTRACTOR, IGL has required the CONTRACTOR to furnish to IGL an Indemnity Bond in the manner and upon terms and conditions hereinafter indicated.

NOW, THEREFORE, in consideration of the premises aforesaid the CONTRACTOR hereby irrevocably and unconditionally undertakes to indemnify and keep indemnified IGL from and against all loss, damage and destruction (inclusive but not limited to any or all loss or damage or destruction to or of the said materials or any item or part thereof by theft, pilferage, fire, flood, storm, tempest, lightning, explosion, storage, chemical or physical action or reaction, binding, warping, exposure, rusting, faulty workmanship, faulty fabrication, or faulty method or technique of fabrication, strike, riot, civil commotion, or other act or omission or commission whatsoever within or beyond the control of the CONTRACTOR, misuse and misappropriation (inclusive but not limited to the misuse or misappropriation by the CONTRACTOR and the CONTRACTOR's servants and/or agents) whatsoever to, or of in the said materials or any part of them thereof from the date that the same or relative part of item thereof was supplied to the CONTRACTOR upto and until the date of return to IGL of the said materials or relative part of item thereof or completed fabricated works(s) incorporating the said material and undertake to pay to IGL forthwith on demand in writing without protest or demur the value as specified by IGL of the said material or item or part thereof,



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lost, damaged, destroyed, misused and/or misappropriated, as the case may be or, together with IGL's costs and expenses (inclusive of but not limited to handling, transportation, cartage, insurance, freight, packing and inspection costs/or expenses upto) and aggregate limit of Rs. _____ (In words _____ only).

AND THE CONTRACTOR hereby agrees with IGL that:

- i) This Indemnity/Undertaking shall be a continuing Indemnity/ Undertaking and shall remain valid and irrevocable for all claims of IGL arising hereunder upto and until the midnight of _____. However, if the CONTRACT for which this Indemnity/Undertaking is given is not completed by this date, the CONTRACTOR hereby agrees to extend the Indemnity/Undertaking till such time as is required to fulfill the CONTRACT.
- ii) This Indemnity/Undertaking shall not be determined by any change in constitution or upon insolvency of the CONTRACTOR but shall be in all respects and for all purposes be binding and operative until payment of all moneys payable to IGL in terms of hereof.
- iii) The mere statement of allegation made by or on behalf of IGL in any notice or demand or other writing addressed to the CONTRACTOR as to any of the said material or item or part thereof having been lost, damaged, destroyed, misused or misappropriated while in the custody of the CONTRACTOR and/or prior to completion of the completed fabricated work(s) and delivery to job site thereof incorporating the said materials shall be conclusive of the factum of the said material or item or part thereof having been supplied to the CONTRACTOR and/or the loss, damage, destruction, misuse or misappropriation thereof, as the case may be, while in the custody of the CONTRACTOR and/or prior to the completion of the completed fabricated work(s) and delivery to job site thereof incorporating the said materials without necessity on the part of IGL to produce any documentary proof or other evidence whatsoever in support of this.
- iv) The amount stated in any notice of demand addressed by IGL to the CONTRACTOR as to the value of such said materials lost, damaged, destroyed, misused or misappropriated, inclusive relative to the costs and expenses incurred by IGL in connection therewith shall be conclusive of the value of such said materials and the said cost and expenses as also of the amount liable to be paid to IGL to produce any voucher, bill or other documentation or evidence whatsoever in support thereof and such amount shall be paid without any demur and on demand and no dispute shall be raised concerning the same.

The undersigned has full power to execute this Indemnity Bond on behalf of the CONTRACTOR under the Power of Attorney dated _____.

Place:

Dated:

(Signed by Competent Authority)
Official seal of the CONTRACTOR

PERFORMA OF INDEMNITY BOND

WHEREAS INDRAPRASTHA GAS LIMITED, NEW DELHI (INDIA) (hereinafter referred to as “**IGL**”) which expression shall, unless repugnant to the context include its successors and assigns, having its registered office at 4, Community Center, Sector-9, R. K. Puram, New Delhi has entered into a contract with M/s * _____ (hereinafter referred to as the “**Contractor**”) which expression shall unless repugnant to the context include its representatives, successors and assigns, having its registered office at * ____ and on the terms and conditions as set out, inter-alia in the [*mention the work order/LOA/Tender No.*] and various documents forming part thereof, hereinafter collectively referred to as the ‘**CONTRACT**’ which expression shall include all amendments, modifications and / or variations thereto.

IGL has also advised the Contractor to execute an Indemnity Bond in general in favour of IGL indemnifying IGL and its employees and Directors including Independent Directors from all consequences which may arise out of any prospective litigation or proceedings filed or may be initiated by any third party, including any Banker / financial institution / worker(s) / vendor(s)/ sub-contractor(s) etc. who may have been associated or engaged by the Contractor directly or indirectly with or without consent of IGL for above works.

NOW, THEREFORE, in consideration of the promises aforesaid, the Contractor hereby irrevocably and unconditionally undertakes to indemnify and keep indemnified IGL and all its employees, Directors, including Independent Directors, from and against all/any claim(s), damages, loss, which may arise out of any litigations/ liabilities that may be raised by the Contractor or any third party against IGL under or in relation to this contract. The Contractor undertakes to compensate and pay to IGL and/or any of its employees, Directors including Independent Directors, forthwith on demand without any protest the amount claimed by IGL for itself and for and on behalf of its employees, Directors including Independent Directors together with direct/indirect expenses including all legal expenses incurred by them or any of them on account of such litigation or proceedings.

AND THE CONTRACTOR hereby further agrees with IGL that:

(i) This Indemnity shall remain valid and irrevocable for all claims of IGL and/or any of its employees and Directors including Independent Directors arising out of said contract with respect to any such litigation / court case for which IGL and/or its employees and Directors including Independent Directors has been made party until now or here-in-after.

(ii) This Indemnity shall not be discharged/revoked by any change/ modification/amendment/ assignment of the contract or any merger of the Contractor with other entity or any change in the constitution/structure of the Contractor’s firm/Company or any conditions thereof including insolvency etc. of the Contractor, but shall be in all respects and for all purposes binding and operative until any/all claims for payment of IGL are settled by the Contractor and/or IGL discharges the Contractor in writing from this Indemnity.



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The undersigned has full power to execute this Indemnity Bond for and on behalf of the Contractor and the same stands valid.

SIGNED BY :

For [*Contractor*]
Authorised Representative

Place:

Dated:

Witnesses:

1.

2.



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Annexure - 4

[On the Letter-head of Contractor]

NO CLAIM CERTIFICATE

We, _____, a company incorporated under the laws of India/ a Consortium between *____ and *____ (*name of Consortium partners to be inserted*)/ a Partnership Firm consisting of *____ and *____ (*name of Partners to be inserted*)/ a Sole Proprietorship (as the case may be), having its registered office at _____ and carrying on business under the name and style M/s. _____ were awarded the contract by IGL (Indraprastha Gas Limited). in reference to Tender No. _____ dated _____ ("Contract").

After completion of the above-said Work under the contract, we have scrutinized all our claims, contentions, disputes, issues and we hereby confirm that after adjusting all payments received by us against our R.A. Bills, our balance entitlement under the Contract is to a sum of Rs. _____ (Rupees _____ only) as per our Final Bill dated _____ towards full and final settlement of all our claims, dues, issues and contentions from IGL.

We confirm and declare that with the receipt of aforesaid monies, all our claims, dues, disputes, differences between M/s. _____ and IGL under and with reference to said Contract stands fully and finally settled.

We further absolve IGL from all liabilities present or future arising directly or indirectly out of the Contract.

We further confirm that the present settlement has been arrived at after mutual negotiations and is freely and fairly entered into between the parties. There is no economic duress or any other compulsion on us in entering into this settlement.

Signature with Seal of contractor

Dated :



SCHEDULE OF RATES (SOR)

IGL/ET2/CP/CP18519

SECTION - VI

SCHEDULE OF RATES (SOR)

Refer below Attachment-1 (Estimated Cost)

(The bidders must quote in the SOR provided on the e-tendering portal in the prescribed excel file only)



**OTHER FORMS APPLICABLE
AFTER AWARD**

IGL/ET2/CP/CP18519

SECTION - VII

OTHER FORMS APPLICABLE AFTER AWARD



OTHER FORMS APPLICABLE AFTER AWARD

IGL/ET2/CP/CP18519

CONTRACT – PERFORMANCE BANK GUARANTEE

(To be stamped in accordance with Stamp Act)

Ref:

Bank Guarantee No.....

Date.....

To

INDRAPRASTHA GAS LIMITED

OWNER CONTRACT NO.....DATED.....

Dear Sir,

In consideration of the INDRAPRASTHA GAS LIMITED, NEW DELHI (INDIA) (hereinafter referred to as the OWNER which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and assigns) having awarded the work of to having its Principal Office at (hereinafter referred to as "VENDOR(SELLER)/CONTRACTOR") which expression shall unless repugnant to the context or meaning thereof include their respective successors, administrators, executors and assigns) the supply/execution by issue of OWNER'S Owner order No. dated..... And the same having been accepted by the VENDOR(SELLER/CONTRACTOR) resulting into CONTRACTS for supplies of materials equipments/execution of works/services as per above Owner Order having a total value of for the complete supply of materials/equipments/execution of works/services and the VENDOR(SELLER/CONTRACTOR) having agreed to provide a Contract performance and Warranty/Guarantee for the faithful performance of the aforementioned contract and warranty to quality to OWNER.

We (Bank) having its Head Office at (hereinafter referred to as the 'Bank' which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the OWNER/OWNER, on demand any and all moneys payable by the seller/Contractor to the extent of ____% (____ percent) of the Contract price without any deviation and protest as aforesaid at any time up to.....and without reference to the VENDOR(SELLER/CONTRACTOR). Any such demand made by OWNER on the Bank shall be conclusive and binding notwithstanding any difference between OWNER and VENDOR(SELLER/CONTRACTOR) or any dispute pending before any Court, Tribunals, Arbitrator or any other Authority.

The Bank undertakes not to revoke this guarantee during its currency without previous consent of OWNER and further agrees that the guarantee herein contained shall continue to be enforceable till the OWNER discharges the guarantee. OWNER shall have the fullest liberty without affecting in any way the liability of the BANK under this guarantee from time to time to extend the time for performance by VENDOR(SELLER/CONTRACTOR) of the aforementioned contract. OWNER shall have the fullest liberty, without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against VENDOR(SELLER/CONTRACTOR) and to exercise the same at any time in any manner, and either to enforce to forebear to enforce any covenants contained or implied, in the aforementioned Contracts between OWNER and VENDOR(SELLER/CONTRACTOR) or any other course of or remedy or security available to OWNER. The BANK shall not be released of its obligations under these presents by any exercise by OWNER of its liability with reference to the matters aforesaid or any of them or by reason or any other acts of omission or commission on the part of OWNER or any other indulgence shown by OWNER or by any other matter or thing whatsoever which under law would, but for this provisions, have the effect of relieving the BANK.



OTHER FORMS APPLICABLE AFTER AWARD

IGL/ET2/CP/CP18519

Bank Guarantee No.....

Date.....

The BANK also agrees that OWNER at its option shall be entitled to enforce this Guarantee against the BANK as a Principal Debtor, in the first instance without proceeding against VENDOR(SELLER/CONTRACTOR) and notwithstanding any security or other guarantee that OWNER may have in relation to the VENDOR'S(SELLER'S/CONTRACTOR'S) liabilities.

Notwithstanding anything contained herein above our liability under this Guarantee is restricted to AND it shall be remain in force upto and including and shall be extended from time to time for such period as may be desired by the VENDOR(SELLER/CONTRACTOR) on whose behalf this Guarantee has been given.

Dated this the _____ day of _____ 2025 at _____

- 1. The guarantee shall not be affected by any change in constitution of the bank or by absorption/merger of bank with any other body or corporation.*
- 2. The guarantee shall be in addition to and not in substitution for any other guarantees or security for the supplier/Contractor given or to the owner in respect of said purchase order by the bank (whether alone or jointly with others.*
- 3. The bank hereby declares that _____(Name of the person signing on behalf of bank) _____ is authorized to sign this guarantee /undertaking on behalf of the bank and to bind the bank thereby.*
- 4. Any notice by way of request, demand or otherwise hereunder may be sent by post/courier to the bank address and duly verified by proof of delivery will be sufficient & shall be deemed as claim lodging date by owner.*
- 5. This guarantee is operative at _____ in Delhi NCR (name and address of the branch) branch, _____(Place).*
- 6. Details of issuing and operating branches are as under:*

	Outstation Bank details	Local Operating bank details. (Delhi-NCR)
Postal Address		
Telephone no / Fax No		
Contact person		
Email ID		

- 7. These present shall be governed by and construed in accordance to Indian law.*

Bank Guarantee No.....

Date.....



OTHER FORMS APPLICABLE AFTER AWARD

IGL/ET2/CP/CP18519

Notwithstanding anything contained herein above:-

1. *Our liability under this Bank Guarantee shall not exceed Rs. ----- (amount in word).*
2. *This Bank Guarantee shall be valid up to ----- (Contract period + Min period as defined in contract/Tender(i.e. 90 days beyond contract/defect liability period whichever is higher)).*
3. *We are liable to pay the guaranteed amount or any part thereof under this Guarantee only and only if you serve upon written claim or demand on or before -----.”(1 month beyond expiry date.)*

WITNESS
(Signature)

(Name)
(Official Address)

(Signature Bank Signatory)

Bank Rubber Stamp
(Name)

Designation with Bank
Stamp plus Attorney as
Per Power of Attorney

No.....
Dated.....



IGL/ET2/CP/CP18519

TECHNO-COMMERCIAL INFORMATION

(To be filled serial-wise on the e-tendering portal bid floor in the provided format)

Wherever remarks are required, bidders are advised to ensure that sufficient information has been provided and remarks such as “attached”, “enclosed”, “submitted” or other such terms alone should be avoided.

Bidder Organization Name		
Sr.	Requirement	Response
General Information		
1	Bidder's own bid Reference No. and Date	
2	Date of incorporation of company	
3	Company Address(es) in India	
4	No. of years in business	
5	Type of Firm (Proprietary / Partnership / Private Ltd. / Public Ltd.)	
6	Details of Directors / Proprietors / Partners	
7	Phone no. of contact person	
8	Email ID of contact person	
9	GST registration number	
Technical BEC		
1	Same as mentioned in clause 8.1 of IFB	Agree
Details in support of Technical BEC		
1	Any one past reference client (Mention Client Company Name)	
2	Purchase order(s)/ Work Order(s) copy.	
3	Copy of SOR clearly describing the scope of work	
4	Certificate from owner certifying executed amount against the said PO / WO in a single contract covering the BEC clauses.	
5	Certificate from owner certifying completion of PNG domestic connection in a single contract covering the BEC clauses.	
Financial BEC		
1	Bidder's turnover for preceding financial year (mention in INR along with FY).	
2	Bidder's turnover for second to last preceding financial year (mention in INR along with FY).	
3	Bidder's turnover for third to last preceding financial year	



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	(mention in INR along with FY).	
4	Bidder's net worth for preceding financial year should be positive.	
5	Bidder's working capital for preceding financial year (mention in INR along with FY).	
Commercial Terms and Conditions		
1	Bidder accepts to keep the bid valid for a period of 90 days from the date of opening of techno-commercial bid	Agree
2	Details of EMD submitted against the tender (Ref. no. and date of DD/BG/Banker's Cheque/ Online transaction, or MSE's certificate details along with Annexure-1 in case of exemption)	
4	Bidder accepts to quote the discount as per SOR enclosed with this tender document	Agree
5	Discount/Markup quoted by the bidder shall remain firm, fixed and valid for entire contractual period	Agree
6	Bidder understands and accepts the complete scope of work as defined in the tender document	Agree
7	Bidder accepts the contractual validity period as per tender	Agree
8	Bidder accepts the terms of payment as per tender	Agree
9	Bidder accepts to submit the Performance Bank Guarantee(s) as per tender provisions	Agree
10	Bidder accepts the Price Reduction Schedule and other penalties as mentioned in the tender document	Agree
11	Bidder accepts the General / Special / Technical Terms & Conditions of the tender	Agree
12	Bidder accepts all statutory compliances against tender	Agree
13	Bidder has read and accepts the tender document in toto	Agree
14	Any deviation from the tender document sought by the bidder is listed separately in Form- 2 only	Agree
15	All the bidders must ensure adequacy and sufficiency of their document while submitting bid in all respects. Bid shall include all documents confirming to the tender terms and conditions, BEC and the tender specifications in toto failing which their bids are liable to be rejected.	Agree

Note: Bidder have to upload the unpriced SOR marked "Quoted/ Unquoted" for each segment as per the excel (named "Unpriced SOR") provided in the e-tender portal.

DOCUMENTS TO BE CHECKED AGAINST BEC

Sr. No.	Criteria	Verification Document
Technical BEC		
1	Same as mentioned in clause 8.1 of IFB	Certificate from statutory auditors/chartered engineer certifying list of similar past orders and their values executed by bidder in last 7 years as per Forms 3 & 4 along with supporting PO copies clearly mentioning scope of work and completion certificates clearly mentioning actual executed and actual contract duration/completion date.
Financial BEC		
1	Same as mentioned in clause 8.2 of IFB	Annual audited reports with UDIN complete in all respect of last three preceding financial years along with Form 5
2		Annual audited reports with UDIN complete in all respect of last three preceding financial years along with Form 5 Bank Credit Letter in case of inadequate working capital.

DOCUMENTS TO BE UPLOADED ON E-TENDER PORTAL

Sr. No.	Document Header Name	Document Description
1.	Bid Signatory PoA / Board Resolution	Power of attorney of the signatory to the bid offer on non-judicial stamp paper / Board resolution of company for authorized signatory.
2.	Form 1 General Info with Supporting Docs	Bidder's General Information as per appended format along with PAN card copy, GST registration certificate and copy of cancelled cheque in support.
3.	Form 2 Deviation Form	Deviation Form as per appended format
4.	Form 3 Work Experience Certificates	Certificates from Statutory Auditor / Chartered Engineer for details of similar goods / work / services supplied / done during past 7 years as per appended format
5.	Form 4	Certificate From the Statutory Auditor / Chartered Engineer Regarding Supply of Goods/Works/Services
6.	Form 5 Annual Turnover for last 3 year & Financial Data for last Financial Year	Certificate for financial capability of the bidder Format for Statutory Auditor's / Chartered Accountant with UDIN.
7.	Form 6	Bidder to Confirmation (declaration) that bidder is not banned or delisted by any government (national, state or local governments), PSU, PSU-JV, government ministry and/ or other government entities from quoting
8.	Form 7	Declaration of Tender Document Purchased/ Downloaded
9.	Form 8	Covering Letter from Statutory Auditor / Chartered Engineer / Chartered Accountant as per appended format
10.	Form 9	Pro Forma for Letter of Authority
11.	Form 10	Details of litigation, if any
12.	Audited Annual Financial Statements	Annual audited reports complete in all respect of last three financial years in support of Form 5 with UDIN.
13.	Corrigendum and Other documents	Copy of all addenda / corrigenda, if any, along with required documents as stated therein, duly signed and stamped. (In case no addendum / corrigendum has been issued against this tender document, then the bidder may upload a letter stating that "No addendum / corrigendum has been issued against this tender document")
14.	Declaration of Bid Security (on Bidder's letterhead) (Annexure 1)	In case of exemption from EMD, Bid Security proforma as specified in tender document to be mandatorily submitted

Note: Bidder may attach any other docs, not in above list but relevant to this tender, at the specified link "other documents" on the e-tendering portal.

		ATTACHMENT - 1: ESTIMATED COST					
LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN							
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 1 : DELHI (NORTH & WEST ZONE)							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
PART-I	MDPE LAYING						
	Route survey of allotted areas and Preparation /Submission of detailed route plan for approval by EIC in AutoCAD format. Receiving, handling, loading, transportation and unloading of owner supplied MDPE pipes & fittings and other free issue items from IGL's designated stock yards to Contractor's own stock-yards/ work-sites. Proper storing, stacking, identification, providing security and insurance cover for the materials. Liaisoning with Landowning agencies / statutory authorities and obtaining permission from them (Separately payable as per SOR Item No.10), making trial pits to determine the underground utilities/ services etc., restoration of the abandoned excavation/ trial pits (excavated to depth of 1.5 m or more as per satisfaction to EIC / Site-in-charge) to original condition, barricading the work area as per the procedures & drawings provided in the tender and as per the directions of EIC / Site-in-charge; uncoiling / stringing of pipes, jointing of the pipe ends/ fittings / Transition fittings/ valves by qualified personnel, using approved electro fusion techniques as per specification.						
	Laying using any method (Open trench, Moling and HDD) with or without casing; it includes survey of the under ground utilities, submission of pre & post HDD profile for approval, execution of the work as per specification (as per trench dimension Drg No 14588-10-03--27), including excavation of pits, moling with hole size not exceeding 20% of the the carrier / casing pipe dia. jointing and insertion of the carrier pipe in casing pipe (on case to case basis) and subsequent padding with soft soil, laying of warning mat in open trench only, backfilling, compaction, submission of as built drawing, as graphs as per attached specification and instruction of EIC / Site Engineer of Owner. Includes laying of pipeline in all type of surface including Kutcha, metal, concrete (PCC/RCC), bituminous, tiled, brick lined etc. after raking up of hard surface of any type; Roads, Pavement, Footpaths etc. shall be made motorable once the pipeline is laid.						
	In case, it is impractical to provide 1.0-meter cover due to physical constrain, additional protective measures such as concrete slab or high impact resistance plastic sheet shall be installed (for the minimum top cover of 600 mm) by the contractor in consultation with EIC / Site-in-charge. EIC / Site-in-charge after examining thoroughly and considering the PNGRB Guidelines may allow the contractor. However, the contractor has to raise technical deviation for approval before commence of work. All the technical deviation shall be submitted with the RA bills.						
	Supply & installation of GI Sleeves, 2.5" NB x 300 mm length GI pipe Sleeve / Half Round Concrete Sleeves for domestic connections, 3" NB x 300 mm length GI Sleeve for commercial and industrial installations (as per GI Pipe Sleeve Drg No 14588-10-03--18), and 1/2 Round concrete sleeve, Drg No 14588-10-03--33) excavation, breaking through any obstructions, insertion of pipe, sealing the annulus, fixing of the sleeves with concrete mix, preparation of pedestal & restoration of excavated pits within the size of pedestal & the same pit with the laying of 20/32 mm dia MDPE pipe as defined in technical specification and instruction of EIC.						

 Emerging Quality		ATTACHMENT - 1: ESTIMATED COST					
LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN							
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 1 : DELHI (NORTH & WEST ZONE)							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	Flushing, cleaning ,Pneumatic testing, purging with nitrogen and commissioning as per specification and approved procedures providing all tools and tackles, nitrogen, instruments, manpower and other related accessories and as per instructions of the Engineer-in charge.						
	Maintaining the completed pipelines / installation for any defect, failures during defect liability period .						
	Handing over the completed works to IGL for their operation/ use, returning of all surplus material to IGL stores, reconciliation of free issue material area wise and obtaining no objection certificate.						
	On completion of gas charging of pipelines, preparation and submission of As built drawings, crossings details, termination, utility graphs and deviation statements.						
	Submission of all documents required for contract closure in numbers as mentioned in contract.						
	Note- Supply & installation of GI Sleeve / Half round Concrete sleeve and warning mat (open trench excavation) shall be included in laying of MDPE pipe.(Refer Drg No. 14588-20-03--18); Laying in Brick trench shall not payable in this SOR; In such cases SOR No. -20 is valid.						
	GIS data shall be collected of laid MDPE pipeline network. Data like Geo Co-ordinates (latitude, longitude) of Pipeline and related features like fittings, valves, FRS, MRS, Markers etc. shall be collected as per given procedure along with 50 m land base corridor (25 m on either side of the pipeline) with min. accuracy of 50 cm. Data format shall be in shape (.shp) or Geo Database (.gdb)						
1	MDPE Pipe line laying in Soft soil & all type of surface (Including PCC/RCC Top Surface - Upto 12") , Open Cut / Moling or any other methodology ; Clear cover to pipeline min 1.0m; (Refer Drg No 14588-10-03-27))						
1.1	20 mm dia	M	1020533	5000	367.70	18,38,504.09	
1.2	32 mm Dia	M	1020534	286341	337.97	9,67,75,255.06	
1.3	63 mm Dia (Excluding HDD with casing)	M	1020535	715994	391.91	28,06,06,145.67	
1.4	125mm dia (Excluding HDD with/without casing)	M	1020536	11469	501.58	57,52,389.40	
1.5	180 mm dia (Excluding HDD with/without casing)	M	1020537	1000	582.47	5,82,472.83	
	MDPE Pipe line laying in common trench						
1.6	32 mm Dia (in common trench with 32/63/125/180 mm Dia MDPE Pipe)	M	1020538	30050	138.43	41,59,830.42	
1.7	63 mm Dia (in common trench with 63/125/180 mm Dia MDPE Pipe)	M	1020539	43	166.29	7,172.89	
1.8	125mm dia (in common trench with 125/180 mm Dia MDPE Pipe)	M	1020540	2000	207.64	4,15,273.39	
	All service lines left out initially during mainline laying, shall be laid under above mentioned SOR within six months of gas charging of a particular area by the same contractor. In Open trench method/ moiling, no extra rate shall be payable for casing installation. Roads, Pavement, Footpaths, Kutcha etc. shall be made motorable once the pipeline is laid. Liasoning and HSE shall not be paid wrt this SOR						

 Emerging Quality		ATTACHMENT - 1: ESTIMATED COST					
LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN							
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 1 : DELHI (NORTH & WEST ZONE)							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
2	MDPE Pipe line laying by HDD Method, with Casing						
	Survey of the under ground utilities, submission of HDD profile for approval (excluding road and nalla crossings), execution of the work as per the standard procedure attached, including excavation of the pits, Jointing of casing and carrier pipe and insertion of the carrier pipe in casing of dia ranging from 110mm to 160mm for 63 mm, 200mm to 250 mm dia for 125 mm dia MDPE and 250 mm to 315 dia for 180 mm MDPE, subsequent sealing, backfilling, compaction, submission of as built graphs, final HDD profiles as per attached specification and the instruction of EIC / Site Engineer of Owner. The other activities are as per SOR Item No. 1 and as detailed in specification and as per the instructions of the EIC / Site engineer of Owner. The payment shall be made for length of casing pipe laid in HDD, remaining carrier pipe length without casing shall be paid under SOR item no.1						
2.1	63 mm Dia HDD with casing	M	1020541	1001	510.57	5,11,255.81	
2.2	125 mm Dia HDD with casing	M	1020542	26	1,154.15	29,547.64	
2.3	180 mm Dia HDD with casing	M	1020543	1000	1,396.85	13,96,849.23	
3	MDPE Pipe line laying by HDD Method, without Casing						
	Survey of the under ground utilities, submission of profile for approval, execution of the work as per the standard procedure attached, including excavation of the pits, Jointing and insertion of the carrier pipe, subsequent backfilling, compaction, submission of as built graphs and final HDD profiles as per attached specification and the instruction of EIC / Site Engineer of Owner. The other activities are as per SOR Item No. 1 & 2 and as detailed in specification and as per the instructions of the EIC / Site engineer of Owner						
3.1	125 mm Dia HDD without casing	M	1020544	47978	635.51	3,04,90,068.91	
3.2	180 mm Dia HDD without casing	M	1020545	1000	789.20	7,89,204.89	
3.3	Laying of MDPE pipeline by HDD method (Maximum length 200m)- This SOR may be applicable only for spans less than 200m where additional mobilization of HDD m/c is required & HDD is the only option to execute the same. Note: There should be no consecutive HDD laying in upstream/downstream within a span of 1KM & This SOR would be applicable for allocations less than 200 m in a single stretch						
3.3.1	63 mm by HDD method (with casing)	Nos.	1020546	2	87,605.12	2,13,796.20	
3.3.2	125/180 mm by HDD method(with/ without casing)	Nos.	1020547	3	1,38,465.86	4,79,297.62	
4	MDPE Service Line laying in New & old Projects / O&M areas						
	Includes laying of pipeline (for 20 & 32mm) in all type of surface i.e. Kutcha, metal, concrete (PCC/RCC), bituminous, tiled, brick lined etc. after braking up of hard surface of any type by any methodology. Roads, Pavement, Footpaths etc. shall be made motorable once the pipeline is laid. Supply & installation of GI Sleeve / Half round Concrete sleeve shall be included in laying rates. All other activities mentioned in SOR no.1 are applicable.						
	Supply & installation of GI Sleeves, 2.5" NB x 300 mm length Half Round Concrete Sleeves for domestic connections, 3" NB x 300 mm length GI Sleeve for commercial and industrial installations (as per Drg No14588-20-03--18)) excavation, breaking through any obstructions, insertion of pipe, sealing the annulus, fixing of the sleeves with concrete mix, preparation of pedestal & restoration of excavated pits within the size of pedestal & the same pit with the laying of 20/32 mm as defined in technical specification and instruction of EIC. The rates shall include liaison rates with statutory bodies, HSE and no separate rates are payable under this SOR. Wherever service lines are to be laid as per Dwg.- 14885-10-03-46A.						

		ATTACHMENT - 1: ESTIMATED COST					
		LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
		TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 1 : DELHI (NORTH & WEST ZONE)							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	Note:- a. Old Project area shall be defined as an area where any of folowing criteria are being met: 1. MDPE line is already been charged for more than 6 months. 2. MDPE is laid and gasified by another contractor (currently not working in respective zone) b. Additional rate for construction of RCC structure for protection of service line shall be payable under SOR no. 4.5						
4.1	For pipe length up to 8 meters (O&M area)	Nos	1020548	17589	5,553.24	9,76,75,255.22	
4.2	For pipe length up to 6 meters (Project area)	Nos	1020549	60000	3,288.48	19,73,08,686.04	
4.3	For pipe length more than 6 meters (Project area)	M	1020550	30000	367.70	1,10,31,024.52	
4.4	Per meter rate for pipeline more than 8 meters (Per meter additional rate shall be payable above SOR item no. 4.1)	M	1020551	29027	367.70	1,06,73,188.19	
4.5	Construction of RCC structure for protection of service line (20/32 mm dia.) for drain/nallah (adjacent to house / Boundry walls / Multistory Buildings) crossing as per Dwg.- 14885-10-03-46A						
	The scope includesconstruction providing and laying reinforced cement concrete of M-25 grade (Concrete shall be design mix/nominal mix) with 20mm & down size graded crushed stone aggregates in Non suspended slabs/pavement slabs including pedestal/ramp etc., laying in alternate panels to required slopes, all necessary form work and finishing the top surface rough/smooth as required in any position, shape, level and thickness etc. The rates includes grouting of pockets, supply of material, tools, shuttering, Reinforce ment etc.	Nos.	1013003	34127	2,144.88	7,31,98,260.09	
5	Excavation in Special Conditions:						
5.1	Excavation of trench or pits in Malba/Multiple layers of asphalt/ brick / PCC/RCC etc. The rates are payable over and above the Laying rates as per relevant SOR item no 1						
5.1.1	Cutting of PCC/RCC surface with thickness cumulative more than 12" (in case of multilayer)or Continuous asphalt multi-layer/Malba/Brick/Boulders more than 24". (Malba shall be considered as a strata where soil is in mixed form of debris/building rubbish or discarded pieces of bricks/stones)	M	1012920	240379	201.35	4,84,00,133.54	
5.1.2	Cutting of PCC/RCC surface with kneumatic braker and cutter thickness cumulative upto 10" (in case of multilayer) (Malba shall be considered as a strata where soil is in mixed form of debris/building rubbish or discarded pieces of bricks/stones)	M	1020552	60095	154.88	93,07,717.99	
5.2	Excavation of Hard Rock:						
	Trenching of Hard Rock is defined as trench material with a single piece of rock, dimension exceeding 1 meter in any direction, which requires cutting only by use of manual/pneumatic chisel/drill or sledge hammer and chisel or removal of same by additional techniques and supply of approved coarse sand (Size 0.6-2 mm as per IS 383) free from any impurities like clay, mica and soft flaky pieces for padding of 150 mm above and below laid pipeline as per the specifications ; The rates are payable over and above the Laying rates as per relevant SOR item no 1	Cu.M	1013004	985	3,837.28	37,81,472.00	
5.3	Laying in Congested Area:						
	Congested area shall be defined as an area where MDPE pipeline has to be laid in narrow lanes (Less than 4.5 M including footpath/drains) & houses in such locations have only one side entrance i.e. there is no backlane between two back to back houses & pipeline has to be laid in front of the house. The rates are payable over and above the Laying rates as per relevant SOR item no 1.	M	1012982	40090	53.93	21,61,936.37	

 Energising Quality		ATTACHMENT - 1: ESTIMATED COST					
LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN							
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 1 : DELHI (NORTH & WEST ZONE)							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
5.4	Laying in continuous water seepage area:						
	The water seepage area shall be defined as an area where the MDPE pipeline has to be laid, in such locations where continuous water seepage occur during trench activity and the same shall not be possible. In that case, the contractor shall have to deploy additional equipment i.e. de-watering pumps etc. for continuous de-watering so that waterlogging shall be avoided. The rates are payable over and above the Laying rates as per relevant SOR item no 1.	M	1014791	14810	28.77	4,26,048.43	
5.5	Excavation of Trench / Pit for Tap-off or Hook-up Laocations of new connectivity (1.5 Mtr and above)						
	This item shall cover the deep excavation (depth beyond 1.5 m) of trenches or pits for the identification of existing MDPE pipelines and tap-off or hook-up for new connectivity. Also, required shoring work (including necessary close plank walling, framing, bulla piling, strutting, etc.) shall be done by the contractor. (This item should be executed on specific direction of the Engineer in charge).	No.	1015921	13	17,228.63	2,26,786.45	
6	Restoration of trenches						
6.1	Restoration to original conditions of dismantled surface like Asphalted/Bituminous Road, Concrete Pavement, Agra /Kota Stones / Tiles (Chequered/interlocking etc.), Dry Brick Pavement as per the technical specifications attached in the tender after laying of pipeline in Built- Up surface, as per the directions of EIC / Site Incharge. Scope includes supply of the approved quality material, testing of materials by third party agencies as per technical specification / CPWD / IRC Standards, submission of the restoration reports, obtaining no objection certificates from the concern local authorities /land owners / third party inspection agencies designated by land owing agencies and Owner.	Cu.M	1007137	4788	3,928.05	1,88,07,985.04	
6.2	Providing & laying, Fixing, of cement concrete interlocking paver blocks of approved size, design shape as per the directions of EIC / Site Incharge. Scope includes supply of the approved quality material, testing of materials by third party agencies as per technical specification / CPWD / IRC Standards.	Sq.M	1014792	15102	777.42	1,17,40,641.21	
7	Survey GPR					-	
7.1	For length up to 100 meters	Nos.	1015922	2	8,539.26	14,050.65	
7.2	Per meter rate for more than 100 meters (Per meter additional rate shall be payable above SOR item no. 7.1)	M	1013010	1308	53.93	70,560.90	
8	Fabrication & Installation of Pipeline Markers:						
	Supply and Installation of Stone Route Markers, Powder Coated Plate / Pole Markers as per the attached drawings, along the route / along boundary wall, lamp posts including all associated civil works such as excavation and construction in all types of soils, construction of pedestals and grouting with concrete, cleaning, supply and application of approved colour and quality of primer and paint, stencil letter cutting of numbers, direction, chainage etc., restoration of area to original condition and performing all works as per drawings, specification and instruction of Engineer-in-Charge. The rates shall include liaison rates with statutory bodies and restoration rates and no separate rates are payable under this SOR.						
8.1	Stone Route Markers as per Drg No14588-10-03--29)	Nos	1013011	12145	601.37	73,03,560.44	
8.2	Installation of FRP MARKER	Nos	1020553	288	2,932.75	8,45,547.37	
8.3	Pole markers with foundation as per Drawing No. Drg No14588-10-03-30 & 14588-10-03-31) and specification.	Nos	1013012	1153	2,932.75	33,82,189.47	
8.4	Plate marker as per Drg No Drg No 14588-10-03--28)	Nos	1013013	43552	272.35	1,18,61,507.66	

		ATTACHMENT - 1: ESTIMATED COST					
LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN							
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 1 : DELHI (NORTH & WEST ZONE)							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
9	LIASONING WITH LAND OWNING AGENCIES FOR PERMISSION						
	Submission of applications as per approved drawings provided by owner / owner's representative (Initial Route Survey,Preperation of Drawings, measuring and providing details of surface type shall be in scope of Contractor with approval from Owner / Owner's representative), obtaining & submission of demand note, Coordination, Liaisoning, Obtaining written permissions from Land owing agencies like MCD, PWD, DDA, NDMC, NHAI, AAI, GDA, GNDA, GNN, Forest Dept, NHAI, Indian Railways, other government agencies who maintains the public lands and Private lands i.e. Apartments/institutions etc. Note: Service lines in SOR item no. 4 are not applicable;						
9.1	For All sizes - Liaisoning and getting permissions from NHAI/ Railway/ Forest (Protected & Un-Protected)/ Canal/ River crossings.	M	1012678	109389	255.28	2,79,24,541.51	
9.2	For All sizes - Liaisoning and getting permissions from New Delhi Municipal Corporation (NDMC)/ PWD	M	1015924	109389	120.45	1,31,76,177.90	
9.3	For All sizes - Actual length of network laid against written permission statutory Authorities (except covered under SOR 9.1 & 9.2)	M	1013014	437557	77.30	3,38,23,639.56	
9.4	For All sizes - Actual length of network laid where written permissions are not available (other than pvt. Area)	M	1014446	437557	48.53	2,12,36,258.19	
	*above rates include all other sorts of liasioning including traffic dept.						
10	Charges for compliance to Health, Safety & Environment (HSE) as detailed in Scope of Work.						
10.1	MDPE Section-PPE, Contineous Barricades along the trenches as per approved drawing in tender, Use of Safety Boots, Hand gloves, Reflective jackets, Hard hats(helmets), Safety shoes, eye and ear safety equipments, Fire extinguishers and as per the detailed scope of work in tender specifications.	M	1010126	1093891	20.67	2,26,11,766.06	
10.2	GI Section- Safety requirement per Rise- Use of Fall arrestor/ petzl, Ascendors/descendors, PPE, Barricades/ Warning Boards (03 Nos.) connected with warning/Caution tapes in areas where piping work is in progress , Use of Safety shoes, Walky talky, Hand gloves, Reflective jackets, Hard hats(helmets), eye and ear safety equipments, Fire extinguishers and as per the detailed scope of work in tender specifications; In case of non compliance- Refere SCC clause - for applicable penalty . Upto 4th GI (G+4) floor full body safety harness & assessories shall be of KARAM or equivalent make. Note- This SOR is applicable for Non LMC length of GI Section only.	Nos	1010127	45683	500.67	2,28,72,349.98	
10.3	GI Section- Safety requirement per Rise-Use of Fall arrestor/ petzl, Ascendors/descendors, PPE, Barricades/ Warning Boards (03 Nos.) connected with warning/Caution tapes in areas where piping work is in progress , Use of Safety shoes, Walky talky, Hand gloves, Reflective jackets, Hard hats(helmets), eye and ear safety equipments, Fire extinguishers and as per the detailed scope of work in tender specifications; In case of non compliance- Refere SCC clause - for applicable penalty . GI (G+5) and above including high rise Above 4th floor full body safety harness & assessories shall be of PETZL is compulsory. Note- This SOR is applicable for Non LMC length of GI Section only.	Nos	1010128	267	1,170.33	3,12,985.59	

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 1 : DELHI (NORTH & WEST ZONE)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
PART II	GI / COPPER SECTION					
	Supply & Installation of Powder Coated GI Service Pipe & Fittings					
	Assessment of material requirement for installation at site, Order placement and Purchasing of Powder coated GI Pipes, GI fittings, Copper pipes & fittings, Brass Fittings from approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, getting dispatch clearance, handling, loading, transportation and unloading of these items at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of owner supplied above ground fittings such as regulators, meters, Isolation Valves & appliance valves and other free issue items as defined in specification from Owner's designated stock yards to Contractor's own stores / work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches, schedules & execution procedures. Finalising optimum route with consent of customer from transition fitting to cooking oven / appliance and ensuring installations in well ventilated area. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices. Portal entry for new connections - New registration tracking and feasibility survey and its updation as per IGL defined TAT;printing of stationary as per approved IGL formats required during connections. Followup and attend complaints receives from customer regarding delay in new connection (ReferDrg No 14588-20-05--01, 02, 03)					

 Emerging Quality		ATTACHMENT - 1: ESTIMATED COST					
LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN							
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 1 : DELHI (NORTH & WEST ZONE)							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	Installation of GI service pipes & fittings, regulators, Valves etc. including NPT threading, as specified, Drillings of holes through the walls (Brick, RCC), Granite, Marble, Wood Cutting, Glass Cutting with proper heavy duty hammer drill machine, tools & tackles, using proper sealant/grout material and colours to match the original replacement of the damages during drilling, restoring the area to the original condition, Painting of scratched length of powder coated pipe and fittings after proper surface finish by one coat of approved primer paint and two coats of approved synthetic enamel paint. Restoring the wall surface to original conditions.						
	Supply & fixing of approved clamps & nylon rawl plugs with SS 304 2" screws, grout material, suitable thread sealant i.e. Teflon Tape, Joining of transition fitting to above ground service GI pipes, testing, purging and commission of the complete installation. The rates in connections also includes meter installation, tap off rates. The GI installation in already gas charged areas, planning & coordinating with existing consumer's for New tap offs from existing riser with or without tee, testing of these existing risers and commissioning of these connections with newly tapp offs etc.is inclusive.						
11	NON LMC						
11.1	Supply & installation powder coated 1/2" GI Pipe from TF to regulator - up to 1.5 Mtr Length	Nos	1013015	43552	432.29	1,88,27,009.52	
11.2	Supply & Installation of powder coated 1/2" GI Riser from regulator isolation valve to appliance for G+3 Apt and Individual kothi /Bungalow. Refer Drg No 14588-20-05--02)	M	1013016	1284070	408.97	52,51,40,381.47	
11.3	Supply & installation of powder coated 3/4" GI Riser from regulator isolation valve to lateral isolation valve for Apt more than G+3 floors. Refer Drg No 14588-20-05-02)	M	1013017	9838	436.78	42,97,126.09	
11.4	Testing & Commisioioning of already installed Risers GI / Copper Pipe (1/2" / 3/4" / 12mm) Non LMC riser (1/2" / 3/4")	M	1012680	471412	58.43	2,75,43,775.88	
11.5	Testing & Commisioioning of already installed / Laterals GI / Copper Pipe (1/2" / 12mm / mlc) LMC	Nos	1015925	15316	336.17	51,48,911.10	
12	LMC						
12.1	PNG connection in Project area-low rise						
12.1.1	Installation of meter with required fittings	Nos.	1020554	82852	1,521.11	12,60,26,792.10	
12.1.2	Supply and installation of Gi/ Cu/ MLC pipe along with required fittings from Lateral isolation valve to appliance valve	M	1020555	331408	474.60	15,72,87,940.87	
12.2	PNG CONNECTIONS IN O&M AREA (ON EXISTING RISER)						
12.2.1	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2 m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter. Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4m. Payment against additional length of (GI + Cu) shall be as per item 12.2.3 of SOR.	Nos.	1013019	35751	3,565.93	12,74,84,365.15	
12.2.2	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 12.2.3 of SOR.	Nos.	1015927	23	3,587.46	82,484.21	

	ATTACHMENT - 1: ESTIMATED COST					
LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN						
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 1 : DELHI (NORTH & WEST ZONE)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
12.2.3	Powder coated GI and Cu installations for pipes more than 4 m per connection					
12.2.3.1	1/2" Powder coated GI	M	1013020	266130	368.61	9,80,97,533.01
12.2.3.2	12mm Copper /mlc Pipe - Inside kitchen location only	M	1013021	1193	369.51	4,40,838.65
13	Collection of registration /KYC forms duly filled with required supporting documents, Submission to IGL marketing on schedule as decided by IGL; This SOR may be used only after instruction of EIC/Site-in-Charge.	Nos	1013022	4863	225.62	10,97,072.15
PART III	HIGH RISE SEGMENT (14 Storey & Above)					
14	MDPE Pipe line laying (20mm / 32 mm / 63mm) in already excavated trench in Builder segment / Private Property i.e Multistorey buildings / apartments with no movement of Heavy Vehicles, surrounded with Boundary wall)					
	Laying in already excavated trench with or without casing ; it includes execution of the work as per specification (as per trench dimension Drg No 14588-10-03-16), laying, electrofusion joints and insertion of the carrier pipe in casing pipe (on case to case basis) laying of warning mat and re-installation of pre cast slabs as per specification and instruction of EIC / Site Engineer of Owner. In Case of sand filling required as instructed by EIC/IGL representative SOR no. 28.4 shall be paid over and above this rate.	M	1013034	87	306.45	26,592.73
15	Supply & Installation of Welded Riser - Non LMC					
15.1	Installation of welded riser 1/2 inch upto isolation valve	M	1013035	446	558.74	2,49,050.78
15.1	Installation of welded riser 3/4 inch upto isolation valve	M	1013036	5262	599.10	31,52,620.07
15.1	Installation of welded riser 1 inch upto isolation valve	M	1013037	3968	656.51	26,04,934.32
15.1	Installation of welded riser 2 inch upto isolation valve	M	1013038	1412	1,237.67	17,47,828.94
16	LMC					
16.1	PNG CONNECTIONS IN PROJECT AREA					
16.1.1	Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + Cu) shall be as per item 17 of SOR.	Nos.	1013039	411	3,533.65	14,50,840.16
16.1.2	Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 17 of SOR.	Nos.	1017154	411	3,483.42	14,30,216.51
16.2	PNG CONNECTIONS IN O&M AREA (ON EXISTING RISER)					
16.2.1	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2 m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter. Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4m. Payment against additional length of (GI + Cu) shall be as per item 17 of SOR.	Nos.	1013040	277	3,743.51	10,35,325.65

	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 1 : DELHI (NORTH & WEST ZONE)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
16.2.2	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 17 of SOR.	Nos.	1017155	277	3,722.89	10,29,621.53
17	Powder coated GI and Cu installations for pipes more than 4 m per connection.					
17.1	1/2" Powder coated GI	M	1013041	2139	369.51	7,90,300.94
17.2	12mm Copper/mlc - Inside kitchen location only	M	1013042	16	408.07	6,634.56
18	NG conversion for domestic connection					
18.1	Providing services for NG conversion, monitoring the pendency and conversion of stoves including the supply of material required for conversion of appliance/stove + Tools & Tackles required, Printing of JMR sent by IGL In-charge on email, scanning of signed JMR and submission to In-charge, completion of NG conversion within the defined TAT.	Nos.	1013309	173253	300.23	5,20,15,127.73
18.2	Perforing Slab hole by using specific tools (wherever required)	Nos.	1015703	1251	206.74	2,58,727.21
18.3	Perforing Core cutting by using specific tools (wherever required)	Nos.	1015704	52	186.06	9,656.02
18.4	Perforing glass cutting by using specific tools (wherever required)	Nos.	1015705	2	69.22	136.41
18.5	Replacement of defective Meter/Domestic Regulator/Meter Regulator with new ones (which are freely issued by IGL)	Nos.	1015706	182	273.26	49,724.02
18.6	Extension of existing / modification in GI pipeline	M	1015707	67	381.12	25,525.15
18.7	Extension of existing / modification in Cu pipeline	M	1015708	48	368.54	17,673.40
19	Installation of Service Regulator					
19.1	Receiving, taking over, handling, loading, transportation and unloading of owner supplied items such as Service Regulator/ SR module with canopy & Isolation Valves and other free issue items as per technical specification from Owner's designated stock yards to Contractor's stores / work sites. Fabrication, Erection, Welding, Testing & Installation of Service Regulators as per drawing no. Drg No 14588-20-05-37), Rev 0. Supply and installation of regulator boxes including fabrication as per drawing no. Drg No 14588-20-05-42), and painting as per technical specification. Any other material & activities not mentioned/covered above, but otherwise required for satisfactory completion/safety of work as defined in tender has to be supplied / done by contractor with in specified schedule at no extra cost to owner.					
19.1.1	Service Regulator with regulator cover and Transition Fittings installation	Nos	1013043	131	9,448.01	12,41,202.74
19.2	Receiving, taking over, handling, loading, transportation and unloading of owner supplied items such as Service Regulator module with canopy as per technical specification from Owner's designated stock yards to Contractor's stores / work sites. Testing, Commissioning & Installation of Service Regulators as per drawing no. Drg No 14588-20-05-37), Rev 0. Supply and installation of regulator boxes including fabrication as per drawing no. Drg No 14588-20-05-42), and painting as per technical specification. Any other material & activities not mentioned/covered above, but otherwise required for satisfactory completion/safety of work as defined in tender has to be supplied / done by contractor with in specified schedule at no extra cost to owner.					
19.2.1	installation and commissioning of SR module with canopy	Nos	1020556	307	5,050.01	15,48,001.43

		ATTACHMENT - 1: ESTIMATED COST					
		LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
		TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 1 : DELHI (NORTH & WEST ZONE)							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
20	Foundations works for Service Regulator						
	Providing and laying of Plain Cement Concrete (PCC - 1:2:4)						
	Providing, Fixing, Centering, Shuttering and laying of Cement Concrete with concrete of nominal mix 1:2:4 by mass (1 cement 2 coarse sand 4 coarse stone/aggregates/gravels) with 20 mm down size graded crushed stone / aggregates / gravels as per technical specification. Any other material & activities not mentioned/covered above, but otherwise required for satisfactory completion/safety of work as defined in tender has to be supplied / done by contractor with in specified schedule at no extra cost to owner.	Nos	1013044	426	5,801.88	24,74,433.38	
21	Supply & Installation of Crash guard for Service Regulator						
	service will cover site clearance, RCC structure M-25 upto plinth level, painting s&t and S&f of steel structure of all levels	Nos	1020557	426	10,816.66	46,13,176.65	
PART III	Civil Works						
22	Foundation works						
22.1	Excavation, Providing and Laying Reinforced Cement Concrete (M-20))						
	Excavation in any plane & dimension including disposal of excavated earth up to any lead in all conditions, backfilling using serviceable earth and disposal of surplus and unserviceable earth. Soil to be levelled and properly compacted complete in all respect as per scope of work, technical specification and directions of EIC / Site-in-charge. Providing and laying REINFORCED CEMENT CONCRETE OF M-20 Grade (Concrete shall be design mix / nominal mix) with 20mm & down size graded crushed stone aggregates in NON SUSPENDED slabs/pavement slabs including pedestals, ramps etc., laying in alternate panels to required slopes, all necessary form work and finishing the top surface rough or smooth as required and directed, providing pockets/openings etc. including vibrating, tampering, curing, rendering and making smooth if required in any position, shape, level and thickness etc. as specified and directed by EIC / Site-in-charge. The rates include grouting of pockets, supply of material, shuttering, tools & tackles, Reinforcement etc.	CuM	1008323	22	11,542.76	2,57,315.43	
22.2	Providing and Laying Plain Cement Concrete (1:4:8)						
	Providing & laying, Fixing, Centering and Shuttering of plain cement concrete with nominal mix 1:4:8 by mass (1 cement: 4 coarse sand: 8 coarse stone/aggregates/ gravels) with 20 mm down size graded etc as specified in specifications .	CuM	1007178	4	4,974.79	18,417.61	
23	Shifting and Installation of Field Regulating Station (For weights ranging from 1 Ton to 10 Ton)						
	Dismantling/loading from IGL site/store and its transportation to IGL store/Site with its unloading and installation of FRS/MRS as per the instructions of Site In-charge/ EIC. The shifting of FRS/MRS skids on the platform / foundation shall be done using cranes / hydra as required by the site condition.	Nos	1013023	1	36,074.33	47,396.23	
24	Supply & Installation of Half round concrete sleeve (Crush Guard)						
	Installation of half round concrete sleeve for service line shall be done by sealing the annulus between pipe & sleeve, firm fixing of concrete sleeve by concrete mix pedestal, clamping, sand filling etc. Half round concrete sleeve shall be made as per drawing no 14588-10-03-33. Installation shall be done after instruction of IGL/PMC.						
24.1	Project	CuM	1013024	200	626.06	1,25,211.42	
24.2	O&M (existing regulator piece)	Nos	1013025	200	643.21	1,28,641.02	
25	Supply & Installation of RCC Slab 100 mm thk X 300 mm width						
	Supply & Installation of RCC (M20) Slab 100 mm thk X 300 mm width; This SOR may be used only after instruction of EIC / Site-in-charge.	M	1014794	200	444.49	88,897.91	
26	Installation of Valve Chambers:						

 Emerging Quality		ATTACHMENT - 1: ESTIMATED COST					
LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN							
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 1 : DELHI (NORTH & WEST ZONE)							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	All civil works including supply of materials, excavation of pit, piping supports including all PCC, RCC and Brick works for valve pits, sand filling to cover valve body, pedestals with insert plates as required, sealing of pipes in pits, providing cover etc., finishing, clean up and restoration. The work shall be executed as per specification. Also providing water proofing agents internal and external plaster of chamber to avoid water seepage. Refer Drg No 14588-20-03-- 20, 21, 22.& 23)						
26.1	Brick Valve Chambers- Size (L x W)- 2m x 1 m	Nos	1013026	4	59042	2,36,168.67	
26.2	RCC Valve Chambers- Size (L x W)- 2m x 1 m	Nos	1013027	8	62917	4,99,702.96	
26.3	Brick Valve Chambers- Size (L x W)- 1.5m x 1 m	Nos	1013028	2	51901	1,17,187.99	
26.4	RCC Valve Chambers- Size (L x W)- 1.5m x 1 m	Nos	1013029	536	48956	2,62,40,778.89	
26.5	Brick Valve Chambers- Size (L x W)- 1 m x 1 m	Nos	1014795	4	42484	1,69,937.12	
26.6	RCC Valve Chambers- Size (L x W)- 1 m x 1 m	Nos	1014796	1	39495	31,211.29	
26.7	RCC Valve Chambers- Size (L x W)- 0.85 m x 0.85 m	Nos	1014797	1	33433	33,432.95	
26.8	CONSTRUCTION OF LONG STEM VALVE CHAMBER	Nos	1020558	328	41,145.00	1,35,02,447.25	
26.9	PRE-CAST Valve Chambers- Size (L x W)- 2m x 1 m	Nos	1020559	3	69209	2,35,574.25	
26.10	PRE-CAST Valve Chambers- Size (L x W)- 1.5m x 1 m	Nos	1020560	230	53852	1,23,70,652.91	
26.11	PRE-CAST Valve Chambers- Size (L x W)- 1 m x 1 m	Nos	1020561	1	43444	43,444.00	
26.12	PRE-CAST Valve Chambers- Size (L x W)- 0.85 m x 0.85 m	Nos	1020562	1	36776	36,776.25	
26.13	PRE-CAST Valve Chambers- Size (L x W)- 0.6 m x 0.6 m	Nos	1020563	3	29841	1,02,310.42	
26.14	RCC Valve Chambers- Size (L x W)- 0.6 m x 0.6 m	Nos	1014798	8	27128	2,17,022.11	
27	Brick Work						
	Providing brick work with brick class designation M-7.5 of IS:1077 in cm1:4 (1 cement : 4 sand) in steps, walls, retaining walls and load bearing structures drains, or any shape with all lead, depths & height including curring, scaffolding, etc., as per specifications and drawings with all bye-works and direction of the Engineer-incharge.	CuM	1014799	1	7,027.28	4,351.52	
	Rate to include cost of all labour, tools, tackles, equipment, hire charges, supply of all materials such as minimum 43 grade cement, bricks, finishes, bitumen, other minor construction materials, shuttering, staging, masonry work, plastering, painting etc. with all bye-works and sundry works).						
	Note: The quantities of individual item can varied as per site requirement. The payment will be made as per actual certified measurement at site.						
28	Construction of trenches in Builder segment / Private Property i.e Multistory buildings / apartments with no movement of Heavy Vehicles, surrounded with Boundary wall)						
28.1	Construction of dedicated trench (as per approved drawing) with removable top cover, scope includes excavation of trench, construction of brick wall, waterproofing of trench, installation of precast RCC slab covers (including supply) Ref. drawing 14588-10-03--34 Trench Dimension- 0.6m x 0.66m x 1.0m (d x w x l)	M	1013030	40	5,853.30	2,34,132.19	
28.2	Construction of dedicated trench (as per approved drawing) with removable top cover, scope includes excavation of trench, construction of brick wall, waterproofing of trench, RCC slab (150mm thick and 300mm width) at the top and RCC slab (100mm thick and 300mm width) at bottom. However, where MDPE laid on the basment top, roof of basment shall be treated as the bottom. There shall be sand filling across three sides of the line pipe of 100mm each shall be required to be taken by contractor in consultation with EIC / Site-in-charge as per latest PNGRB Guidelines. Minimum pipe top cover of 375 mm is required and the line pressure shall not exceed 110mbar. Trench Dimension- 0.375m x 0.66m x 1.0m (d x w x l)	M	1013031	4	4,990.48	19,961.90	
28.3	Excavation of trench and installation of 6" GI Pipe C Class by any method (Open /Moiling) , and restoration for road crossing upto 7.0 m inside society as 14588-10-03-43 Note- In case of restoration SOR Item no. 5 shall be applicable over and above this SOR.	M	1013032	7	2,581.52	18,406.58	

 Emerging Quality		ATTACHMENT - 1: ESTIMATED COST						
LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN								
TENDER NO. : IGL/ET2/CP/CP18519								
SEGMENT - 1 : DELHI (NORTH & WEST ZONE)								
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)		
28.4	Sand Filling in any type of trenches in builder segment only; Scope includes supply of coarse sand (Size 0.6 To 2.0mm) as per IS 383 free from impurity like clay, mica and soft flaky pieces as per instruction of EIC / Site-in-charge. Note- Actual qty.(Cu.m) of sand filling for 28.1, 28.2 & 28.3 shall be claimed in this SOR	Cu.M	1013033	6	1,032.79	6,196.72		
PART V	MRS FABRICATION AND INTERNAL PIPING WORKS FOR INSTALLATION OF INDUSTRIAL & COMMERCIAL CONNECTIONS							
	Receiving, handling, loading, transportation and unloading of owner supplied MDPE pipes & fittings, warning mat and other free issue items from IGL's designated stock yards to Contractor's own stock-yards/ work-sites. Proper storing, stacking, identification, providing security, and insurance cover for the materials. Liaisoning with Landowning agencies / statutory authorities, preparation of detailed route plan, making trial pits to determine the underground utilities/ services etc., obtaining permission from Land owning agencies, restoration of the abandoned trial pits (excavation to depth 1.5 m or more as satisfaction to EIC) to original condition. Barricading the work area as per the procedures & drawings provided in the tender and as per the directions of EIC / site-in charge. Trenching to the required depth in all type of surface, uncoiling / stringing of pipes, damping, jointing of the pipe ends/ fittings/ valves by qualified personnel, using approved electro fusion techniques as per specification. Restoration of extra excavated portion along the TF point is inclusive in connection rates irrespective of the size of pit excavated at TF point and shall not be charged separately.							
29	MDPE Pipeline laying in all type of surface by any method							
29.1	Laying rates of 32&63 mm Dia MDPE pipeline - pipe length upto 25.00 mtrs for industrial and commercial connections	Nos.	1020564	200	26,520.91	53,04,182.39		
29.2	MRS Installation							
29.2.1	Connection rates for installation of CS MRS with 1" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014449					
29.2.2	Connection rates for installation of CS MRS with 1-1/2" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014450					
29.2.3	Connection rates for installation of CS MRS with 2" pipe & fittings with RPD Meter up to G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1012050					
29.2.4	Connection rates for installation of CS MRS with 3" pipe & fittings with RPD Meter above G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1014451					
	Note: a. Supply & Installation of required size of brass fittings in all type of meters supplied by IGL shall be in scope of contractor. B. Supply & installation of SS Tubing with fitting shall be in scope of contractor; Maximum length is 2.0m per MRS installation. C. 10% payment shall be released only after instillation of caging.							
30	CS Common Headers for MRS installation - Supply, Erection, welding & Installation of CS pipes & fittings (all types) except Ball Valves as common headers along with branching for commercial connections.							

 Emerging Quality		ATTACHMENT - 1: ESTIMATED COST						
LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN								
TENDER NO. : IGL/ET2/CP/CP18519								
SEGMENT - 1 : DELHI (NORTH & WEST ZONE)								
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)		
	In addition to other activities under SOR item no. 29 and as detailed in specification and as per the instructions of the EIC / Site engineer of Owner. Erection, Fabrication, Welding & Installation of common headers of CS pipes & Fittings till isolation valves for fixing of numerous meters through a single header and includes connecting of common Regulators on headers, NPT threading, Radiography, as specified, Drillings of holes through the walls Brick, RCC, Granite, Marble, Wood Cutting, Glass Cutting with proper heavy duty hammer drill machine, tools & tackles, using proper sealant/grout material and colors to match the original replacement of the damages during drilling, restoring the area to the original condition, Painting of entire length of pipe along with fittings after proper surface finish by one coat of approved primer paint and two coats of approved synthetic enamel paint. Restoring the wall surface to original conditions, Supply & fixing of approved MS angle clamps, Ceiling clamps & dowel plugs with screws, supply and insertion of insulation material i.e. PVC, PTFE sheet between pipe/ meter support and pipe/ meter, grout material, suitable thread sealant i.e. Teflon Tape / lock tight, Supply of different sizes 1" to 4", 150# spiral wound gasket, studs & bolts (various sizes with wire sealing arrangement wherever required), Joining of transition ftg. to above ground CS pipes, testing, purging and commission of the complete installation. Supply and installation of STANDARD Y TYPE FLANGE END STRAINER between T.F. I.V. to Regulator Inlet. Strainer size may be 1", 2", 3" & 4" corresponding to installed TF size. The payment for supply and installation of Y type strainer is included in MRS fabrication. The meters installed on tap offs from common header will be paid separately as per SOR No. 30.3 to 30.6							
30.1	2" pipes & fittings	RM	1007245					
30.2	4" pipes & fittings	RM	1007246					
30.3	Connection rates for installation of CS MRS with 1" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014449					
30.4	Connection rates for installation of CS MRS with 1-1/2" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014450					
30.5	Connection rates for installation of CS MRS with 2" pipe & fittings with RPD Meter up to G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1012050					
30.6	Connection rates for installation of CS MRS with 3" pipe & fittings with RPD Meter above G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1014451					
	Note: a. Supply & Installation of required size of brass fittings in all type of meters supplied by IGL shall be in scope of contractor. B. Supply & installation of SS Tubing with fitting shall be in scope of contractor; Maximum length is 2.0m per MRS installation C. 10% payment shall be released only after installation of caging							
30.7	Supply & Installation of Pressure Gauges							
30.7a	RANGE 0-100 MBAR - 4"- DIAL SIZE	Nos.	1012127					
30.7b	RANGE 0-1 BAR - 4"- DIAL SIZE	Nos.	1007252					
30.7c	RANGE 0-4 BAR - 4"- DIAL SIZE	Nos.	1007253					
30.7d	RANGE 0-6 BAR - 4"- DIAL SIZE	Nos.	1007254					
30.8	Supply & Installation of FLANGE END BALL VALVES, MAOP- 4 BAR							
30.8a	4"	Nos.	1007181					
30.8b	2"	Nos.	1007182					
30.8c	1-1/2"	Nos.	1009365					
30.8d	1"	Nos.	1007283					
30.9	Supply & Installation of FLANGE END GLOBE VALVES, MAOP- 4 BAR							
30.9a	2"	Nos.	1007182					

 Emerging Quality		ATTACHMENT - 1: ESTIMATED COST					
LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN							
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 1 : DELHI (NORTH & WEST ZONE)							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
30.9b	1-1/2"	Nos.	1012130				
30.9c	1"	Nos.	1007283				
30.10	Supply & Installation of BRASS ISOLATION VALVE						
30.10a	2"	Nos.	1007182				
30.10b	1-1/2"	Nos.	1012130				
30.10c	1"	Nos.	1007283				
30.10d	1/2"	Nos.	1012135				
30.11	Supply & Installation of STRAINER						
30.11a	2"	Nos.	1007182				
30.11b	1"	Nos.	1007283				
30.12	WELDING OF JOINTS - Butt Weld Joints						
30.12a	4"	Nos.	1007181				
30.12b	3"	Nos.	1007287				
30.12c	2"	Nos.	1007182				
30.12d	1-1/2"	Nos.	1012130				
30.12e	1"	Nos.	1007283				
30.12f	1/2"	Nos.	1012135				
30.13	Fillet Joints & Supply of Socolet						
30.13a	1"	Nos.	1007283				
30.13b	1/2"	Nos.	1012135				
30.14	RADIOGRAPHY OF JOINTS						
30.14a	4"	Nos.	1007181				
30.14b	3"	Nos.	1007287				
30.14c	2"	Nos.	1007182				
30.14d	1-1/2"	Nos.	1012130				
30.14e	1"	Nos.	1007283				
30.14f	1/2"	Nos.	1012135				
30.15	SUPPLY/ INSTALLATION OF CLAMPS, SUPPORTS FOR ERECTION OF ALL SIZES OF PIPELINE						
30.15a	TYPE-1, SIDE WALL MOUNTED AS PER DRAWING	KG	1015931				
30.15b	TYPE-2, GROUND BASED AS PER DRAWING	KG	1015932				
30.15c	TYPE-3, CEILING MOUNTED AS PER DRAWING	KG	1015933				
30.16	SUPPLY OF THREADED END BALL VALVE						
30.16a	1"	Nos.	1007283				
30.16b	1/2"	Nos.	1012135				
30.17	SUPPLY OF FLANGES AS PER SPECIFICATION						
30.17a	WNRF 3"	Nos.	1012136				
30.17b	WNRF 2"	Nos.	1012137				
30.17c	BLRF 3"	Nos.	1012138				
30.17d	BLRF 2"	Nos.	1012139				
30.17e	Spectacle Blind 3"	Nos.	1012140				
30.17f	Spectacle Blind 2"	Nos.	1012141				
30.18	SUPPLY OF REDUCER						
30.18a	3" X 2"	Nos.	1012142				
30.18b	2" x 1-1/2"	Nos.	1012143				
31	Modifications & Installation of Meters & Regulators in existing MRS/Skids/DRS:						
	Assessment of material requirement for installation at site, Order placement for purchasing of CS Pipes & fittings from anyone of approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, Dispatch clearance, handling, loading, transportation and unloading of these at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of owner supplied above ground fittings like regulators, meter & Isolation Valve and other free issue items as defined in specification from Owner's designated stock yards to Contractor's own stores / work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches for modification, schedules & execution procedures and all others necessary documentation. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices.						

 Emerging Quality		ATTACHMENT - 1: ESTIMATED COST					
LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN							
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 1 : DELHI (NORTH & WEST ZONE)							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	Taking shutdown of existing MRS, dismantling meters/regulators, replacement/fixing of meters/regulators with associated inlet and outlet connections / fittings, supply of pipes & fittings (excluding flange end Ball Valve), pipe cutting, threading, welding, testing, Radiography of Joints & firmly fixing with approved meter clamps/brackets and other supports by proper grouting and necessary documentation. Restoring the area to the original condition as per the specifications and to complete satisfaction of consumer and EIC. The rates includes all as above along with testing of joints till re-commissioning.						
31.1	Diaphragm meter	Nos.	1012153				
31.2	RPD Meter	Nos.	1012154				
31.3	Turbine Meter	Nos.	1012155				
31.4	300 mbar regulator	Nos.	1012156				
31.5	500 mar regulator	Nos.	1012157				
31.6	2 bar regulator	Nos.	1012158				
31.7	Butt Weld Joints						
31.7a	4"	Nos.	1007181				
31.7b	3"	Nos.	1007287				
31.7c	2"	Nos.	1007182				
31.7d	1-1/2"	Nos.	1012130				
31.7e	1"	Nos.	1007283				
31.8	Supply & Installation of CS Piping (Seamless A 106 Gr-B, Sch-40)- 150 #						
31.8a	4"	MR	1009386				
31.8b	3"	MR	1007287				
31.8c	2"	MR	1007182				
31.8d	1-1/2"	MR	1012130				
31.8e	1"	MR	1007283				
	Modifications/ replacements (meter or regulator or both) in existing MRS/Skids/DRS using threaded fittings/ flanged end (same size or bigger) shall be payable through SOR Item No. 31.1 to 31.6.						
	Modifications/ replacements (meter or regulator or both) in existing MRS/Skids/DRS using welding (same size or bigger upto 3.00 mtrs) shall be payable through SOR Item No31.7						
	Modifications/ replacements (meter or regulator or both) in existing MRS/Skids/DRS using welding (in case, erected length after modification is more than 3.00 mtrs) shall be payable through SOR Item No. 31.8						
	The payments of flange end ball valve shall be paid as per SOR Item No. 30.8.						
32	Restoration of old MRS (after 1 year/Complete defect liability)						
	Cleaning, Repair,Testing, painting, tightening of bolts of old Metering and Regulating skids	Nos.	1015934				
33	Conversion of Commercial Appliances:						
	Conversions of all types of appliances to NG based appliances. Supply & changing of the nozzles /jets and associated controls for Non-domestic appliances (imported appliances included) with proper tools and tackles. Cleaning and performing minor maintenance, greasing etc. of the appliance. Testing and showing the performance to the customer, signing of joint meter records (JMR) and instructing the customer on use & safety norms, complete as per specifications & to satisfaction of owner / Engineer in Charge and includes supply of reinforced rubber hose with requisite pressure rating.						
33.1	NG conversion for domestic appliances (G 1.6)	Nos.	1015935				
33.2	NG conversion for all commercial appliances	Nos.	1007175				
	Note: The payments of conversion shall be as per burners.						

		ATTACHMENT - 1: ESTIMATED COST					
LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN							
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 1 : DELHI (NORTH & WEST ZONE)							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
34	Supply of lock & Keys for MRS Cages						
	Padlock with Lever mechanism shall be durable solid body to resist corrosion. Shackle shall be hardened electroplated to resists hacksaw cutting and rusting under normal atmospheric conditions.	Nos.	1015936				
	Civil Works						
35	Demolition of PCC work below plinth level						
	Demolishing plain cement concrete (PCC) work (taking all necessary safety precautions) for all depths below plinth level including supply of all tools & tackles, necessary scaffolding, propping, underpinning, etc. , disposal of unserviceable material outside the IGL boundary limits kipping the IGL indemnified of any liabilities from statutory/ local bodies, all complete work as specified and directed	Cu. M	1009367				
36	Excavation for foundation works						
	Excavation as per plan, upto 3 meters and upto any lead in all conditions, backfilling using serviceable earth and disposal of surplus and unserviceable earth. Soil to be levelled and neatly dressed complete in all respect as per scope of work, technical specification and directions of EIC.						
	Upto 3.0 Mtrs	Cu. M	1007176				
37	Foundation works						
37.1	Providing and Laying Plain Cement Concrete (1:2:4)						
	Providing & laying, Fixing, Centering and Shuttering of plain cement concrete with nominal mix 1:2:4 by mass (1 cement: 2 coarse sand: 4 coarse aggregates) with 20 mm down size graded aggregates/ gravels as specified in specifications and satisfaction to the EIC.	Cu. M	1007177				
37.2	Providing and Laying Plain Cement Concrete (1:4:8)						
	Providing & laying, Fixing, Centering and Shuttering of plain cement concrete with nominal mix 1:4:8 by mass (1 cement: 4 coarse sand: 8 coarse stone/ aggregates/ gravels) with 20 mm down size graded etc as specified in specifications and satisfaction to the EIC.	Cu. M	1017159				
37.2	Supply and Fixing of Deformed Steel Bars Reinforcement						
	Supply and placing in position high strength deformed steel bars reinforcement (conforming to IS: 1786, Grade Fe 415) for RCC work including transporting, straightening, cleaning, de-coiling, cutting & binding to required shapes and length as per details, binding with contractor's own 16 SWG black soft annealed binding wire at every intersection, supplying and placing with proper cover blocks, supports, chairs, overlaps, welding, spacers, fan hooks etc. for all heights and depths etc. complete the work as directed.	KG	1009380				
37.4	Providing and Laying Reinforced Cement Concrete (M-25)						
	Providing and laying REINFORCED CEMENT CONCRETE OF M-25 Grade (Concrete shall be design / nominal mix) with 20mm & down size graded aggregates in NON SUSPENDED slabs / pavement slabs including pedestals, ramps etc. filling pockets with grouting, laying in alternate panels to required slopes, all necessary form work and finishing the top surface rough or smooth as required and directed, providing pockets/openings, recesses, chamfering etc. wherever required, vibrating, tamping, curing, and rendering smooth if required in any position, shape, level and thickness etc. all complete as specified, shown and directed. Rates to include all materials (other than steel), labour, shuttering and necessary works required to make work complete.	Cu. M	1007179				

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 1 : DELHI (NORTH & WEST ZONE)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
37.5	Dismantling of RCC & cutting of reinforcement (Thickness above 3’’)	Cu. M	1012161			
	Internal Piping Work					
38	Internal Piping - Supply, Erection & welding of CS pipes & fittings (all types) except Ball Valves for commercial connections.					
	Assessment of material requirement for installation at site, Order placement for purchasing of CS Pipes & fittings from anyone of approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, Dispatch clearance, handling, loading, transportation and unloading of these at respective contractor’s store. Receiving, taking over, handling, loading, transportation and unloading of contractor supplied material as defined in specification from Contractor’s designated stock yards to IGL's work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches, schedules & execution procedures and all others necessary documentation. Finalising Piping location with optimum route in consent of customer from Meter Outlet till Customer’s Appliance. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices.					
38.1	Supply, Erection, Welding, Radiography & Testing of CS Seamless A 106 Gr-B Pipeline. It includes supply of all type of fittings (except ball valves), Supply Of Consumables Like Spiral Wound Gaskets (Winding ANSI 304 Graphite Centering Ring Cs), Stud Bolts (ASTM A 193 B 7, Hexagonal Nuts, ASTM A194 Gr 2H) and is inclusive in rates.					
38.1a	4" NB, Sch-40	MR	1007159			
38.1b	3" NB, Sch-40	MR	1007160			
38.1c	2" NB, Sch-80	MR	1007161			
38.1d	1-1/2" NB, Sch-80	MR	1007162			
38.1e	1" NB, Sch-80	MR	1007163			
38.2	Supply, Erection, Welding, Radiography & Testing of CS Seamless / HFW API 5L GR-B Pipeline. It includes supply of all type of fittings (except ball valves), Supply Of Consumables Like Spiral Wound Gaskets (Winding ANSI 304 Graphite Centering Ring CS), Stud Bolts (ASTM A 193 B 7, Hexagonal Nuts, ASTM A194 Gr 2H) and is inclusive in rates.					
38.2a	4" NB	MR	1007164			
38.2b	3" NB	MR	1007165			
38.3	Supply & Installation of Safety Devices as per PNGRB gudelines					
38.3a	1" Solenoid Valves	Nos.	1012145			
38.3b	1.5" Solenoid Valves	Nos.	1012146			
38.3c	2" Solenoid Valves	Nos.	1012147			
38.3d	2.5" Solenoid Valves	Nos.	1012148			
38.3e	ATEX/PESO/CMRI approved Gas detectors	Nos.	1012144			
38.3f	1" Shutoff valve	Nos.	1012149			
38.3g	1.5" Shutoff valve	Nos.	1012150			
38.3h	2" Shutoff valve	Nos.	1012151			
38.3f	2.5" Shutoff valve	Nos.	1012152			

 Emerging Quality		ATTACHMENT - 1: ESTIMATED COST						
LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN								
TENDER NO. : IGL/ET2/CP/CP18519								
SEGMENT - 1 : DELHI (NORTH & WEST ZONE)								
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)		
39	Internal Piping - Supply & Installation of Powder Coated GI pipes & fittings (all types) except Ball Valves for commercial connections.							
	Assessment of material requirement for installation at site, Order placement and Purchasing of Powder coated GI Pipes & GI fittings from approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, getting dispatch clearance, handling, loading, transportation and unloading of these items at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of owner supplied above ground fittings such as Isolation Valves and other free issue items as defined in specification from Owner's designated stock yards to Contractor's own stores / work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches, schedules & execution procedures and all others necessary documentation. Finalising Piping location with optimum route in consent of customer from Meter Outlet till Customer's Appliance. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices.							
39.1	Supply installation & Testing of Powder coated GI Pipes. It includes supply of all type of fittings (except Isolation valves), Supply & fixing of approved clamps & nylon rawl plugs with SS 304 2" screws, grout material, suitable thread sealant i.e. Teflon Tape, etc. and is inclusive in rates.							
39.1a	1/2" GI Pipe	Mtr	1015937					
39.1b	3/4" GI Pipe	Mtr	1015938					
39.1c	1" GI Pipe	Mtr	1015939					
40	Supply & Fabrication/Erection of Wired cages for MRS							
	Assessment of material requirement for installation at site, Order placement for purchasing of MS Angle, Flat, wire mesh & fittings from anyone of approved vendors of IGL, Scheduling, Planning of material & handling, loading, transportation and unloading of these at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of contractor supplied material as defined in specification from Contractor's designated stock yards to IGL's work sites, proper storing, stacking, identification, providing security and insurance cover. Finalising Cage location with in consent of customer & IGL. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices. Supplying & Fixing 4 mm thick MS welded wire mesh (30 mm x 75 mm) by welding/bolting with structural steel elements (Angle & Flat) for making covers for MRS and various other equipments for protection of equipments. Rates to include one coat of primer and two coats of synthetic enamel paint (both side of wired cages), labour, material, transportation, loading/ unloading of material, welding charges etc complete in all respects. For fabrication of cage structure, all the essential jobs viz. cutting, welding, grinding, finishing, painting including all materials like Angle, channel, wire net, support sheet, hardware, electrode, grinding wheel, gas cylinder, paint, primer, grouting, equipment, tools, generator for power, welding machine etc. is under contractor's scope							
40.1	Supply (Angle 65 mm x 65 mm x 6 mm, Flat 50 mm x 6 mm & Wire Mesh 75 mm X 30 mm X 4 mm), fabrication, painting, transportation and installation of MRS cages for SKID by welding/bolting with structural steel elements for making covers for industrial/ commercial PNG meter-regulator systems as per detailed scope of work & Drawing.	MT	1015282					

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 1 : DELHI (NORTH & WEST ZONE)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
40.2	Supply (Angle 40 mm x 40 mm x 5 mm, Flat 25 mm x 4 mm & Wire Mesh 75 mm X 30 mm X 4 mm), fabrication, painting, transportation and installation of MRS cages for WALL MOUNTED MRS by welding/bolting with structural steel elements for making covers for industrial/ commercial PNG meter-regulator systems as per detailed scope of work & Drawing.	MT	1015293			
41	Supply & Installation Crash Guard for Cage Protection					
	Supply, fabrication, painting, transportation and installation of Crash Guard for protection of Wall Mounted cages for industrial/ commercial PNG meter-regulator systems as per detailed scope of work & Drawing.	MT	1014813			
	Total Cost (INR)					2,30,15,62,672.91
	GST @ 18%					41,42,81,281.12
	Total Cost incl. GST (INR)					2,71,58,43,954.04
	Total Cost inc. GST (in Cr.)					271.58

 Energy with Quality		ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 2 : DELHI (SOUTH, CENTRAL & EAST ZONE)							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
PART-I	MDPE LAYING						
	Route survey of allotted areas and Preparation /Submission of detailed route plan for approval by EIC in AutoCAD format. Receiving, handling, loading, transportation and unloading of owner supplied MDPE pipes & fittings and other free issue items from IGL's designated stock yards to Contractor's own stock-yards/ work-sites. Proper storing, stacking, identification, providing security and insurance cover for the materials. Liaisoning with Landowning agencies / statutory authorities and obtaining permission from them (Separately payable as per SOR Item No.10), making trial pits to determine the underground utilities/ services etc., restoration of the abandoned excavation/ trial pits (excavated to depth of 1.5 m or more as per satisfaction to EIC / Site-in-charge) to original condition, barricading the work area as per the procedures & drawings provided in the tender and as per the directions of EIC / Site-in-charge; uncoiling / stringing of pipes, jointing of the pipe ends/ fittings / Transition fittings/ valves by qualified personnel, using approved electro fusion techniques as per specification.						
	Laying using any method (Open trench, Moling and HDD) with or without casing; it includes survey of the under ground utilities, submission of pre & post HDD profile for approval, execution of the work as per specification (as per trench dimension Drg No 14588-10-03--27), including excavation of pits, moling with hole size not exceeding 20% of the the carrier / casing pipe dia. jointing and insertion of the carrier pipe in casing pipe (on case to case basis) and subsequent padding with soft soil, laying of warning mat in open trench only, backfilling, compaction, submission of as built drawing, as graphs as per attached specification and instruction of EIC / Site Engineer of Owner. Includes laying of pipeline in all type of surface including Kutcha, metal, concrete (PCC/RCC), bituminous, tiled, brick lined etc. after raking up of hard surface of any type; Roads, Pavement, Footpaths etc. shall be made motorable once the pipeline is laid.						
	In case, it is impractical to provide 1.0-meter cover due to physical constrain, additional protective measures such as concrete slab or high impact resistance plastic sheet shall be installed (for the minimum top cover of 600 mm) by the contractor in consultation with EIC / Site-in-charge. EIC / Site-in-charge after examining thoroughly and considering the PNGRB Guidelines may allow the contractor. However, the contractor has to raise technical deviation for approval before commence of work. All the technical deviation shall be submitted with the RA bills.						
	Supply & installation of GI Sleeves, 2.5" NB x 300 mm length GI pipe Sleeve / Half Round Concrete Sleeves for domestic connections, 3" NB x 300 mm length GI Sleeve for commercial and industrial installations (as per GI Pipe Sleeve Drg No 14588-10-03--18), and 1/2 Round concrete sleeve, Drg No 14588-10-03--33) excavation, breaking through any obstructions, insertion of pipe, sealing the annulus, fixing of the sleeves with concrete mix, preparation of pedestal & restoration of excavated pits within the size of pedestal & the same pit with the laying of 20/32 mm dia MDPE pipe as defined in technical specification and instruction of EIC.						

		ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
		TENDER NO. : IGL/ET2/CP/CP18519					
		SEGMENT - 2 : DELHI (SOUTH, CENTRAL & EAST ZONE)					
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	Flushing, cleaning ,Pneumatic testing, purging with nitrogen and commissioning as per specification and approved procedures providing all tools and tackles, nitrogen, instruments, manpower and other related accessories and as per instructions of the Engineer-in charge.						
	Maintaining the completed pipelines / installation for any defect, failures during defect liability period .						
	Handing over the completed works to IGL for their operation/ use, returning of all surplus material to IGL stores, reconciliation of free issue material area wise and obtaining no objection certificate.						
	On completion of gas charging of pipelines, preparation and submission of As built drawings, crossings details, termination, utility graphs and deviation statements.						
	Submission of all documents required for contract closure in numbers as mentioned in contract.						
	Note- Supply & installation of GI Sleeve / Half round Concrete sleeve and warning mat (open trench excavation) shall be included in laying of MDPE pipe.(Refer Drg No. 14588-20-03--18); Laying in Brick trench shall not payable in this SOR; In such cases SOR No. -20 is valid.						
	GIS data shall be collected of laid MDPE pipeline network. Data like Geo Co-ordinates (latitude, longitude) of Pipeline and related features like fittings, valves, FRS, MRS, Markers etc. shall be collected as per given procedure along with 50 m land base corridor (25 m on either side of the pipeline) with min. accuracy of 50 cm. Data format shall be in shape (.shp) or Geo Database (.gdb)						
1	MDPE Pipe line laying in Soft soil & all type of surface (Including PCC/RCC Top Surface - Upto 12") , Open Cut / Moling or any other methodology ; Clear cover to pipeline min 1.0m; (Refer Drg No 14588-10-03-27))						
1.1	20 mm dia	M	1020533	5000	369.43	18,47,154.67	
1.2	32 mm Dia	M	1020534	92521	374.12	3,46,13,650.62	
1.3	63 mm Dia (Excluding HDD with casing)	M	1020535	795971	433.82	34,53,05,309.58	
1.4	125mm dia (Excluding HDD with/without casing)	M	1020536	5057	555.20	28,07,512.65	
1.5	180 mm dia (Excluding HDD with/without casing)	M	1020537	1000	644.75	6,44,753.66	
	MDPE Pipe line laying in common trench						
1.6	32 mm Dia (in common trench with 32/63/125/180 mm Dia MDPE Pipe)	M	1020538	9709	153.23	14,87,782.58	
1.7	63 mm Dia (in common trench with 63/125/180 mm Dia MDPE Pipe)	M	1020539	48	184.07	8,826.68	
1.8	125mm dia (in common trench with 125/180 mm Dia MDPE Pipe)	M	1020540	2000	229.84	4,59,688.10	
	All service lines left out initially during mainline laying, shall be laid under above mentioned SOR within six months of gas charging of a particular area by the same contractor. In Open trench method/ moling, no extra rate shall be payable for casing installation. Roads, Pavement, Footpaths, Kutcha etc. shall be made motorable once the pipeline is laid. Liasoning and HSE shall not be paid wrt this SOR						
2	MDPE Pipe line laying by HDD Method, with Casing						
	Survey of the under ground utilities, submission of HDD profile for approval (excluding road and nalla crossings), execution of the work as per the standard procedure attached, including excavation of the pits, Jointing of casing and carrier pipe and insertion of the carrier pipe in casing of dia ranging from 110mm to 160mm for 63 mm, 200mm to 250 mm dia for 125 mm dia MDPE and 250 mm to 315 dia for 180 mm MDPE, subsequent sealing, backfilling, compaction, submission of as built graphs, final HDD profiles as per attached specification and the instruction of EIC / Site Engineer of Owner. The other activities are as per SOR Item No. 1 and as detailed in specification and as per the instructions of the EIC / Site engineer of Owner. The payment shall be made for length of casing pipe laid in HDD, remaining carrier pipe length without casing shall be paid under SOR item no.1						
2.1	63 mm Dia HDD with casing	M	1020541	1113	565.15	6,29,132.08	
2.2	125 mm Dia HDD with casing	M	1020542	11	1,277.57	14,421.21	
2.3	180 mm Dia HDD with casing	M	1020543	1000	1,546.21	15,46,211.96	
3	MDPE Pipe line laying by HDD Method, without Casing						

 Energy to Quality		ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
		TENDER NO. : IGL/ET2/CP/CP18519					
		SEGMENT - 2 : DELHI (SOUTH, CENTRAL & EAST ZONE)					
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	Survey of the under ground utilities, submission of profile for approval, execution of the work as per the standard procedure attached, including excavation of the pits, Jointing and insertion of the carrier pipe, subsequent backfilling, compaction, submission of as built graphs and final HDD profiles as per attached specification and the instruction of EIC / Site Engineer of Owner. The other activities are as per SOR Item No. 1 & 2 and as detailed in specification and as per the instructions of the EIC / Site engineer of Owner						
3.1	125 mm Dia HDD without casing	M	1020544	21154	703.46	1,48,81,023.04	
3.2	180 mm Dia HDD without casing	M	1020545	1000	873.60	8,73,600.69	
3.3	Laying of MDPE pipeline by HDD method (Maximum length 200m)- This SOR may be applicable only for spans less than 200m where additional mobilization of HDD m/c is required & HDD is the only option to execute the same. Note: There should be no consecutive HDD laying in upstream/downstream within a span of 1KM & This SOR would be applicable for allocations less than 200 m in a single stretch						
3.3.1	63 mm by HDD method (with casing)	Nos.	1020546	3	96,972.84	2,63,092.42	
3.3.2	125/180 mm by HDD method(with/ without casing)	Nos.	1020547	2	1,53,272.20	2,33,928.24	
4	MDPE Service Line laying in New & old Projects / O&M areas						
	Includes laying of pipeline (for 20 & 32mm) in all type of surface i.e. Kutcha, metal, concrete (PCC/RCC), bituminous, tiled, brick lined etc. after braking up of hard surface of any type by any methodology. Roads, Pavement, Footpaths etc. shall be made motorable once the pipeline is laid. Supply & installation of GI Sleeve / Half round Concrete sleeve shall be included in laying rates. All other activities mentioned in SOR no.1 are applicable.						
	Supply & installation of GI Sleeves, 2.5" NB x 300 mm length Half Round Concrete Sleeves for domestic connections, 3" NB x 300 mm length GI Sleeve for commercial and industrial installations (as per Drg No14588-20-03--18)) excavation, breaking through any obstructions, insertion of pipe, sealing the annulus, fixing of the sleeves with concrete mix, preparation of pedestal & restoration of excavated pits within the size of pedestal & the same pit with the laying of 20/32 mm as defined in technical specification and instruction of EIC.The rates shall include liaison rates with statutory bodies, HSE and no separate rates are payable under this SOR. Wherever service lines are to be laid as per Dwg.- 14885-10-03-46A.						
	Note:- a. Old Project area shall be defined as an area where any of folowing criteria are being met: 1. MDPE line is already been charged for more than 6 months. 2. MDPE is laid and gasified by another contractor (currently not working in respective zone) b. Additional rate for construction of RCC structure for protection of service line shall be payable under SOR no. 4.5						
4.1	For pipe length up to 8 meters (O&M area)	Nos	1020548	17589	6,147.05	10,81,19,729.80	
4.2	For pipe length up to 6 meters (Project area)	Nos	1020549	55000	3,640.18	20,02,09,643.31	
4.3	For pipe length more than 6 meters (Project area)	M	1020550	27500	382.08	1,05,07,119.55	
4.4	Per meter rate for pipeline more than 8 meters (Per meter additional rate shall be payable above SOR item no. 4.1)	M	1020551	43540	382.08	1,66,35,728.00	
4.5	Construction of RCC structure for protection of service line (20/32 mm dia.) for drain/nallah (adjecent to house / Boundry walls / Multistory Buildings) crossing as per Dwg.- 14885-10-03-46A						
	The scope includesconstruction providing and laying reinforced cement concrete of M-25 grade (Concrete shall be design mix/nominal mix) with 20mm & down size graded crushed stone aggregates in Non suspended slabs/pavement slabs including pedestal/ramp etc., laying in alternate panels to required slopes, all necessary form work and finishing the top surface rough/smooth as required in any position, shape, level and thickness etc. The rates includes grouting of pockets, supply of material, tools, shuttering, Reinforce ment etc.	Nos.	1013003	44299	2,374.23	10,51,76,734.21	
5	Excavation in Special Conditions:						
5.1	Excavation of trench or pits in Malba/Multiple layers of asphalt/ brick / PCC/RCC etc. The rates are payable over and above the Laying rates as per relevant SOR item no 1						
5.1.1	Cutting of PCC/RCC surface with thickness cumulative more than 12" (in case of multilayer)or Continuous asphalt multi-layer/Malba/Brick/Boulders more than 24". (Malba shall be considered as a strata where soil is in mixed form of debris/building rubbish or discarded pieces of bricks/stones)	M	1012920	220347	222.88	4,91,10,342.85	
5.1.2	Cutting of PCC/RCC surface with kneumatic braker and cutter thickness cumulative upto 10" (in case of multilayer) (Malba shall be considered as a strata where soil is in mixed form of debris/building rubbish or discarded pieces of bricks/stones)	M	1020552	55087	171.44	94,44,296.70	
5.2	Excavation of Hard Rock:						

 Strength is Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 2 : DELHI (SOUTH, CENTRAL & EAST ZONE)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Trenching of Hard Rock is defined as trench material with a single piece of rock, dimension exceeding 1 meter in any direction, which requires cutting only by use of manual/pneumatic chisel/drill or sledge hammer and chisel or removal of same by additional techniques and supply of approved coarse sand (Size 0.6-2 mm as per IS 383) free from any impurities like clay, mica and soft flaky pieces for padding of 150 mm above and below laid pipeline as per the specifications ; The rates are payable over and above the Laying rates as per relevant SOR item no 1	Cu.M	1013004	903	4,389.96	39,65,604.45
5.3	Laying in Congested Area:					
	Congested area shall be defined as an area where MDPE pipeline has to be laid in narrow lanes (Less than 4.5 M including footpath/drains) & houses in such locations have only one side entrance i.e. there is no backlane between two back to back houses & pipeline has to be laid in front of the house. The rates are payable over and above the Laying rates as per relevant SOR item no 1.	M	1012982	36749	59.70	21,93,873.55
5.4	Laying in continuous water seepage area:					
	The water seepage area shall be defined as an area where the MDPE pipeline has to be laid, in such locations where continuous water seepage occur during trench activity and the same shall not be possible. In that case, the contractor shall have to deploy additional equipment i.e. de-watering pumps etc. for continuous de-watering so that waterlogging shall be avoided. The rates are payable over and above the Laying rates as per relevant SOR item no 1.	M	1014791	13576	31.84	4,32,251.59
5.5	Excavation of Trench / Pit for Tap-off or Hook-up Locations of new connectivity (1.5 Mtr and above)					
	This item shall cover the deep excavation (depth beyond 1.5 m) of trenches or pits for the identification of existing MDPE pipelines and tap-off or hook-up for new connectivity. Also, required shoring work (including necessary close plank walling, framing, bulla piling, strutting, etc.) shall be done by the contractor. (This item should be executed on specific direction of the Engineer in charge).	No.	1015921	12	19,070.92	2,30,117.32
6	Restoration of trenches					
6.1	Restoration to original conditions of dismantled surface like Asphalted/Bituminous Road, Concrete Pavement, Agra /Kota Stones / Tiles (Chequered/interlocking etc.), Dry Brick Pavement as per the technical specifications attached in the tender after laying of pipeline in Built- Up surface, as per the directions of EIC / Site Incharge. Scope includes supply of the approved quality material, testing of materials by third party agencies as per technical specification / CPWD / IRC Standards, submission of the restoration reports, obtaining no objection certificates from the concern local authorities /land owners / third party inspection agencies designated by land owing agencies and Owner.	Cu.M	1007137	4389	4,348.09	1,90,84,248.00
6.2	Providing & laying, Fixing, of cement concrete interlocking paver blocks of approved size, design shape as per the directions of EIC / Site Incharge. Scope includes supply of the approved quality material, testing of materials by third party agencies as per technical specification / CPWD / IRC Standards.	Sq.M	1014792	13844	860.55	1,19,13,093.93
7	Survey GPR					
7.1	For length up to 100 meters	Nos.	1015922	2	9,452.38	14,257.02
7.2	Per meter rate for more than 100 meters (Per meter additional rate shall be payable above SOR item no. 7.1)	M	1013010	1199	59.70	71,603.26
8	Fabrication & Installation of Pipeline Markers:					
	Supply and Installation of Stone Route Markers, Powder Coated Plate / Pole Markers as per the attached drawings, along the route / along boundary wall, lamp posts including all associated civil works such as excavation and construction in all types of soils, construction of pedestals and grouting with concrete, cleaning, supply and application of approved colour and quality of primer and paint, stencil letter cutting of numbers, direction, chainage etc., restoration of area to original condition and performing all works as per drawings, specification and instruction of Engineer-in-Charge. The rates shall include liaison rates with statutory bodies and restoration rates and no separate rates are payable under this SOR.					
8.1	Stone Route Markers as per Drg No14588-10-03--29)	Nos	1013011	10285	665.67	68,46,740.43
8.2	Installation of FRP MARKER	Nos	1020553	244	3,246.35	7,92,659.90
8.3	Pole markers with foundation as per Drawing No. Drg No14588-10-03-30 & 14588-10-03-31) and specification.	Nos	1013012	977	3,246.35	31,70,639.59
8.4	Plate marker as per Drg No Drg No 14588-10-03--28)	Nos	1013013	56534	301.48	1,70,43,843.44
9	LIASONING WITH LAND OWNING AGENCIES FOR PERMISSION					

 Energy & Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 2 : DELHI (SOUTH, CENTRAL & EAST ZONE)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Submission of applications as per approved drawings provided by owner / owner's representative (Initial Route Survey,Preperation of Drawings, measuring and providing details of surface type shall be in scope of Contractor with approval from Owner / Owner's representative), obtaining & submission of demand note, Coordination, Liaisoning, Obtaining written permissions from Land owing agencies like MCD, PWD, DDA, NDMC, NHAI, AAI, GDA, GNDA, GNN, Forest Dept, NHAI, Indian Railways, other government agencies who maintains the public lands and Private lands i.e. Apartments/institutions etc. Note: Service lines in SOR item no. 4 are not applicable;					
9.1	For All sizes - Liaisoning and getting permissions from NHAI/ Railway/ Forest (Protected & Un-Protected)/ Canal/ River crossings.	M	1012678	92641	282.58	2,61,78,066.88
9.2	For All sizes - Liaisoning and getting permissions from New Delhi Municipal Corporation (NDMC)/ PWD	M	1015924	92641	133.33	1,23,51,623.11
9.3	For All sizes - Actual length of network laid against written permission statutory Authorities (except covered under SOR 9.1 & 9.2)	M	1013014	370563	85.57	3,17,08,644.39
9.4	For All sizes - Actual length of network laid where written permissions are not available (other than pvt. Area)	M	1014446	370563	53.73	1,99,10,079.04
	*above rates include all other sorts of liasioning including traffic dept.					
10	Charges for compliance to Health, Safety & Environment (HSE) as detailed in Scope of Work.					
10.1	MDPE Section -PPE, Contineous Barricades along the trenches as per approved drawing in tender, Use of Safety Boots, Hand gloves, Reflective jackets, Hard hats(helmets), Safety shoes, eye and ear safety equipments, Fire extinguishers and as per the detailed scope of work in tender specifications.	M	1010126	926407	22.88	2,12,00,547.12
10.2	GI Section - Safety requirement per Rise- Use of Fall arrestor/ petzl, Ascenders/descenders, PPE, Barricades/ Warning Boards (03 Nos.) connected with warning/Caution tapes in areas where piping work is in progress , Use of Safety shoes, Walky talky, Hand gloves, Reflective jackets, Hard hats(helmets), eye and ear safety equipments, Fire extinguishers and as per the detailed scope of work in tender specifications; In case of non compliance- Refere SCC clause - for applicable penalty . Upto 4th GI (G+4) floor full body safety harness & assessories shall be of KARAM or equivalent make. Note- This SOR is applicable for Non LMC length of GI Section only.	Nos	1010127	41876	572.78	2,39,86,056.31
10.3	GI Section - Safety requirement per Rise-Use of Fall arrestor/ petzl, Ascenders/descenders, PPE, Barricades/ Warning Boards (03 Nos.) connected with warning/Caution tapes in areas where piping work is in progress , Use of Safety shoes, Walky talky, Hand gloves, Reflective jackets, Hard hats(helmets), eye and ear safety equipments, Fire extinguishers and as per the detailed scope of work in tender specifications; In case of non compliance- Refere SCC clause - for applicable penalty . GI (G+5) and above including high rise Above 4th floor full body safety harness & assessories shall be of PETZL is compulsory. Note- This SOR is applicable for Non LMC length of GI Section only.	Nos	1010128	245	1,295.47	3,17,582.47
PART II	GI / COPPER SECTION					
	Supply & Installation of Powder Coated GI Service Pipe & Fittings					

	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 2 : DELHI (SOUTH, CENTRAL & EAST ZONE)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Assessment of material requirement for installation at site, Order placement and Purchasing of Powder coated GI Pipes, GI fittings, Copper pipes & fittings, Brass Fittings from approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, getting dispatch clearance, handling, loading, transportation and unloading of these items at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of owner supplied above ground fittings such as regulators, meters, Isolation Valves & appliance valves and other free issue items as defined in specification from Owner's designated stock yards to Contractor's own stores / work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches, schedules & execution procedures. Finalising optimum route with consent of customer from transition fitting to cooking oven / appliance and ensuring installations in well ventilated area. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices. Portal entry for new connections - New registration tracking and feasibility survey and its updation as per IGL defined TAT;printing of stationary as per approved IGL formats required during connections. Followup and attend complaints receives from customer regarding delay in new connection (ReferDrg No 14588-20-05--01, 02, 03)					
	Installation of GI service pipes & fittings, regulators, Valves etc. including NPT threading, as specified, Drillings of holes through the walls (Brick, RCC), Granite, Marble, Wood Cutting, Glass Cutting with proper heavy duty hammer drill machine, tools & tackles, using proper sealant/grout material and colours to match the original replacement of the damages during drilling, restoring the area to the original condition, Painting of scratched length of powder coated pipe and fittings after proper surface finish by one coat of approved primer paint and two coats of approved synthetic enamel paint. Restoring the wall surface to original conditions.					
	Supply & fixing of approved clamps & nylon rawl plugs with SS 304 2" screws, grout material, suitable thread sealant i.e. Teflon Tape, Joining of transition fitting to above ground service GI pipes, testing, purging and commission of the complete installation. The rates in connections also includes meter installation, tap off rates. The GI installation in already gas charged areas, planning & coordinating with existing consumer's for New tap offs from existing riser with or without tee, testing of these existing risers and commissioning of these connections with newly tapp offs etc.is inclusive.					
11	NON LMC					
11.1	Supply & installation powder coated 1/2" GI Pipe from TF to regulator - up to 1.5 Mtr Length	Nos	1013015	56534	478.51	2,70,52,197.55
11.2	Supply & Installation of powder coated 1/2" GI Riser from regulator isolation valve to appliance for G+3 Apt and Individual kothi /Bungalow. Refer Drg No 14588-20-05--02)	M	1013016	1177064	452.70	53,28,59,787.16
11.3	Supply & installation of powder coated 3/4" GI Riser from regulator isolation valve to lateral isolation valve for Apt more than G+3 floors. Refer Drg No 14588-20-05-02)	M	1013017	9018.4	483.48	43,60,197.95
11.4	Testing & Commissioining of already installed Risers GI / Copper Pipe (1/2" / 3/4" / 12mm) Non LMC riser (1/2" / 3/4")	M	1012680	432127.9	64.67	2,79,47,510.49
11.5	Testing & Commissioining of already installed / Laterals GI / Copper Pipe (1/2" / 12mm / mlc) LMC	Nos	1015925	14040	372.13	52,24,580.82

	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 2 : DELHI (SOUTH, CENTRAL & EAST ZONE)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
12	LMC					
12.1	PNG connection in Project area-low rise					
12.1.1	Installation of meter with required fittings	Nos.	1020554	75948	1,683.74	12,78,75,936.63
12.1.2	Supply and installation of Gi/ Cu/ MLC pipe along with required fittings from Lateral isolation valve to appliance valve	M	1020555	303791	525.36	15,96,00,026.30
12.2	PNG CONNECTIONS IN O&M AREA (ON EXISTING RISER)					
12.2.1	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2 m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter. Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4m. Payment against additional length of (GI + Cu) shall be as per item 12.2.3 of SOR.	Nos.	1013019	32771	3,947.25	12,93,56,874.95
12.2.2	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 12.2.3 of SOR.	Nos.	1015927	21	3,971.07	83,695.69
12.2.3	Powder coated GI and Cu installations for pipes more than 4 m per connection					
12.2.3.1	1/2" Powder coated GI	M	1013020	243952.7	408.03	9,95,39,517.20
12.2.3.2	12mm Copper /mlc Pipe - Inside kitchen location only	M	1013021	1093.6	409.02	4,47,311.78
13	Collection of registration /KYC forms duly filled with required supporting documents, Submission to IGL marketing on schedule as decided by IGL; This SOR may be used only after instruction of EIC/Site-in-Charge.	Nos	1013022	4457	249.74	11,13,184.71
PART III	HIGH RISE SEGMENT (14 Storey & Above)					
14	MDPE Pipe line laying (20mm / 32 mm / 63mm) in already excavated trench in Builder segment / Private Property i.e Multistorey buildings / apartments with no movement of Heavy Vehicles, surrounded with Boundary wall)					
	Laying in already excavated trench with or without casing ; it includes execution of the work as per specification (as per trench dimension Drg No 14588-10-03-16), laying, electrofusion joints and insertion of the carrier pipe in casing pipe (on case to case basis) laying of warning mat and re-installation of pre cast slabs as per specification and instruction of EIC / Site Engineer of Owner. In Case of sand filling required as instructed by EIC/IGL representative SOR no. 28.4 shall be paid over and above this rate.	M	1013034	100.0	269.64	26,964.15
15	Supply & Installation of Welded Riser - Non LMC					
15.1	Installation of welded riser 1/2 inch upto isolation valve	M	1013035	408.6	618.49	2,52,710.06
15.1	Installation of welded riser 3/4 inch upto isolation valve	M	1013036	4823.7	663.17	31,98,943.08
15.1	Installation of welded riser 1 inch upto isolation valve	M	1013037	3637.2	726.71	26,43,179.45
15.1	Installation of welded riser 2 inch upto isolation valve	M	1013038	1294.5	1,370.02	17,73,503.20
16	LMC					
16.1	PNG CONNECTIONS IN PROJECT AREA					

 Strength & Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
	SEGMENT - 2 : DELHI (SOUTH, CENTRAL & EAST ZONE)					
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
16.1.1	Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + Cu) shall be as per item 17 of SOR.	Nos.	1013039	376	3,911.51	14,72,147.32
16.1.2	Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 17 of SOR.	Nos.	1017154	376	3,855.91	14,51,223.40
16.2	PNG CONNECTIONS IN O&M AREA (ON EXISTING RISER)					
16.2.1	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2 m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter. Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4m. Payment against additional length of (GI + Cu) shall be as per item 17 of SOR.	Nos.	1013040	254	4,143.82	10,50,532.70
16.2.2	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 17 of SOR.	Nos.	1017155	254	4,120.98	10,44,743.95
17	Powder coated GI and Cu installations for pipes more than 4 m per connection.					
17.1	1/2" Powder coated GI	M	1013041	1960.5	408.03	7,99,959.08
17.2	12mm Copper/mlc - Inside kitchen location only	M	1013042	14.9	451.71	6,732.00
18	NG conversion for domestic connection					
18.1	Providing services for NG conversion, monitoring the pendency and conversion of stoves including the supply of material required for conversion of appliance/stove + Tools & Tackles required, Printing of JMR sent by IGL In-charge on email, scanning of signed JMR and submission to In-charge, completion of NG conversion within the defined TAT.	Nos.	1013309	158815	332.33	5,27,78,417.89
18.2	Perfoming Slab hole by using specific tools (wherever required)	Nos.	1015703	1147	228.85	2,62,522.93
18.3	Perfoming Core cutting by using specific tools (wherever required)	Nos.	1015704	48	205.96	9,798.10
18.4	Perfoming glass cutting by using specific tools (wherever required)	Nos.	1015705	2	76.61	138.41
18.5	Replacement of defective Meter/Domestic Regulator/Meter Regulator with new ones (which are freely issued by IGL)	Nos.	1015706	167	302.48	50,454.25
18.6	Extension of existing / modification in GI pipeline	M	1015707	61.4	421.87	25,899.87
18.7	Extension of existing / modification in Cu pipeline	M	1015708	44.0	407.94	17,932.93
19	Installation of Service Regulator					
19.1	Receiving, taking over, handling, loading, transportation and unloading of owner supplied items such as Service Regulator/ SR module with canopy & Isolation Valves and other free issue items as per technical specification from Owner's designated stock yards to Contractor's stores / work sites. Fabrication, Erection, Welding, Testing & Installation of Service Regulators as per drawing no. Drg No 14588-20-05-37), Rev 0. Supply and installation of regulator boxes including fabrication as per drawing no. Drg No 14588-20-05-42), and painting as per technical specification. Any other material & activities not mentioned/covered above, but otherwise required for satisfactory completion/safety of work as defined in tender has to be supplied / done by contractor with in specified schedule at no extra cost to owner.					
19.1.1	Service Regulator with regulator cover and Transition Fittings installation	Nos	1013043	120	10,458.31	12,59,433.35
19.2	Receiving, taking over, handling, loading, transportation and unloading of owner supplied items such as Service Regulator module with canopy as per technical specification from Owner's designated stock yards to Contractor's stores / work sites. Testing, Commissioning & Installation of Service Regulators as per drawing no. Drg No 14588-20-05-37), Rev 0. Supply and installation of regulator boxes including fabrication as per drawing no. Drg No 14588-20-05-42), and painting as per technical specification. Any other material & activities not mentioned/covered above, but otherwise required for satisfactory completion/safety of work as defined in tender has to be supplied / done by contractor with in specified schedule at no extra cost to owner.					

 Strength & Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519						
	SEGMENT - 2 : DELHI (SOUTH, CENTRAL & EAST ZONE)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
19.2.1	installation and commissioning of SR module with canopy	Nos	1020556	281	5,050.01	14,19,001.31	
20	Foundations works for Service Regulator						
	Providing and laying of Plain Cement Concrete (PCC - 1:2:4)						
	Providing, Fixing, Centering, Shuttering and laying of Cement Concrete with concrete of nominal mix 1:2:4 by mass (1 cement 2 coarse sand 4 coarse stone/aggregates/gravels) with 20 mm down size graded crushed stone / aggregates / gravels as per technical specification. Any other material & activities not mentioned/covered above, but otherwise required for satisfactory completion/safety of work as defined in tender has to be supplied / done by contractor with in specified schedule at no extra cost to owner.	Nos	1013044	391	6,422.29	25,10,776.00	
21	Supply & Installation of Crash guard for Service Regulator						
	service will cover site clearance, RCC structure M-25 upto plinth level, painting s&t and S&f of steel structure of all levels	Nos	1020557	391	10,816.66	42,28,745.26	
PART III	Civil Works						
22	Foundation works						
22.1	Excavation, Providing and Laying Reinforced Cement Concrete (M-20)						

 Ensuring Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 2 : DELHI (SOUTH, CENTRAL & EAST ZONE)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Excavation in any plane & dimension including disposal of excavated earth up to any lead in all conditions, backfilling using serviceable earth and disposal of surplus and unserviceable earth. Soil to be levelled and properly compacted complete in all respect as per scope of work, technical specification and directions of EIC / Site-in-charge. Providing and laying REINFORCED CEMENT CONCRETE OF M-20 Grade (Concrete shall be design mix / nominal mix) with 20mm & down size graded crushed stone aggregates in NON SUSPENDED slabs/pavement slabs including pedestals, ramps etc., laying in alternate panels to required slopes, all necessary form work and finishing the top surface rough or smooth as required and directed, providing pockets/openings etc. including vibrating, tampering, curing, rendering and making smooth if required in any position, shape, level and thickness etc. as specified and directed by EIC / Site-in-charge. The rates include grouting of pockets, supply of material, shuttering, tools & tackles, Reinforcement etc.	CuM	1008323	20.4	12,777.04	2,61,094.62
22.2	Providing and Laying Plain Cement Concrete (1:4:8) Providing & laying, Fixing, Centering and Shuttering of plain cement concrete with nominal mix 1:4:8 by mass (1 cement: 4 coarse sand: 8 coarse stone/ aggregates/ gravels) with 20 mm down size graded etc as specified in specifications .	CuM	1007178	3.4	5,506.75	18,688.11
23	Shifting and Installation of Field Regulating Station (For weights ranging from 1 Ton to 10 Ton) Dismantling/loading from IGL site/store and its transportation to IGL store/Site with its unloading and installation of FRS/MRS as per the instructions of Site In-charge/ EIC. The shifting of FRS/MRS skids on the platform / foundation shall be done using cranes / hydra as required by the site condition.	Nos	1013023	1	39,931.82	48,092.36
24	Supply & Installation of Half round concrete sleeve (Crush Guard) Installation of half round concrete sleeve for service line shall be done by sealing the annulus between pipe & sleeve, firm fixing of concrete sleeve by concrete mix pedestal, clamping, sand filling etc. Half round concrete sleeve shall be made as per drawing no 14588-10-03-33. Installation shall be done after instruction of IGL/PMC.					
24.1	Project	CuM	1013024	200	692.68	1,38,536.94
24.2	O&M (existing regulator piece)	Nos	1013025	200	711.98	1,42,395.90
25	Supply & Installation of RCC Slab 100 mm thk X 300 mm width Supply & Installation of RCC (M20) Slab 100 mm thk X 300 mm width; This SOR may be used only after instruction of EIC / Site-in-charge.	M	1014794	200.0	492.02	98,403.67
26	Installation of Valve Chambers: All civil works including supply of materials, excavation of pit, piping supports including all PCC, RCC and Brick works for valve pits, sand filling to cover valve body, pedestals with insert plates as required, sealing of pipes in pits, providing cover etc., finishing, clean up and restoration. The work shall be executed as per specification. Also providing water proofing agents internal and external plaster of chamber to avoid water seepage. Refer Drg No 14588-20-03-- 20, 21, 22.& 23)					
26.1	Brick Valve Chambers- Size (L x W)- 2m x 1 m	Nos	1013026	1	59042	59,042.17
26.2	RCC Valve Chambers- Size (L x W)- 2m x 1 m	Nos	1013027	7	62917	4,23,194.04
26.3	Brick Valve Chambers- Size (L x W)- 1.5m x 1 m	Nos	1013028	2	51901	99,245.48
26.4	RCC Valve Chambers- Size (L x W)- 1.5m x 1 m	Nos	1013029	454	48956	2,22,23,084.87
26.5	Brick Valve Chambers- Size (L x W)- 1 m x 1 m	Nos	1014795	4	42484	1,69,937.12
26.6	RCC Valve Chambers- Size (L x W)- 1 m x 1 m	Nos	1014796	1	39495	26,432.57
26.7	RCC Valve Chambers- Size (L x W)- 0.85 m x 0.85 m	Nos	1014797	1	33433	33,432.95
26.8	CONSTRUCTION OF LONG STEM VALVE CHAMBER	Nos	1020558	278	41,145.00	1,14,35,103.83

 Diligence & Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 2 : DELHI (SOUTH, CENTRAL & EAST ZONE)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
26.9	PRE-CAST Valve Chambers- Size (L x W)- 2m x 1 m	Nos	1020559	3	69209	1,99,505.76
26.10	PRE-CAST Valve Chambers- Size (L x W)- 1.5m x 1 m	Nos	1020560	195	53852	1,04,76,597.15
26.11	PRE-CAST Valve Chambers- Size (L x W)- 1 m x 1 m	Nos	1020561	1	43444	43,444.00
26.12	PRE-CAST Valve Chambers- Size (L x W)- 0.85 m x 0.85 m	Nos	1020562	1	36776	36,776.25
26.13	PRE-CAST Valve Chambers- Size (L x W)- 0.6 m x 0.6 m	Nos	1020563	2	29841	71,617.30
26.14	RCC Valve Chambers- Size (L x W)- 0.6 m x 0.6 m	Nos	1014798	6	27128	1,51,915.48
27	Brick Work					
	Providing brick work with brick class designation M-7.5 of IS:1077 in cm1:4 (1 cement : 4 sand) in steps, walls, retaining walls and load bearing structures drains, or any shape with all lead, depths & height including curring, scaffolding, etc., as per specifications and drawings with all bye-works and direction of the Engineer-incharge.	CuM	1014799	0.6	7,778.71	4,415.43
	Rate to include cost of all labour, tools, tackles, equipment, hire charges, supply of all materials such as minimum 43 grade cement, bricks, finishes, bitumen, other minor constrcution materials, shuttering, staging, masonry work, plastering, painting etc. with all bye-works and sundry works).					
	Note: The quantites of individual item can varied as per site requirement.The payment will be made as per actual certified measurement at site.					
28	Construction of trenches in Builder segment / Private Property i.e Multistory buildings / apartments with no movement of Heavy Vehicles, surrounded with Boundary wall)					
28.1	Construction of dedicated trench (as per approved drawing) with removable top cover, scope includes excavation of trench, construction of brick wall, waterproofing of trench, installation of precast RCC slab covers (including supply) Ref. drawing 14588-10-03--34 Trench Dimension- 0.6m x 0.66m x 1.0m (d x w x l)	M	1013030	0.2	6,479.21	1,563.61
28.2	Construction of dedicated trench (as per approved drawing) with removable top cover, scope includes excavation of trench, construction of brick wall, waterproofing of trench, RCC slab (150mm thick and 300mm width) at the top and RCC slab (100mm thick and 300mm width) at bottom. However, where MDPE laid on the basment top, roof of basment shall be treated as the bottom. There shall be sand filling across three sides of the line pipe of 100mm each shall be required to be taken by contractor in consultation with EIC / Site-in-charge as per latest PNGRB Guidelines. Minimum pipe top cover of 375 mm is required and the line pressure shall not exceed 110mbar. Trench Dimension- 0.375m x 0.66m x 1.0m (d x w x l)	M	1013031	2.0	5,524.11	11,048.22
28.3	Excavation of trench and installation of 6" GI Pipe C Class by any method (Open /Moiling) , and restoration for road crossing upto 7.0 m inside society as 14588-10-03-43 Note- In case of restoration SOR Item no. 5 shall be applicable over and above this SOR.	M	1013032	6.5	2,857.57	18,676.95
28.4	Sand Filling in any type of trenches in builder segment only; Scope includes supply of coarse sand (Size 0.6 To 2.0mm) as per IS 383 free from impurity like clay, mica and soft flaky pieces as per instruction of EIC / Site-in-charge. Note- Actual qty.(Cu.m) of sand filling for 28.1, 28.2 & 28.3 shall be claimed in this SOR	Cu.M	1013033	2.0	1,143.22	2,286.44
PART V	MRS FABRICATION AND INTERNAL PIPING WORKS FOR INSTALLATION OF INDUSTRIAL & COMMERCIAL CONNECTIONS					
	Receiving, handling, loading, transportation and unloading of owner supplied MDPE pipes & fittings, warning mat and other free issue items from IGL's designated stock yards to Contractor's own stock-yards/ work-sites. Proper storing, stacking, identification, providing security, and insurance cover for the materials. Liaisoning with Landowning agencies / statutory authorities, preparation of detailed route plan, making trial pits to determine the underground utilities/ services etc., obtaining permission from Land owning agencies, restoration of the abandoned trial pits (excavation to depth 1.5 m or more as satisfaction to EIC) to original condition. Barricading the work area as per the procedures & drawings provided in the tender and as per the directions of EIC / site-in charge. Trenching to the required depth in all type of surface, uncoiling / stringing of pipes, damping, jointing of the pipe ends/ fittings/ valves by qualified personnel, using approved electro fusion techniques as per specification. Restoration of extra excavated portion along the TF point is inclusive in connection rates irrespective of the size of pit excavated at TF point and shall not be charged separately.					
29	MDPE Pipeline laying in all type of surface by any method					
29.1	Laying rates of 32&63 mm Dia MDPE pipeline - pipe length upto 25.00 mtrs for industrial and commercial connections	Nos.	1020564	50	26,520.91	13,26,045.60
29.2	MRS Installation					
29.2.1	Connection rates for installation of CS MRS with 1" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports	Nos.	1014449			

	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 2 : DELHI (SOUTH, CENTRAL & EAST ZONE)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
29.2.2	Connection rates for installation of CS MRS with 1-1/2" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014450			
29.2.3	Connection rates for installation of CS MRS with 2" pipe & fittings with RPD Meter up to G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1012050			
29.2.4	Connection rates for installation of CS MRS with 3" pipe & fittings with RPD Meter above G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1014451			
	Note: a. Supply & Installation of required size of brass fittings in all type of meters supplied by IGL shall be in scope of contractor. B. Supply & installation of SS Tubing with fitting shall be in scope of contractor; Maximum length is 2.0m per MRS installation. C. 10% payment shall be released only after instllation of caging.					
30	CS Common Headers for MRS installation - Supply, Erection, welding & Installation of CS pipes & fittings (all types) except Ball Valves as common headers along with branching for commercial connections.					
	In addition to other activities under SOR item no. 29 and as detailed in specification and as per the instructions of the EIC / Site engineer of Owner. Erection, Fabrication, Welding & Installation of common headers of CS pipes & Fittings till isolation valves for fixing of numerous meters through a single header and includes connecting of common Regulators on headers, NPT threading, Radiography, as specified, Drillings of holes through the walls Brick, RCC, Granite, Marble, Wood Cutting, Glass Cutting with proper heavy duty hammer drill machine, tools & tackles, using proper sealant/grout material and colors to match the original replacement of the damages during drilling, restoring the area to the original condition, Painting of entire length of pipe along with fittings after proper surface finish by one coat of approved primer paint and two coats of approved synthetic enamel paint. Restoring the wall surface to original conditions, Supply & fixing of approved MS angle clamps, Ceiling clamps & dowel plugs with screws, supply and insertion of insulation material i.e. PVC, PTFE sheet between pipe/ meter support and pipe/ meter, grout material, suitable thread sealant i.e. Teflon Tape / lock tight, Supply of different sizes 1" to 4", 150# spiral wound gasket, studs & bolts (various sizes with wire sealing arrangement wherever required), Joining of transition ftg. to above ground CS pipes, testing, purging and commission of the complete installation. Supply and installation of STANDARD Y TYPE FLANGE END STRAINER between T.F. I.V. to Regulator Inlet. Strainer size may be 1", 2", 3" & 4" corresponding to installed TF size. The payment for supply and installation of Y type strainer is included in MRS fabrication. The meters installed on tap offs from common header will be paid separately as per SOR No. 30.3 to 30.6					
30.1	2" pipes & fittings	RM	1007245			
30.2	4" pipes & fittings	RM	1007246			
30.3	Connection rates for installation of CS MRS with 1" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014449			
30.4	Connection rates for installation of CS MRS with 1-1/2" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014450			
30.5	Connection rates for installation of CS MRS with 2" pipe & fittings with RPD Meter up to G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1012050			
30.6	Connection rates for installation of CS MRS with 3" pipe & fittings with RPD Meter above G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1014451			
	Note: a. Supply & Installation of required size of brass fittings in all type of meters supplied by IGL shall be in scope of contractor. B. Supply & installation of SS Tubing with fitting shall be in scope of contractor; Maximum length is 2.0m per MRS installation C. 10% payment shall be released only after installation of caging					
30.7	Supply & Installation of Pressure Gauges					
30.7a	RANGE 0-100 MBAR - 4"- DIAL SIZE	Nos.	1012127			
30.7b	RANGE 0-1 BAR - 4"- DIAL SIZE	Nos.	1007252			
30.7c	RANGE 0-4 BAR - 4"- DIAL SIZE	Nos.	1007253			
30.7d	RANGE 0-6 BAR - 4"- DIAL SIZE	Nos.	1007254			
30.8	Supply & Installation of FLANGE END BALL VALVES, MAOP- 4 BAR					
30.8a	4"	Nos.	1007181			
30.8b	2"	Nos.	1007182			
30.8c	1-1/2"	Nos.	1009365			
30.8d	1"	Nos.	1007283			
30.9	Supply & Installation of FLANGE END GLOBE VALVES, MAOP- 4 BAR					
30.9a	2"	Nos.	1007182			
30.9b	1-1/2"	Nos.	1012130			
30.9c	1"	Nos.	1007283			

 Energy & Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
	TENDER NO. : IGL/ET2/CP/CP18519					
	SEGMENT - 2 : DELHI (SOUTH, CENTRAL & EAST ZONE)					
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
30.10	Supply & Installation of BRASS ISOLATION VALVE					
30.10a	2"	Nos.	1007182			
30.10b	1-1/2"	Nos.	1012130			
30.10c	1"	Nos.	1007283			
30.10d	1/2"	Nos.	1012135			
30.11	Supply & Installation of STRAINER					
30.11a	2"	Nos.	1007182			
30.11b	1"	Nos.	1007283			
30.12	WELDING OF JOINTS - Butt Weld Joints					
30.12a	4"	Nos.	1007181			
30.12b	3"	Nos.	1007287			

 Energy & Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 2 : DELHI (SOUTH, CENTRAL & EAST ZONE)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
30.12c	2"	Nos.	1007182			
30.12d	1-1/2"	Nos.	1012130			
30.12e	1"	Nos.	1007283			
30.12f	1/2"	Nos.	1012135			
30.13	Fillet Joints & Supply of Socolet					
30.13a	1"	Nos.	1007283			
30.13b	1/2"	Nos.	1012135			
30.14	RADIOGRAPHY OF JOINTS					
30.14a	4"	Nos.	1007181			
30.14b	3"	Nos.	1007287			
30.14c	2"	Nos.	1007182			
30.14d	1-1/2"	Nos.	1012130			
30.14e	1"	Nos.	1007283			
30.14f	1/2"	Nos.	1012135			
30.15	SUPPLY/ INSTALLATION OF CLAMPS, SUPPORTS FOR ERECTION OF ALL SIZES OF PIPELINE					
30.15a	TYPE-1, SIDE WALL MOUNTED AS PER DRAWING	KG	1015931			
30.15b	TYPE-2, GROUND BASED AS PER DRAWING	KG	1015932			
30.15c	TYPE-3, CEILING MOUNTED AS PER DRAWING	KG	1015933			
30.16	SUPPLY OF THREADED END BALL VALVE					
30.16a	1"	Nos.	1007283			
30.16b	1/2"	Nos.	1012135			
30.17	SUPPLY OF FLANGES AS PER SPECIFICATION					
30.17a	WNRF 3"	Nos.	1012136			
30.17b	WNRF 2"	Nos.	1012137			
30.17c	BLRF 3"	Nos.	1012138			
30.17d	BLRF 2"	Nos.	1012139			
30.17e	Spectacle Blind 3"	Nos.	1012140			
30.17f	Spectacle Blind 2"	Nos.	1012141			
30.18	SUPPLY OF REDUCER					
30.18a	3" X 2"	Nos.	1012142			
30.18b	2" x 1-1/2"	Nos.	1012143			
31	Modifications & Installation of Meters & Regulators in existing MRS/Skids/DRS:					
	Assessment of material requirement for installation at site, Order placement for purchasing of CS Pipes & fittings from anyone of approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, Dispatch clearance, handling, loading, transportation and unloading of these at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of owner supplied above ground fittings like regulators, meter & Isolation Valve and other free issue items as defined in specification from Owner's designated stock yards to Contractor's own stores / work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches for modification, schedules & execution procedures and all others necessary documentation. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices.					
	Taking shutdown of existing MRS, dismantling meters/regulators, replacement/fixing of meters/regulators with associated inlet and outlet connections / fittings, supply of pipes & fittings (excluding flange end Ball Valve), pipe cutting, threading, welding, testing, Radiography of Joints & firmly fixing with approved meter clamps/brackets and other supports by proper grouting and necessary documentation. Restoring the area to the original condition as per the specifications and to complete satisfaction of consumer and EIC. The rates includes all as above along with testing of joints till re-commissioning.					

 Strength & Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 2 : DELHI (SOUTH, CENTRAL & EAST ZONE)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
31.1	Diaphragm meter	Nos.	1012153			
31.2	RPD Meter	Nos.	1012154			
31.3	Turbine Meter	Nos.	1012155			
31.4	300 mbar regulator	Nos.	1012156			
31.5	500 mar regulator	Nos.	1012157			
31.6	2 bar regulator	Nos.	1012158			
31.7	Butt Weld Joints					
31.7a	4"	Nos.	1007181			
31.7b	3"	Nos.	1007287			
31.7c	2"	Nos.	1007182			
31.7d	1-1/2"	Nos.	1012130			
31.7e	1"	Nos.	1007283			
31.8	Supply & Installation of CS Piping (Seamless A 106 Gr-B, Sch-40)- 150 #					
31.8a	4"	MR	1009386			
31.8b	3"	MR	1007287			
31.8c	2"	MR	1007182			
31.8d	1-1/2"	MR	1012130			
31.8e	1"	MR	1007283			
	Modifications/ replacements (meter or regulator or both) in existing MRS/Skids/DRS using threaded fittings/ flanged end (same size or bigger) shall be payable through SOR Item No. 31.1 to 31.6.					
	Modifications/ replacements (meter or regulator or both) in existing MRS/Skids/DRS using welding (same size or bigger upto 3.00 mtrs) shall be payable through SOR Item No31.7					
	Modifications/ replacements (meter or regulator or both) in existing MRS/Skids/DRS using welding (in case, erected length after modification is more than 3.00 mtrs) shall be payable through SOR Item No. 31.8					
	The payments of flange end ball valve shall be paid as per SOR Item No. 30.8.					
32	Restoration of old MRS (after 1 year/Complete defect liability)					
	Cleaning, Repair,Testing, painting, tightening of bolts of old Metering and Regulating skids	Nos.	1015934			
33	Conversion of Commercial Appliances:					
	Conversions of all types of appliances to NG based appliances. Supply & changing of the nozzles /jets and associated controls for Non-domestic appliances (imported appliances included) with proper tools and tackles. Cleaning and performing minor maintenance, greasing etc. of the appliance. Testing and showing the performance to the customer, signing of joint meter records (JMR) and instructing the customer on use & safety norms, complete as per specifications & to satisfaction of owner / Engineer in Charge and includes supply of reinforced rubber hose with requisite pressure rating.					
33.1	NG conversion for domestic appliances (G 1.6)	Nos.	1015935			
33.2	NG conversion for all commercial appliances	Nos.	1007175			
	Note: The payments of conversion shall be as per burners.					
34	Supply of lock & Keys for MRS Cages					
	Padlock with Lever mechanism shall be durable solid body to resist corrosion. Shackle shall be hardened electroplated to resists hacksaw cutting and rusting under normal atmospheric conditions.	Nos.	1015936			
	Civil Works					
35	Demolition of PCC work below plinth level					
	Demolishing plain cement concrete (PCC) work (taking all necessary safety precautions) for all depths below plinth level including supply of all tools & tackles, necessary scaffolding, propping, underpinning, etc. , disposal of unserviceable material outside the IGL boundary limits kipping the IGL indemnified of any liabilities from statutory/ local bodies, all complete work as specified and directed	Cu. M	1009367			
36	Excavation for foundation works					
	Excavation as per plan, upto 3 meters and upto any lead in all conditions, backfilling using serviceable earth and disposal of surplus and unserviceable earth. Soil to be levelled and neatly dressed complete in all respect as per scope of work, technical specification and directions of EIC.					
	Upto 3.0 Mtrs	Cu. M	1007176			
37	Foundation works					
37.1	Providing and Laying Plain Cement Concrete (1:2:4)					
	Providing & laying, Fixing, Centering and Shuttering of plain cement concrete with nominal mix 1:2:4 by mass (1 cement: 2 coarse sand: 4 coarse aggregates) with 20 mm down size graded aggregates/ gravels as specified in specifications and satisfaction to the EIC.	Cu. M	1007177			
37.2	Providing and Laying Plain Cement Concrete (1:4:8)					
	Providing & laying, Fixing, Centering and Shuttering of plain cement concrete with nominal mix 1:4:8 by mass (1 cement: 4 coarse sand: 8 coarse stone/ aggregates/ gravels) with 20 mm down size graded etc as specified in specifications and satisfaction to the EIC.	Cu. M	1017159			
37.2	Supply and Fixing of Deformed Steel Bars Reinforcement					

 Integrity & Quality		ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 2 : DELHI (SOUTH, CENTRAL & EAST ZONE)							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	Supply and placing in position high strength deformed steel bars reinforcement (conforming to IS: 1786, Grade Fe 415) for RCC work including transporting, straightening, cleaning, de-coiling, cutting & binding to required shapes and length as per details, binding with contractor's own 16 SWG black soft annealed binding wire at every intersection, supplying and placing with proper cover blocks, supports, chairs, overlaps, welding, spacers, fan hooks etc. for all heights and depths etc. complete the work as directed.	KG	1009380				
37.4	Providing and Laying Reinforced Cement Concrete (M-25)						
	Providing and laying REINFORCED CEMENT CONCRETE OF M-25 Grade (Concrete shall be design / nominal mix) with 20mm & down size graded aggregates in NON SUSPENDED slabs / pavement slabs including pedestals, ramps etc. filling pockets with grouting, laying in alternate panels to required slopes, all necessary form work and finishing the top surface rough or smooth as required and directed, providing pockets/openings, recesses, chamfering etc. wherever required, vibrating, tamping, curing, and rendering smooth if required in any position, shape, level and thickness etc. all complete as specified, shown and directed. Rates to include all materials (other than steel), labour, shuttering and necessary works required to make work complete.	Cu. M	1007179				
37.5	Dismantling of RCC & cutting of reinforcement (Thickness above 3")	Cu. M	1012161				
Internal Piping Work							
38	Internal Piping - Supply, Erection & welding of CS pipes & fittings (all types) except Ball Valves for commercial connections.						
	Assessment of material requirement for installation at site, Order placement for purchasing of CS Pipes & fittings from anyone of approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, Dispatch clearance, handling, loading, transportation and unloading of these at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of contractor supplied material as defined in specification from Contractor's designated stock yards to IGL's work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches, schedules & execution procedures and all others necessary documentation. Finalising Piping location with optimum route in consent of customer from Meter Outlet till Customer's Appliance. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices.						
38.1	Supply, Erection, Welding, Radiography & Testing of CS Seamless A 106 Gr-B Pipeline. It includes supply of all type of fittings (except ball valves), Supply Of Consumables Like Spiral Wound Gaskets (Winding ANSI 304 Graphite Centering Ring Cs), Stud Bolts (ASTM A 193 B 7, Hexagonal Nuts, ASTM A194 Gr 2H) and is inclusive in rates.						
38.1a	4" NB, Sch-40	MR	1007159				
38.1b	3" NB, Sch-40	MR	1007160				
38.1c	2" NB, Sch-80	MR	1007161				
38.1d	1-1/2" NB, Sch-80	MR	1007162				
38.1e	1" NB, Sch-80	MR	1007163				
38.2	Supply, Erection, Welding, Radiography & Testing of CS Seamless / HFW API 5L GR-B Pipeline. It includes supply of all type of fittings (except ball valves), Supply Of Consumables Like Spiral Wound Gaskets (Winding ANSI 304 Graphite Centering Ring CS), Stud Bolts (ASTM A 193 B 7, Hexagonal Nuts, ASTM A194 Gr 2H) and is inclusive in rates.						
38.2a	4" NB	MR	1007164				
38.2b	3" NB	MR	1007165				
38.3 Supply & Installation of Safety Devices as per PNGRB gudelines							
38.3a	1" Solenoid Valves	Nos.	1012145				
38.3b	1.5" Solenoid Valves	Nos.	1012146				
38.3c	2" Solenoid Valves	Nos.	1012147				
38.3d	2.5" Solenoid Valves	Nos.	1012148				
38.3e	ATEX/PESO/CMRI approved Gas detectors	Nos.	1012144				
38.3f	1" Shutoff valve	Nos.	1012149				
38.3g	1.5" Shutoff valve	Nos.	1012150				
38.3h	2" Shutoff valve	Nos.	1012151				
38.3f	2.5" Shutoff valve	Nos.	1012152				
39	Internal Piping - Supply & Installation of Powder Coated GI pipes & fittings (all types) except Ball Valves for commercial connections.						

		ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 2 : DELHI (SOUTH, CENTRAL & EAST ZONE)							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	Assessment of material requirement for installation at site, Order placement and Purchasing of Powder coated GI Pipes & GI fittings from approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, getting dispatch clearance, handling, loading, transportation and unloading of these items at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of owner supplied above ground fittings such as Isolation Valves and other free issue items as defined in specification from Owner's designated stock yards to Contractor's own stores / work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches, schedules & execution procedures and all others necessary documentation. Finalising Piping location with optimum route in consent of customer from Meter Outlet till Customer's Appliance. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices.						
39.1	Supply installation & Testing of Powder coated GI Pipes. It includes supply of all type of fittings (except Isolation valves), Supply & fixing of approved clamps & nylon rawl plugs with SS 304 2" screws, grout material, suitable thread sealant i.e. Teflon Tape, etc. and is inclusive in rates.						
39.1a	1/2" GI Pipe	Mtr	1015937				
39.1b	3/4" GI Pipe	Mtr	1015938				
39.1c	1" GI Pipe	Mtr	1015939				
40	Supply & Fabrication/Erection of Wired cages for MRS						
	Assessment of material requirement for installation at site, Order placement for purchasing of MS Angle, Flat, wire mesh & fittings from anyone of approved vendors of IGL, Scheduling, Planning of material & handling, loading, transportation and unloading of these at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of contractor supplied material as defined in specification from Contractor's designated stock yards to IGL's work sites, proper storing, stacking, identification, providing security and insurance cover. Finalising Cage location with in consent of customer & IGL. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices. Supplying & Fixing 4 mm thick MS welded wire mesh (30 mm x 75 mm) by welding/bolting with structural steel elements (Angle & Flat) for making covers for MRS and various other equipments for protection of equipments. Rates to include one coat of primer and two coats of synthetic enamel paint (both side of wired cages), labour, material, transportation, loading/ unloading of material, welding charges etc complete in all respects. For fabrication of cage structure, all the essential jobs viz. cutting, welding, grinding, finishing, painting including all materials like Angle, channel, wire net, support sheet, hardware, electrode, grinding wheel, gas cylinder, paint, primer, grouting, equipment, tools, generator for power, welding machine etc. is under contractor's scope						
40.1	Supply (Angle 65 mm x 65 mm x 6 mm, Flat 50 mm x 6 mm & Wire Mesh 75 mm X 30 mm X 4 mm), fabrication, painting, transportation and installation of MRS cages for SKID by welding/bolting with structural steel elements for making covers for industrial/ commercial PNG meter-regulator systems as per detailed scope of work & Drawing.	MT	1015282				
40.2	Supply (Angle 40 mm x 40 mm x 5 mm, Flat 25 mm x 4 mm & Wire Mesh 75 mm X 30 mm X 4 mm), fabrication, painting, transportation and installation of MRS cages for WALL MOUNTED MRS by welding/bolting with structural steel elements for making covers for industrial/ commercial PNG meter-regulator systems as per detailed scope of work & Drawing.	MT	1015293				
41	Supply & Installation Crash Guard for Cage Protection						
	Supply, fabrication, painting, transportation and installation of Crash Guard for protection of Wall Mounted cages for industrial/ commercial PNG meter-regulator systems as per detailed scope of work & Drawing.	MT	1014813				
	Total Cost (INR)					2,34,54,96,371.09	
	GST @ 18%					42,21,89,346.80	
	Total Cost incl. GST (INR)					2,76,76,85,717.89	
	Total Cost inc. GST (in Cr.)					276.77	

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 3 : GAUTAMBUDDH NAGAR, GHAZIABAD & HAPUR						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
PART-I	MDPE LAYING					
	Route survey of allotted areas and Preparation /Submission of detailed route plan for approval by EIC in AutoCAD format. Receiving, handling, loading, transportation and unloading of owner supplied MDPE pipes & fittings and other free issue items from IGL's designated stock yards to Contractor's own stock-yards/ work-sites. Proper storing, stacking, identification, providing security and insurance cover for the materials. Liaisoning with Landowning agencies / statutory authorities and obtaining permission from them (Separately payable as per SOR Item No.10), making trial pits to determine the underground utilities/ services etc., restoration of the abandoned excavation/ trial pits (excavated to depth of 1.5 m or more as per satisfaction to EIC / Site-in-charge) to original condition, barricading the work area as per the procedures & drawings provided in the tender and as per the directions of EIC / Site-in-charge; uncoiling / stringing of pipes, jointing of the pipe ends/ fittings / Transition fittings/ valves by qualified personnel, using approved electro fusion techniques as per specification.					
	Laying using any method (Open trench, Moling and HDD) with or without casing; it includes survey of the under ground utilities, submission of pre & post HDD profile for approval, execution of the work as per specification (as per trench dimension Drg No 14588-10-03--27), including excavation of pits, moling with hole size not exceeding 20% of the the carrier / casing pipe dia. jointing and insertion of the carrier pipe in casing pipe (on case to case basis) and subsequent padding with soft soil, laying of warning mat in open trench only, backfilling, compaction, submission of as built drawing, as graphs as per attached specification and instruction of EIC / Site Engineer of Owner. Includes laying of pipeline in all type of surface including Kutcha, metal, concrete (PCC/RCC), bituminous, tiled, brick lined etc. after raking up of hard surface of any type; Roads, Pavement, Footpaths etc. shall be made motorable once the pipeline is laid.					
	In case, it is impractical to provide 1.0-meter cover due to physical constrain, additional protective measures such as concrete slab or high impact resistance plastic sheet shall be installed (for the minimum top cover of 600 mm) by the contractor in consultation with EIC / Site-in-charge. EIC / Site-in-charge after examining thoroughly and considering the PNGRB Guidelines may allow the contractor. However, the contractor has to raise technical deviation for approval before commence of work. All the technical deviation shall be submitted with the RA bills.					
	Supply & installation of GI Sleeves, 2.5" NB x 300 mm length GI pipe Sleeve / Half Round Concrete Sleeves for domestic connections, 3" NB x 300 mm length GI Sleeve for commercial and industrial installations (as per GI Pipe Sleeve Drg No 14588-10-03--18), and 1/2 Round concrete sleeve, Drg No 14588-10-03--33) excavation, breaking through any obstructions, insertion of pipe, sealing the annulus, fixing of the sleeves with concrete mix, preparation of pedestal & restoration of excavated pits within the size of pedestal & the same pit with the laying of 20/32 mm dia MDPE pipe as defined in technical specification and instruction of EIC.					

 emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 3 : GAUTAMBUDDH NAGAR, GHAZIABAD & HAPUR						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Flushing, cleaning ,Pneumatic testing, purging with nitrogen and commissioning as per specification and approved procedures providing all tools and tackles, nitrogen, instruments, manpower and other related accessories and as per instructions of the Engineer-in charge.					
	Maintaining the completed pipelines / installation for any defect, failures during defect liability period .					
	Handing over the completed works to IGL for their operation/ use, returning of all surplus material to IGL stores, reconciliation of free issue material area wise and obtaining no objection certificate.					
	On completion of gas charging of pipelines, preparation and submission of As built drawings, crossings details, termination, utility graphs and deviation statements.					
	Submission of all documents required for contract closure in numbers as mentioned in contract.					
	Note- Supply & installation of GI Sleeve / Half round Concrete sleeve and warning mat (open trench excavation) shall be included in laying of MDPE pipe.(Refer Drg No. 14588-20-03--18); Laying in Brick trench shall not payable in this SOR; In such cases SOR No. -20 is valid.					
	GIS data shall be collected of laid MDPE pipeline network. Data like Geo Co-ordinates (latitude, longitude) of Pipeline and related features like fittings, valves, FRS, MRS, Markers etc. shall be collected as per given procedure along with 50 m land base corridor (25 m on either side of the pipeline) with min. accuracy of 50 cm. Data format shall be in shape (.shp) or Geo Database (.gdb)					
1	MDPE Pipe line laying in Soft soil & all type of surface (Including PCC/RCC Top Surface - Upto 12") , Open Cut / Moling or any other methodology ; Clear cover to pipeline min 1.0m; (Refer Drg No 14588-10-03-27))					
1.1	20 mm dia	M	1020533	5000	372.98	18,64,899.62
1.2	32 mm Dia	M	1020534	373967.5	325.94	12,18,91,091.76
1.3	63 mm Dia (Excluding HDD with casing)	M	1020535	511245.3	377.95	19,32,26,461.35
1.4	125mm dia (Excluding HDD with/without casing)	M	1020536	110956.9	483.71	5,36,71,028.66
1.5	180 mm dia (Excluding HDD with/without casing)	M	1020537	354.7346	561.73	1,99,264.73
	MDPE Pipe line laying in common trench					
1.6	32 mm Dia (in common trench with 32/63/125/180 mm Dia MDPE Pipe)	M	1020538	2750.9	133.50	3,67,231.61
1.7	63 mm Dia (in common trench with 63/125/180 mm Dia MDPE Pipe)	M	1020539	40.34434	160.37	6,469.94
1.8	125mm dia (in common trench with 125/180 mm Dia MDPE Pipe)	M	1020540	2000	200.24	4,00,488.25
	All service lines left out initially during mainline laying, shall be laid under above mentioned SOR within six months of gas charging of a particular area by the same contractor. In Open trench method/ moling, no extra rate shall be payable for casing installation. Roads, Pavement, Footpaths, Kutcha etc. shall be made motorable once the pipeline is laid. Liasoning and HSE shall not be paid wrt this SOR					
2	MDPE Pipe line laying by HDD Method, with Casing					

	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 3 : GAUTAMBUDDH NAGAR, GHAZIABAD & HAPUR						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Survey of the under ground utilities, submission of HDD profile for approval (excluding road and nalla crossings), execution of the work as per the standard procedure attached, including excavation of the pits, Jointing of casing and carrier pipe and insertion of the carrier pipe in casing of dia ranging from 110mm to 160mm for 63 mm, 200mm to 250 mm dia for 125 mm dia MDPE and 250 mm to 315 dia for 180 mm MDPE, subsequent sealing, backfilling, compaction, submission of as built graphs, final HDD profiles as per attached specification and the instruction of EIC / Site Engineer of Owner. The other activities are as per SOR Item No. 1 and as detailed in specification and as per the instructions of the EIC / Site engineer of Owner. The payment shall be made for length of casing pipe laid in HDD, remaining carrier pipe length without casing shall be paid under SOR item no.1					
2.1	63 mm Dia HDD with casing	M	1020541	518.811	492.38	2,55,451.91
2.2	125 mm Dia HDD with casing	M	1020542	553.5445	1,113.06	6,16,127.56
2.3	180 mm Dia HDD with casing	M	1020543	15.66197	1,347.11	21,098.45
3	MDPE Pipe line laying by HDD Method, without Casing					
	Survey of the under ground utilities, submission of profile for approval, execution of the work as per the standard procedure attached, including excavation of the pits, Jointing and insertion of the carrier pipe, subsequent backfilling, compaction, submission of as built graphs and final HDD profiles as per attached specification and the instruction of EIC / Site Engineer of Owner. The other activities are as per SOR Item No. 1 & 2 and as detailed in specification and as per the instructions of the EIC / Site engineer of Owner					
3.1	125 mm Dia HDD without casing	M	1020544	38625.59	612.87	2,36,72,637.67
3.2	180 mm Dia HDD without casing	M	1020545	4237.102	761.11	32,24,898.05
3.3	Laying of MDPE pipeline by HDD method (Maximum length 200m)- This SOR may be applicable only for spans less than 200m where additional mobilization of HDD m/c is required & HDD is the only option to execute the same. Note: There should be no consecutive HDD laying in upstream/downstream within a span of 1KM & This SOR would be applicable for allocations less than 200 m in a single stretch					
3.3.1	63 mm by HDD method (with casing)	Nos.	1020546	4	84,485.47	3,06,527.68
3.3.2	125/180 mm by HDD method(with/ without casing)	Nos.	1020547	5	1,33,535.61	6,33,815.13
4	MDPE Service Line laying in New & old Projects / O&M areas					
	Includes laying of pipeline (for 20 & 32mm) in all type of surface i.e. Kutcha, metal, concrete (PCC/RCC), bituminous, tiled, brick lined etc. after braking up of hard surface of any type by any methodology. Roads, Pavement, Footpaths etc. shall be made motorable once the pipeline is laid. Supply & installation of GI Sleeve / Half round Concrete sleeve shall be included in laying rates. All other activities mentioned in SOR no.1 are applicable.					
	Supply & installation of GI Sleeves, 2.5" NB x 300 mm length Half Round Concrete Sleeves for domestic connections, 3" NB x 300 mm length GI Sleeve for commercial and industrial installations (as per Drg No14588-20-03--18)) excavation, breaking through any obstructions, insertion of pipe, sealing the annulus, fixing of the sleeves with concrete mix, preparation of pedestal & restoration of excavated pits within the size of pedestal & the same pit with the laying of 20/32 mm as defined in technical specification and instruction of EIC. The rates shall include liaison rates with statutory bodies, HSE and no separate rates are payable under this SOR. Wherever service lines are to be laid as per Dwg.- 14885-10-03-46A.					

	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 3 : GAUTAMBUDDH NAGAR, GHAZIABAD & HAPUR						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Note:- a. Old Project area shall be defined as an area where any of following criteria are being met: 1. MDPE line is already been charged for more than 6 months. 2. MDPE is laid and gasified by another contractor (currently not working in respective zone) b. Additional rate for construction of RCC structure for protection of service line shall be payable under SOR no. 4.5					
4.1	For pipe length up to 8 meters (O&M area)	Nos	1020548	11333	5,355.50	6,06,96,341.79
4.2	For pipe length up to 6 meters (Project area)	Nos	1020549	60000	3,170.92	19,02,55,285.39
4.3	For pipe length more than 6 meters (Project area)	M	1020550	30000	332.88	99,86,259.38
4.4	Per meter rate for pipeline more than 8 meters (Per meter additional rate shall be payable above SOR item no. 4.1)	M	1020551	49844.87	332.88	1,65,92,127.11
4.5	Construction of RCC structure for protection of service line (20/32 mm dia.) for drain/nallah (adjacent to house / Boundry walls / Multistory Buildings) crossing as per Dwg.- 14885-10-03-46A					
	The scope includes construction providing and laying reinforced cement concrete of M-25 grade (Concrete shall be design mix/nominal mix) with 20mm & down size graded crushed stone aggregates in Non suspended slabs/pavement slabs including pedestal/ramp etc., laying in alternate panels to required slopes, all necessary form work and finishing the top surface rough/smooth as required in any position, shape, level and thickness etc. The rates includes grouting of pockets, supply of material, tools, shuttering, Reinforce ment etc.	Nos.	1013003	7849	2,048.59	1,60,79,261.14
5	Excavation in Special Conditions:					
5.1	Excavation of trench or pits in Malba/Multiple layers of asphalt/ brick / PCC/RCC etc. The rates are payable over and above the Laying rates as per relevant SOR item no 1					
5.1.1	Cutting of PCC/RCC surface with thickness cumulative more than 12" (in case of multilayer)or Continuous asphalt multi-layer/Malba/Brick/Boulders more than 24". <i>(Malba shall be considered as a strata where soil is in mixed form of debris/building rubbish or discarded pieces of bricks/stones)</i>	M	1012920	2193.335	194.18	4,25,899.68
5.1.2	Cutting of PCC/RCC surface with kneumatic braker and cutter thickness cumulative upto 10" (in case of multilayer) <i>(Malba shall be considered as a strata where soil is in mixed form of debris/building rubbish or discarded pieces of bricks/stones)</i>	M	1020552	548.3339	149.37	81,903.78
5.2	Excavation of Hard Rock:					
	Trenching of Hard Rock is defined as trench material with a single piece of rock, dimension exceeding 1 meter in any direction, which requires cutting only by use of manual/pneumatic chisel/drill or sledge hammer and chisel or removal of same by additional techniques and supply of approved coarse sand (Size 0.6-2 mm as per IS 383) free from any impurities like clay, mica and soft flaky pieces for padding of 150 mm above and below laid pipeline as per the specifications ; The rates are payable over and above the Laying rates as per relevant SOR item no 1	Cu.M	1013004	50	3,700.67	1,85,033.51
5.3	Laying in Congested Area:					
	Congested area shall be defined as an area where MDPE pipeline has to be laid in narrow lanes (Less than 4.5 M including footpath/drains) & houses in such locations have only one side entrance i.e. there is no backlane between two back to back houses & pipeline has to be laid in front of the house. The rates are payable over and above the Laying rates as per relevant SOR item no 1.	M	1012982	22927.89	52.01	11,92,530.69
5.4	Laying in continuous water seepage area:					
	The water seepage area shall be defined as an area where the MDPE pipeline has to be laid, in such locations where continuous water seepage occur during trench activity and the same shall not be possible. In that case, the contractor shall have to deploy additional equipment i.e. de-watering pumps etc. for continuous de-watering so that waterlogging shall be avoided. The rates are payable over and above the Laying rates as per relevant SOR item no 1.	M	1014791	50	27.74	1,386.99

 emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 3 : GAUTAMBUDDH NAGAR, GHAZIABAD & HAPUR						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
5.5	Excavation of Trench / Pit for Tap-off or Hook-up Laocations of new connectivity (1.5 Mtr and above)					
	This item shall cover the deep excavation (depth beyond 1.5 m) of trenches or pits for the identification of existing MDPE pipelines and tap-off or hook-up for new connectivity. Also, required shoring work (including necessary close plank walling, framing, bulla piling, strutting, etc.) shall be done by the contractor. (This item should be executed on specific direction of the Engineer in charge).	No.	1015921	50	16,615.31	8,30,765.35
6	Restoration of trenches					
6.1	Restoration to original conditions of dismantled surface like Asphalted/Bituminous Road, Concrete Pavement, Agra /Kota Stones / Tiles (Chequered/interlocking etc.), Dry Brick Pavement as per the technical specifications attached in the tender after laying of pipeline in Built- Up surface, as per the directions of EIC / Site Incharge. Scope includes supply of the approved quality material, testing of materials by third party agencies as per technical specification / CPWD / IRC Standards, submission of the restoration reports, obtaining no objection certificates from the concern local authorities /land owners / third party inspection agencies designated by land owing agencies and Owner.	Cu.M	1007137	2229.36	3,751.73	83,63,960.77
6.2	Providing & laying, Fixing, of cement concrete interlocking paver blocks of approved size, design shape as per the directions of EIC / Site Incharge. Scope includes supply of the approved quality material, testing of materials by third party agencies as per technical specification / CPWD / IRC Standards.	Sq.M	1014792	27760.61	742.52	2,06,12,845.92
7	Survey GPR					
7.1	For length up to 100 meters	Nos.	1015922	10	8,235.27	82,352.70
7.2	Per meter rate for more than 100 meters (Per meter additional rate shall be payable above SOR item no. 7.1)	M	1013010	10	52.01	520.12
8	Fabrication & Installation of Pipeline Markers:					
	Supply and Installation of Stone Route Markers, Powder Coated Plate / Pole Markers as per the attached drawings, along the route / along boundary wall, lamp posts including all associated civil works such as excavation and construction in all types of soils, construction of pedestals and grouting with concrete, cleaning, supply and application of approved colour and quality of primer and paint, stencil letter cutting of numbers, direction, chainage etc., restoration of area to original condition and performing all works as per drawings, specification and instruction of Engineer-in-Charge. The rates shall include liaison rates with statutory bodies and restoration rates and no separate rates are payable under this SOR.					
8.1	Stone Route Markers as per Drg No14588-10-03--29)	Nos	1013011	14290	574.37	82,07,878.65
8.2	Installation of FRP MARKER	Nos	1020553	541	2,814.51	15,23,997.24
8.3	Pole markers with foundation as per Drawing No. Drg No14588-10-03-30 & 14588-10-03-31) and specification.	Nos	1013012	2166	2,814.51	60,95,988.96
8.4	Plate marker as per Drg No Drg No 14588-10-03--28)	Nos	1013013	31996	262.66	84,04,135.33
9	LIASONING WITH LAND OWNING AGENCIES FOR PERMISSION					
	Submission of applications as per approved drawings provided by owner / owner's representative (Initial Route Survey,Preperation of Drawings, measuring and providing details of surface type shall be in scope of Contractor with approval from Owner / Owner's representative), obtaining & submission of demand note, Coordination, Liaisoning, Obtaining written permissions from Land owing agencies like MCD, PWD, DDA, NDMC, NHAI, AAI, GDA, GNDA, GNN, Forest Dept, NHAI, Indian Railways, other government agencies who maintains the public lands and Private lands i.e. Apartments/institutions etc. Note: Service lines in SOR item no. 4 are not applicable;					
9.1	For All sizes - Liaisoning and getting permissions from NHAI/ Railway/ Forest (Protected & Un-Protected)/ Canal/ River crossings.	M	1012678	106228.5	246.19	2,61,52,517.70
9.2	For All sizes - Liaisoning and getting permissions from New Delhi Municipal Corporation (NDMC)/ PWD	M	1015924	10	116.16	1,161.61

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 3 : GAUTAMBUDDH NAGAR, GHAZIABAD & HAPUR						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
9.3	For All sizes - Actual length of network laid against written permission statutory Authorities (except covered under SOR 9.1 & 9.2)	M	1013014	478028.1	74.55	3,56,37,409.68
9.4	For All sizes - Actual length of network laid where written permissions are not available (other than pvt. Area)	M	1014446	478028.1	46.81	2,23,76,978.17
	*above rates include all other sorts of liasioning including traffic dept.					
10	Charges for compliance to Health, Safety & Environment (HSE) as detailed in Scope of Work.					
10.1	MDPE Section-PPE, Contineous Barricades along the trenches as per approved drawing in tender, Use of Safety Boots, Hand gloves, Reflective jackets, Hard hats(helmets), Safety shoes, eye and ear safety equipments, Fire extinguishers and as per the detailed scope of work in tender specifications.	M	1010126	1062285	19.94	2,11,79,855.88
10.2	GI Section- Safety requirement per Rise- Use of Fall arrestor/ petzl, Ascendors/descendors, PPE, Barricades/ Warning Boards (03 Nos.) connected with warning/Caution tapes in areas where piping work is in progress , Use of Safety shoes, Walky talky, Hand gloves, Reflective jackets, Hard hats(helmets), eye and ear safety equipments, Fire extinguishers and as per the detailed scope of work in tender specifications; In case of non compliance- Refere SCC clause - for applicable penalty . Upto 4th GI (G+4) floor full body safety harness & assessories shall be of KARAM or equivalent make. Note- This SOR is applicable for Non LMC length of GI Section only.	Nos	1010127	23935	482.85	1,15,56,765.37
10.3	GI Section- Safety requirement per Rise-Use of Fall arrestor/ petzl, Ascendors/descendors, PPE, Barricades/ Warning Boards (03 Nos.) connected with warning/Caution tapes in areas where piping work is in progress , Use of Safety shoes, Walky talky, Hand gloves, Reflective jackets, Hard hats(helmets), eye and ear safety equipments, Fire extinguishers and as per the detailed scope of work in tender specifications; In case of non compliance- Refere SCC clause - for applicable penalty . GI (G+5) and above including high rise Above 4th floor full body safety harness & assessories shall be of PETZL is compulsory. Note- This SOR is applicable for Non LMC length of GI Section only.	Nos	1010128	2526	1,128.67	28,51,424.32
PART II	GI / COPPER SECTION					
	Supply & Installation of Powder Coated GI Service Pipe & Fittings					

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 3 : GAUTAMBUDDH NAGAR, GHAZIABAD & HAPUR						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Assessment of material requirement for installation at site, Order placement and Purchasing of Powder coated GI Pipes, GI fittings, Copper pipes & fittings, Brass Fittings from approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, getting dispatch clearance, handling, loading, transportation and unloading of these items at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of owner supplied above ground fittings such as regulators, meters, Isolation Valves & appliance valves and other free issue items as defined in specification from Owner's designated stock yards to Contractor's own stores / work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches, schedules & execution procedures. Finalising optimum route with consent of customer from transition fitting to cooking oven / appliance and ensuring installations in well ventilated area. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices. Portal entry for new connections - New registration tracking and feasibility survey and its updation as per IGL defined TAT;printing of stationary as per approved IGL formats required during connections. Followup and attend complaints receives from customer regarding delay in new connection (ReferDrg No 14588-20-05--01, 02, 03)					
	Installation of GI service pipes & fittings, regulators, Valves etc. including NPT threading, as specified, Drillings of holes through the walls (Brick, RCC), Granite, Marble, Wood Cutting, Glass Cutting with proper heavy duty hammer drill machine, tools & tackles, using proper sealant/grout material and colours to match the original replacement of the damages during drilling, restoring the area to the original condition, Painting of scratched length of powder coated pipe and fittings after proper surface finish by one coat of approved primer paint and two coats of approved synthetic enamel paint. Restoring the wall surface to original conditions.					
	Supply & fixing of approved clamps & nylon rawl plugs with SS 304 2" screws, grout material, suitable thread sealant i.e. Teflon Tape, Joining of transition fitting to above ground service GI pipes, testing, purging and commission of the complete installation. The rates in connections also includes meter installation, tap off rates. The GI installation in already gas charged areas, planning & coordinating with existing consumer's for New tap offs from existing riser with or without tee, testing of these existing risers and commissioning of these connections with newly tapp offs etc.is inclusive.					
11	NON LMC					
11.1	Supply & installation powder coated 1/2" GI Pipe from TF to regulator - up to 1.5 Mtr Length	Nos	1013015	31996	414.86	1,32,73,870.76
11.2	Supply & Installation of powder coated 1/2" GI Riser from regulator isolation valve to appliance for G+3 Apt and Individual kothi /Bungalow. Refer Drg No 14588-20-05--02)	M	1013016	621478.3	392.48	24,39,18,746.13
11.3	Supply & installation of powder coated 3/4" GI Riser from regulator isolation valve to lateral isolation valve for Apt more than G+3 floors. Refer Drg No 14588-20-05-02)	M	1013017	23367.83	419.16	97,94,936.80
11.4	Testing & Commissionioining of already installed Risers GI / Copper Pipe (1/2" / 3/4" / 12mm) Non LMC riser (1/2" / 3/4")	M	1012680	231081.3	56.35	1,30,20,638.96
11.5	Testing & Commissionioining of already installed / Laterals GI / Copper Pipe (1/2" / 12mm / mlc) LMC	Nos	1015925	9960	324.21	32,28,969.73

 emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 3 : GAUTAMBUDDH NAGAR, GHAZIABAD & HAPUR						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
12	LMC					
12.1	PNG connection in Project area-low rise					
12.1.1	Installation of meter with required fittings	Nos.	1020554	29559	1,383.65	4,08,98,938.30
12.1.2	Supply and installation of Gi/ Cu/ MLC pipe along with required fittings from Lateral isolation valve to appliance valve	M	1020555	118235	455.47	5,38,52,841.66
12.2	PNG CONNECTIONS IN O&M AREA (ON EXISTING RISER)					
12.2.1	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2 m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter. Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4m. Payment against additional length of (GI + Cu) shall be as per item 12.2.3 of SOR.	Nos.	1013019	32354	3,422.16	11,07,21,275.91
12.2.2	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 12.2.3 of SOR.	Nos.	1015927	10	3,442.82	34,428.20
12.2.3	Powder coated GI and Cu installations for pipes more than 4 m per connection					
12.2.3.1	1/2" Powder coated GI	M	1013020	90898.32	353.75	3,21,55,261.59
12.2.3.2	12mm Copper /mlc Pipe - Inside kitchen location only	M	1013021	589.3242	354.61	2,08,980.54
13	Collection of registration /KYC forms duly filled with required supporting documents, Submission to IGL marketing on schedule as decided by IGL; This SOR may be used only after instruction of EIC/Site-in-Charge.	Nos	1013022	10	217.58	2,175.84
PART III	HIGH RISE SEGMENT (14 Storey & Above)					
14	MDPE Pipe line laying (20mm / 32 mm / 63mm) in already excavated trench in Builder segment / Private Property i.e Multistorey buildings / apartments with no movement of Heavy Vehicles, surrounded with Boundary wall)					
	Laying in already excavated trench with or without casing ; it includes execution of the work as per specification (as per trench dimension Drg No 14588-10-03-16), laying, electrofusion joints and insertion of the carrier pipe in casing pipe (on case to case basis) laying of warning mat and re-installation of pre cast slabs as per specification and instruction of EIC / Site Engineer of Owner. In Case of sand filling required as instructed by EIC/IGL representative SOR no. 28.4 shall be paid over and above this rate.	M	1013034	100	234.92	23,492.19
15	Supply & Installation of Welded Riser - Non LMC					
15.1	Installation of welded riser 1/2 inch upto isolation valve	M	1013035	5904.454	536.22	31,66,081.99
15.1	Installation of welded riser 3/4 inch upto isolation valve	M	1013036	177503	574.95	10,20,55,520.64
15.1	Installation of welded riser 1 inch upto isolation valve	M	1013037	23699.08	630.04	1,49,31,279.02
15.1	Installation of welded riser 2 inch upto isolation valve	M	1013038	6349.22	1,187.77	75,41,432.41
16	LMC					
16.1	PNG CONNECTIONS IN PROJECT AREA					

 emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 3 : GAUTAMBUDDH NAGAR, GHAZIABAD & HAPUR						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
16.1.1	Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + Cu) shall be as per item 17 of SOR.	Nos.	1013039	6876	3,391.18	2,33,17,620.77
16.1.2	Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 17 of SOR.	Nos.	1017154	342	3,342.98	11,43,298.65
16.2	PNG CONNECTIONS IN O&M AREA (ON EXISTING RISER)					
16.2.1	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2 m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter. Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4m. Payment against additional length of (GI + Cu) shall be as per item 17 of SOR.	Nos.	1013040	50629	3,592.58	18,18,89,713.30
16.2.2	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 17 of SOR.	Nos.	1017155	230	3,572.79	8,21,740.96
17	Powder coated GI and Cu installations for pipes more than 4 m per connection.					
17.1	1/2" Powder coated GI	M	1013041	118488.1	353.75	4,19,15,130.02
17.2	12mm Copper/mlc - Inside kitchen location only	M	1013042	2733.667	391.62	10,70,561.08
18	NG conversion for domestic connection					
18.1	Providing services for NG conversion, monitoring the pendency and conversion of stoves including the supply of material required for conversion of appliance/stove + Tools & Tackles required, Printing of JMR sent by IGL In-charge on email, scanning of signed JMR and submission to In-charge, completion of NG conversion within the defined TAT.	Nos.	1013309	156160	289.53	4,52,13,636.12
18.2	Perfoming Slab hole by using specific tools (wherever required)	Nos.	1015703	100	199.38	19,938.02
18.3	Perfoming Core cutting by using specific tools (wherever required)	Nos.	1015704	100	179.44	17,944.22
18.4	Perfoming glass cutting by using specific tools (wherever required)	Nos.	1015705	100	66.75	6,674.90
18.5	Replacement of defective Meter/Domestic Regulator/Meter Regulator with new ones (which are freely issued by IGL)	Nos.	1015706	22	263.53	5,722.76
18.6	Extension of existing / modification in GI pipeline	M	1015707	157.4858	367.55	57,884.40
18.7	Extension of existing / modification in Cu pipeline	M	1015708	100	355.42	35,541.69
19	Installation of Service Regulator					

 emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 3 : GAUTAMBUDDH NAGAR, GHAZIABAD & HAPUR						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
19.1	Receiving, taking over, handling, loading, transportation and unloading of owner supplied items such as Service Regulator/ SR module with canopy & Isolation Valves and other free issue items as per technical specification from Owner's designated stock yards to Contractor's stores / work sites. Fabrication, Erection, Welding, Testing & Installation of Service Regulators as per drawing no. Drg No 14588-20-05-37), Rev 0. Supply and installation of regulator boxes including fabrication as per drawing no. Drg No 14588-20-05-42), and painting as per technical specification. Any other material & activities not mentioned/covered above, but otherwise required for satisfactory completion/safety of work as defined in tender has to be supplied / done by contractor with in specified schedule at no extra cost to owner.					
19.1.1	Service Regulator with regulator cover and Transition Fittings installation	Nos	1013043	137	9,111.68	12,50,103.51
19.2	Receiving, taking over, handling, loading, transportation and unloading of owner supplied items such as Service Regulator module with canopy as per technical specification from Owner's designated stock yards to Contractor's stores / work sites. Testing, Commissioning & Installation of Service Regulators as per drawing no. Drg No 14588-20-05-37), Rev 0. Supply and installation of regulator boxes including fabrication as per drawing no. Drg No 14588-20-05-42), and painting as per technical specification. Any other material & activities not mentioned/covered above, but otherwise required for satisfactory completion/safety of work as defined in tender has to be supplied / done by contractor with in specified schedule at no extra cost to owner.					
19.2.1	installation and commissioning of SR module with canopy	Nos	1020556	320	5,050.01	16,16,652.94
20	Foundations works for Service Regulator					
	Providing and laying of Plain Cement Concrete (PCC - 1:2:4)					
	Providing, Fixing, Centering, Shuttering and laying of Cement Concrete with concrete of nominal mix 1:2:4 by mass (1 cement 2 coarse sand 4 coarse stone/aggregates/gravels) with 20 mm down size graded crushed stone / aggregates / gravels as per technical specification. Any other material & activities not mentioned/covered above, but otherwise required for satisfactory completion/safety of work as defined in tender has to be supplied / done by contractor with in specified schedule at no extra cost to owner.	Nos	1013044	457	5,541.44	25,34,194.13
21	Supply & Installation of Crash guard for Service Regulator					
	service will cover site clearance, RCC structure M-25 upto plinth level, painting s&t and S&f of steel structure of all levels	Nos	1020557	457	10,816.66	49,46,641.14
PART III	Civil Works					
22	Foundation works					
22.1	Excavation, Providing and Laying Reinforced Cement Concrete (M-20))					

 Ensuring Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 3 : GAUTAMBUDDH NAGAR, GHAZIABAD & HAPUR						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Excavation in any plane & dimension including disposal of excavated earth up to any lead in all conditions, backfilling using serviceable earth and disposal of surplus and unserviceable earth. Soil to be levelled and properly compacted complete in all respect as per scope of work, technical specification and directions of EIC / Site-in-charge. Providing and laying REINFORCED CEMENT CONCRETE OF M-20 Grade (Concrete shall be design mix / nominal mix) with 20mm & down size graded crushed stone aggregates in NON SUSPENDED slabs/pavement slabs including pedestals, ramps etc., laying in alternate panels to required slopes, all necessary form work and finishing the top surface rough or smooth as required and directed, providing pockets/openings etc. including vibrating, tampering, curing, rendering and making smooth if required in any position, shape, level and thickness etc. as specified and directed by EIC / Site-in-charge. The rates include grouting of pockets, supply of material, shuttering, tools & tackles, Reinforcement etc.	CuM	1008323	183.0386	11,024.61	20,17,929.84
22.2	Providing and Laying Plain Cement Concrete (1:4:8)					
	Providing & laying, Fixing, Centering and Shuttering of plain cement concrete with nominal mix 1:4:8 by mass (1 cement: 4 coarse sand: 8 coarse stone/ aggregates/ gravels) with 20 mm down size graded etc as specified in specifications .	CuM	1007178	15.21317	4,751.47	72,284.93
23	Shifting and Installation of Field Regulating Station (For weights ranging from 1 Ton to 10 Ton)					
	Dismantling/loading from IGL site/store and its transportation to IGL store/Site with its unloading and installation of FRS/MRS as per the instructions of Site In-charge/ EIC. The shifting of FRS/MRS skids on the platform / foundation shall be done using cranes / hydra as required by the site condition.	Nos	1013023	10	34,790.11	3,32,002.25
24	Supply & Installation of Half round concrete sleeve (Crush Guard)					
	Installation of half round concrete sleeve for service line shall be done by sealing the annulus between pipe & sleeve, firm fixing of concrete sleeve by concrete mix pedestal, clamping, sand filling etc. Half round concrete sleeve shall be made as per drawing no 14588-10-03-33. Installation shall be done after instruction of IGL/PMC.					
24.1	Project	CuM	1013024	200	597.68	1,19,535.97
24.2	O&M (existing regulator piece)	Nos	1013025	200	614.33	1,22,865.66
25	Supply & Installation of RCC Slab 100 mm thk X 300 mm width					
	Supply & Installation of RCC (M20) Slab 100 mm thk X 300 mm width; This SOR may be used only after instruction of EIC / Site-in-charge.	M	1014794	200	424.54	84,907.17
26	Installation of Valve Chambers:					
	All civil works including supply of materials, excavation of pit, piping supports including all PCC, RCC and Brick works for valve pits, sand filling to cover valve body, pedestals with insert plates as required, sealing of pipes in pits, providing cover etc., finishing, clean up and restoration. The work shall be executed as per specification. Also providing water proofing agents internal and external plaster of chamber to avoid water seepage. Refer Drg No 14588-20-03-- 20, 21, 22.& 23)					
26.1	Brick Valve Chambers- Size (L x W)- 2m x 1 m	Nos	1013026	1	59042	59,042.17
26.2	RCC Valve Chambers- Size (L x W)- 2m x 1 m	Nos	1013027	10	62917	6,29,174.68
26.3	Brick Valve Chambers- Size (L x W)- 1.5m x 1 m	Nos	1013028	4	51901	1,99,898.96
26.4	RCC Valve Chambers- Size (L x W)- 1.5m x 1 m	Nos	1013029	532	48956	2,60,44,624.85
26.5	Brick Valve Chambers- Size (L x W)- 1 m x 1 m	Nos	1014795	4	42484	1,69,937.12
26.6	RCC Valve Chambers- Size (L x W)- 1 m x 1 m	Nos	1014796	1	39495	39,494.55
26.7	RCC Valve Chambers- Size (L x W)- 0.85 m x 0.85 m	Nos	1014797	1	33433	33,432.95
26.8	CONSTRUCTION OF LONG STEM VALVE CHAMBER	Nos	1020558	329	41,145.00	1,35,36,705.00

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 3 : GAUTAMBUDDH NAGAR, GHAZIABAD & HAPUR						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
26.9	PRE-CAST Valve Chambers- Size (L x W)- 2m x 1 m	Nos	1020559	4	69209	2,96,610.92
26.10	PRE-CAST Valve Chambers- Size (L x W)- 1.5m x 1 m	Nos	1020560	201	53852	1,08,24,185.25
26.11	PRE-CAST Valve Chambers- Size (L x W)- 1 m x 1 m	Nos	1020561	1	43444	43,444.00
26.12	PRE-CAST Valve Chambers- Size (L x W)- 0.85 m x 0.85 m	Nos	1020562	1	36776	36,776.25
26.13	PRE-CAST Valve Chambers- Size (L x W)- 0.6 m x 0.6 m	Nos	1020563	3	29841	1,02,310.42
26.14	RCC Valve Chambers- Size (L x W)- 0.6 m x 0.6 m	Nos	1014798	8	27128	2,17,022.11
27	Brick Work					
	Providing brick work with brick class designation M-7.5 of IS:1077 in cm1:4 (1 cement : 4 sand) in steps, walls, retaining walls and load bearing structures drains, or any shape with all lead, depths & height including curring, scaffolding, etc., as per specifications and drawings with all bye-works and direction of the Engineer-incharge.	CuM	1014799	100	6,711.83	6,71,182.82
	Rate to include cost of all labour, tools, tackles, equipment, hire charges, supply of all materials such as minimum 43 grade cement, bricks, finishes, bitumen, other minor construction materials, shuttering, staging, masonry work, plastering, painting etc. with all bye-works and sundry works).					
	Note: The quantities of individual item can varied as per site requirement.The payment will be made as per actual certified measurement at site.					
28	Construction of trenches in Builder segment / Private Property i.e Multistorey buildings / apartments with no movement of Heavy Vehicles, surrounded with Boundary wall)					
28.1	Construction of dedicated trench (as per approved drawing) with removable top cover, scope includes excavation of trench, construction of brick wall, waterproofing of trench, installation of precast RCC slab covers (including supply) Ref. drawing 14588-10-03--34 Trench Dimension- 0.6m x 0.66m x 1.0m (d x w x l)	M	1013030	293.6945	5,590.55	16,41,915.18
28.2	Construction of dedicated trench (as per approved drawing) with removable top cover, scope includes excavation of trench, construction of brick wall, waterproofing of trench, RCC slab (150mm thick and 300mm width) at the top and RCC slab (100mm thick and 300mm width) at bottom. However, where MDPE laid on the basement top, roof of basement shall be treated as the bottom. There shall be sand filling across three sides of the line pipe of 100mm each shall be required to be taken by contractor in consultation with EIC / Site-in-charge as per latest PNGRB Guidelines. Minimum pipe top cover of 375 mm is required and the line pressure shall not exceed 110mbar. Trench Dimension- 0.375m x 0.66m x 1.0m (d x w x l)	M	1013031	38021.39	4,766.46	18,12,27,272.41
28.3	Excavation of trench and installation of 6" GI Pipe C Class by any method (Open /Moulding) , and restoration for road crossing upto 7.0 m inside society as 14588-10-03-43 Note- In case of restoration SOR Item no. 5 shall be applicable over and above this SOR.	M	1013032	93.61203	2,465.64	2,30,813.32
28.4	Sand Filling in any type of trenches in builder segment only; Scope includes supply of coarse sand (Size 0.6 To 2.0mm) as per IS 383 free from impurity like clay, mica and soft flaky pieces as per instruction of EIC / Site-in-charge. Note- Actual qty.(Cu.m) of sand filling for 28.1, 28.2 & 28.3 shall be claimed in this SOR	Cu.M	1013033	713.5775	986.42	7,03,888.16
PART V	MRS FABRICATION AND INTERNAL PIPING WORKS FOR INSTALLATION OF INDUSTRIAL & COMMERCIAL CONNECTIONS					

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 3 : GAUTAMBUDDH NAGAR, GHAZIABAD & HAPUR						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Receiving, handling, loading, transportation and unloading of owner supplied MDPE pipes & fittings, warning mat and other free issue items from IGL's designated stock yards to Contractor's own stock-yards/ work-sites. Proper storing, stacking, identification, providing security, and insurance cover for the materials. Liaisoning with Landowning agencies / statutory authorities, preparation of detailed route plan, making trial pits to determine the underground utilities/ services etc., obtaining permission from Land owning agencies, restoration of the abandoned trial pits (excavation to depth 1.5 m or more as satisfaction to EIC) to original condition. Barricading the work area as per the procedures & drawings provided in the tender and as per the directions of EIC / site-in charge. Trenching to the required depth in all type of surface, uncoiling / stringing of pipes, damping, jointing of the pipe ends/ fittings/ valves by qualified personnel, using approved electro fusion techniques as per specification. Restoration of extra excavated portion along the TF point is inclusive in connection rates irrespective of the size of pit excavated at TF point and shall not be charged separately.					
29	MDPE Pipeline laying in all type of surface by any method					
29.1	Laying rates of 32&63 mm Dia MDPE pipeline - pipe length upto 25.00 mtrs for industrial and commercial connections	Nos.	1020564	50	26,963.04	13,48,151.76
29.2	MRS Installation					
29.2.1	Connection rates for installation of CS MRS with 1" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014449			
29.2.2	Connection rates for installation of CS MRS with 1-1/2" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014450			
29.2.3	Connection rates for installation of CS MRS with 2" pipe & fittings with RPD Meter up to G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1012050			
29.2.4	Connection rates for installation of CS MRS with 3" pipe & fittings with RPD Meter above G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1014451			
	Note: a. Supply & Installation of required size of brass fittings in all type of meters supplied by IGL shall be in scope of contractor. B. Supply & installation of SS Tubing with fitting shall be in scope of contractor; Maximum length is 2.0m per MRS installation. C. 10% payment shall be released only after instllation of caging.					
30	CS Common Headers for MRS installation - Supply, Erection, welding & Installation of CS pipes & fittings (all types) except Ball Valves as common headers along with branching for commercial connections.					
	In addition to other activities under SOR item no. 29 and as detailed in specification and as per the instructions of the EIC / Site engineer of Owner. Erection, Fabrication, Welding & Installation of common headers of CS pipes & Fittings till isolation valves for fixing of numerous meters through a single header and includes connecting of common Regulators on headers, NPT threading, Radiography, as specified, Drillings of holes through the walls Brick, RCC, Granite, Marble, Wood Cutting, Glass Cutting with proper heavy duty hammer drill machine, tools & tackles, using proper sealant/grout material and colors to match the original replacement of the damages during drilling, restoring the area to the original condition, Painting of entire length of pipe along with fittings after proper surface finish by one coat of approved primer paint and two coats of approved synthetic enamel paint. Restoring the wall surface to original conditions, Supply & fixing of approved MS angle clamps, Coiling clamps & dowel plugs with screws, supply and insertion of insulation					

 emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 3 : GAUTAMBUDDH NAGAR, GHAZIABAD & HAPUR						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Ceiling clamps & dower plugs with screws, supply and insertion of insulation material i.e. PVC, PTFE sheet between pipe/ meter support and pipe/ meter, grout material, suitable thread sealant i.e. Teflon Tape / lock tight, Supply of different sizes 1" to 4", 150# spiral wound gasket, studs & bolts (various sizes with wire sealing arrangement wherever required), Joining of transition ftg. to above ground CS pipes, testing, purging and commission of the complete installation. Supply and installation of STANDARD Y TYPE FLANGE END STRAINER between T.F. I.V. to Regulator Inlet. Strainer size may be 1", 2", 3" & 4" corresponding to installed TF size. The payment for supply and installation of Y type strainer is included in MRS fabrication. The meters installed on tap offs from common header will be paid separately as per SOR No. 30.3 to 30.6					
30.1	2" pipes & fittings	RM	1007245			
30.2	4" pipes & fittings	RM	1007246			
30.3	Connection rates for installation of CS MRS with 1" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014449			
30.4	Connection rates for installation of CS MRS with 1-1/2" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014450			
30.5	Connection rates for installation of CS MRS with 2" pipe & fittings with RPD Meter up to G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1012050			
30.6	Connection rates for installation of CS MRS with 3" pipe & fittings with RPD Meter above G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1014451			
	Note: a. Supply & Installation of required size of brass fittings in all type of meters supplied by IGL shall be in scope of contractor. B. Supply & installation of SS Tubing with fitting shall be in scope of contractor; Maximum length is 2.0m per MRS installation C. 10% payment shall be released only after installation of caging					
30.7	Supply & Installation of Pressure Gauges					
30.7a	RANGE 0-100 MBAR - 4"- DIAL SIZE	Nos.	1012127			
30.7b	RANGE 0-1 BAR - 4"- DIAL SIZE	Nos.	1007252			
30.7c	RANGE 0-4 BAR - 4"- DIAL SIZE	Nos.	1007253			
30.7d	RANGE 0-6 BAR - 4"- DIAL SIZE	Nos.	1007254			
30.8	Supply & Installation of FLANGE END BALL VALVES, MAOP- 4 BAR					
30.8a	4"	Nos.	1007181			
30.8b	2"	Nos.	1007182			
30.8c	1-1/2"	Nos.	1009365			
30.8d	1"	Nos.	1007283			
30.9	Supply & Installation of FLANGE END GLOBE VALVES, MAOP- 4 BAR					
30.9a	2"	Nos.	1007182			
30.9b	1-1/2"	Nos.	1012130			
30.9c	1"	Nos.	1007283			
30.10	Supply & Installation of BRASS ISOLATION VALVE					
30.10a	2"	Nos.	1007182			
30.10b	1-1/2"	Nos.	1012130			
30.10c	1"	Nos.	1007283			
30.10d	1/2"	Nos.	1012135			
30.11	Supply & Installation of STRAINER					
30.11a	2"	Nos.	1007182			
30.11b	1"	Nos.	1007283			
30.12	WELDING OF JOINTS - Butt Weld Joints					
30.12a	4"	Nos.	1007181			
30.12b	3"	Nos.	1007287			

 Energy Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 3 : GAUTAMBUDDH NAGAR, GHAZIABAD & HAPUR						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
30.12c	2"	Nos.	1007182			
30.12d	1-1/2"	Nos.	1012130			
30.12e	1"	Nos.	1007283			
30.12f	1/2"	Nos.	1012135			
30.13	Fillet Joints & Supply of Socolet					
30.13a	1"	Nos.	1007283			
30.13b	1/2"	Nos.	1012135			
30.14	RADIOGRAPHY OF JOINTS					
30.14a	4"	Nos.	1007181			
30.14b	3"	Nos.	1007287			
30.14c	2"	Nos.	1007182			
30.14d	1-1/2"	Nos.	1012130			
30.14e	1"	Nos.	1007283			
30.14f	1/2"	Nos.	1012135			
30.15	SUPPLY/ INSTALLATION OF CLAMPS, SUPPORTS FOR ERECTION OF ALL SIZES OF PIPELINE					
30.15a	TYPE-1, SIDE WALL MOUNTED AS PER DRAWING	KG	1015931			
30.15b	TYPE-2, GROUND BASED AS PER DRAWING	KG	1015932			
30.15c	TYPE-3, CEILING MOUNTED AS PER DRAWING	KG	1015933			
30.16	SUPPLY OF THREADED END BALL VALVE					
30.16a	1"	Nos.	1007283			
30.16b	1/2"	Nos.	1012135			
30.17	SUPPLY OF FLANGES AS PER SPECIFICATION					
30.17a	WNRF 3"	Nos.	1012136			
30.17b	WNRF 2"	Nos.	1012137			
30.17c	BLRF 3"	Nos.	1012138			
30.17d	BLRF 2"	Nos.	1012139			
30.17e	Spectacle Blind 3"	Nos.	1012140			
30.17f	Spectacle Blind 2"	Nos.	1012141			
30.18	SUPPLY OF REDUCER					
30.18a	3" X 2"	Nos.	1012142			
30.18b	2" x 1-1/2"	Nos.	1012143			
31	Modifications & Installation of Meters & Regulators in existing MRS/Skids/DRS:					
	Assessment of material requirement for installation at site, Order placement for purchasing of CS Pipes & fittings from anyone of approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, Dispatch clearance, handling, loading, transportation and unloading of these at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of owner supplied above ground fittings like regulators, meter & Isolation Valve and other free issue items as defined in specification from Owner's designated stock yards to Contractor's own stores / work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches for modification, schedules & execution procedures and all others necessary documentation. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices.					
	Taking shutdown of existing MRS, dismantling meters/regulators, replacement/fixing of meters/regulators with associated inlet and outlet connections / fittings, supply of pipes & fittings (excluding flange end Ball Valve), pipe cutting, threading, welding, testing, Radiography of Joints & firmly fixing with approved meter clamps/brackets and other supports by proper grouting and necessary documentation. Restoring the area to the original condition as per the specifications and to complete satisfaction of consumer and EIC. The rates includes all as above along with testing of joints till re-commissioning.					

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 3 : GAUTAMBUDDH NAGAR, GHAZIABAD & HAPUR						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
31.1	Diaphragm meter	Nos.	1012153			
31.2	RPD Meter	Nos.	1012154			
31.3	Turbine Meter	Nos.	1012155			
31.4	300 mbar regulator	Nos.	1012156			
31.5	500 mar regulator	Nos.	1012157			
31.6	2 bar regulator	Nos.	1012158			
31.7	Butt Weld Joints					
31.7a	4"	Nos.	1007181			
31.7b	3"	Nos.	1007287			
31.7c	2"	Nos.	1007182			
31.7d	1-1/2"	Nos.	1012130			
31.7e	1"	Nos.	1007283			
31.8	Supply & Installation of CS Piping (Seamless A 106 Gr-B, Sch-40)- 150 #					
31.8a	4"	MR	1009386			
31.8b	3"	MR	1007287			
31.8c	2"	MR	1007182			
31.8d	1-1/2"	MR	1012130			
31.8e	1"	MR	1007283			
	Modifications/ replacements (meter or regulator or both) in existing MRS/Skids/DRS using threaded fittings/ flanged end (same size or bigger) shall be payable through SOR Item No. 31.1 to 31.6.					
	Modifications/ replacements (meter or regulator or both) in existing MRS/Skids/DRS using welding (same size or bigger upto 3.00 mtrs) shall be payable through SOR Item No31.7					
	Modifications/ replacements (meter or regulator or both) in existing MRS/Skids/DRS using welding (in case, erected length after modification is more than 3.00 mtrs) shall be payable through SOR Item No. 31.8					
	The payments of flange end ball valve shall be paid as per SOR Item No. 30.8.					
32	Restoration of old MRS (after 1 year/Complete defect liability)					
	Cleaning, Repair,Testing, painting, tightening of bolts of old Metering and Regulating skids	Nos.	1015934			
33	Conversion of Commercial Appliances:					
	Conversions of all types of appliances to NG based appliances. Supply & changing of the nozzles /jets and associated controls for Non-domestic appliances (imported appliances included) with proper tools and tackles. Cleaning and performing minor maintenance, greasing etc. of the appliance. Testing and showing the performance to the customer, signing of joint meter records (JMR) and instructing the customer on use & safety norms, complete as per specifications & to satisfaction of owner / Engineer in Charge and includes supply of reinforced rubber hose with requisite pressure rating.					
33.1	NG conversion for domestic appliances (G 1.6)	Nos.	1015935			
33.2	NG conversion for all commercial appliances	Nos.	1007175			
	Note: The payments of conversion shall be as per burners.					
34	Supply of lock & Keys for MRS Cages					
	Padlock with Lever mechanism shall be durable solid body to resist corrosion. Shackle shall be hardened electroplated to resists hacksaw cutting and rusting under normal atmospheric conditions.	Nos.	1015936			
	Civil Works					
35	Demolition of PCC work below plinth level					
	Demolishing plain cement concrete (PCC) work (taking all necessary safety precautions) for all depths below plinth level including supply of all tools & tackles, necessary scaffolding, propping, underpinning, etc. , disposal of unserviceable material outside the IGL boundary limits kipping the IGL indemnified of any liabilities from statutory/ local bodies, all complete work as specified and directed	Cu. M	1009367			
36	Excavation for foundation works					

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 3 : GAUTAMBUDDH NAGAR, GHAZIABAD & HAPUR						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Excavation as per plan, upto 3 meters and upto any lead in all conditions, backfilling using serviceable earth and disposal of surplus and unserviceable earth. Soil to be levelled and neatly dressed complete in all respect as per scope of work, technical specification and directions of EIC.					
	Upto 3.0 Mtrs	Cu. M	1007176			
37	Foundation works					
37.1	Providing and Laying Plain Cement Concrete (1:2:4)					
	Providing & laying, Fixing, Centering and Shuttering of plain cement concrete with nominal mix 1:2:4 by mass (1 cement: 2 coarse sand: 4 coarse aggregates) with 20 mm down size graded aggregates/ gravels as specified in specifications and satisfaction to the EIC.	Cu. M	1007177			
37.2	Providing and Laying Plain Cement Concrete (1:4:8)					
	Providing & laying, Fixing, Centering and Shuttering of plain cement concrete with nominal mix 1:4:8 by mass (1 cement: 4 coarse sand: 8 coarse stone/ aggregates/ gravels) with 20 mm down size graded etc as specified in specifications and satisfaction to the EIC.	Cu. M	1017159			
37.2	Supply and Fixing of Deformed Steel Bars Reinforcement					
	Supply and placing in position high strength deformed steel bars reinforcement (conforming to IS: 1786, Grade Fe 415) for RCC work including transporting, straightening, cleaning, de-coiling, cutting & binding to required shapes and length as per details, binding with contractor's own 16 SWG black soft annealed binding wire at every intersection, supplying and placing with proper cover blocks, supports, chairs, overlaps, welding, spacers, fan hooks etc. for all heights and depths etc. complete the work as directed.	KG	1009380			
37.4	Providing and Laying Reinforced Cement Concrete (M-25)					
	Providing and laying REINFORCED CEMENT CONCRETE OF M-25 Grade (Concrete shall be design / nominal mix) with 20mm & down size graded aggregates in NON SUSPENDED slabs / pavement slabs including pedestals, ramps etc. filling pockets with grouting, laying in alternate panels to required slopes, all necessary form work and finishing the top surface rough or smooth as required and directed, providing pockets/openings, recesses, chamfering etc. wherever required, vibrating, tamping, curing, and rendering smooth if required in any position, shape, level and thickness etc. all complete as specified, shown and directed. Rates to include all materials (other than steel), labour, shuttering and necessary works required to make work complete.	Cu. M	1007179			
37.5	Dismantling of RCC & cutting of reinforcement (Thickness above 3")	Cu. M	1012161			
	Internal Piping Work					
38	Internal Piping - Supply, Erection & welding of CS pipes & fittings (all types) except Ball Valves for commercial connections.					
	Assessment of material requirement for installation at site, Order placement for purchasing of CS Pipes & fittings from anyone of approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, Dispatch clearance, handling, loading, transportation and unloading of these at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of contractor supplied material as defined in specification from Contractor's designated stock yards to IGL's work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches, schedules & execution procedures and all others necessary documentation. Finalising Piping location with optimum route in consent of customer from Meter Outlet till Customer's Appliance. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices.					

 emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 3 : GAUTAMBUDDH NAGAR, GHAZIABAD & HAPUR						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
38.1	Supply, Erection, Welding, Radiography & Testing of CS Seamless A 106 Gr-B Pipeline. It includes supply of all type of fittings (except ball valves), Supply Of Consumables Like Spiral Wound Gaskets (Winding ANSI 304 Graphite Centering Ring Cs), Stud Bolts (ASTM A 193 B 7, Hexagonal Nuts, ASTM A194 Gr 2H) and is inclusive in rates.					
38.1a	4" NB, Sch-40	MR	1007159			
38.1b	3" NB, Sch-40	MR	1007160			
38.1c	2" NB, Sch-80	MR	1007161			
38.1d	1-1/2" NB, Sch-80	MR	1007162			
38.1e	1" NB, Sch-80	MR	1007163			
38.2	Supply, Erection, Welding, Radiography & Testing of CS Seamless / HFW API 5L GR-B Pipeline. It includes supply of all type of fittings (except ball valves), Supply Of Consumables Like Spiral Wound Gaskets (Winding ANSI 304 Graphite Centering Ring CS), Stud Bolts (ASTM A 193 B 7, Hexagonal Nuts, ASTM A194 Gr 2H) and is inclusive in rates.					
38.2a	4" NB	MR	1007164			
38.2b	3" NB	MR	1007165			
38.3	Supply & Installation of Safety Devices as per PNGRB gudelines					
38.3a	1" Solenoid Valves	Nos.	1012145			
38.3b	1.5" Solenoid Valves	Nos.	1012146			
38.3c	2" Solenoid Valves	Nos.	1012147			
38.3d	2.5" Solenoid Valves	Nos.	1012148			
38.3e	ATEX/PESO/CMRI approved Gas detectors	Nos.	1012144			
38.3f	1" Shutoff valve	Nos.	1012149			
38.3g	1.5" Shutoff valve	Nos.	1012150			
38.3h	2" Shutoff valve	Nos.	1012151			
38.3f	2.5" Shutoff valve	Nos.	1012152			
39	Internal Piping - Supply & Installation of Powder Coated GI pipes & fittings (all types) except Ball Valves for commercial connections.					
	Assessment of material requirement for installation at site, Order placement and Purchasing of Powder coated GI Pipes & GI fittings from approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, getting dispatch clearance, handling, loading, transportation and unloading of these items at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of owner supplied above ground fittings such as Isolation Valves and other free issue items as defined in specification from Owner's designated stock yards to Contractor's own stores / work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches, schedules & execution procedures and all others necessary documentation. Finalising Piping location with optimum route in consent of customer from Meter Outlet till Customer's Appliance. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices.					
39.1	Supply installation & Testing of Powder coated GI Pipes. It includes supply of all type of fittings (except Isolation valves), Supply & fixing of approved clamps & nylon rawl plugs with SS 304 2" screws, grout material, suitable thread sealant i.e. Teflon Tape, etc. and is inclusive in rates.					
39.1a	1/2" GI Pipe	Mtr	1015937			
39.1b	3/4" GI Pipe	Mtr	1015938			
39.1c	1" GI Pipe	Mtr	1015939			
40	Supply & Fabrication/Erection of Wired cages for MRS					

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 3 : GAUTAMBUDDH NAGAR, GHAZIABAD & HAPUR						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Assessment of material requirement for installation at site, Order placement for purchasing of MS Angle, Flat, wire mesh & fittings from anyone of approved vendors of IGL, Scheduling, Planning of material & handling, loading, transportation and unloading of these at respective contractor’s store. Receiving, taking over, handling, loading, transportation and unloading of contractor supplied material as defined in specification from Contractor’s designated stock yards to IGL’s work sites, proper storing, stacking, identification, providing security and insurance cover. Finalising Cage location with in consent of customer & IGL. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices. Supplying & Fixing 4 mm thick MS welded wire mesh (30 mm x 75 mm) by welding/bolting with structural steel elements (Angle & Flat) for making covers for MRS and various other equipments for protection of equipments. Rates to include one coat of primer and two coats of synthetic enamel paint (both side of wired cages), labour, material, transportation, loading/ unloading of material, welding charges etc complete in all respects. For fabrication of cage structure, all the essential jobs viz. cutting, welding, grinding, finishing, painting including all materials like Angle, channel, wire net, support sheet, hardware, electrode, grinding wheel, gas cylinder, paint, primer, grouting, equipment, tools, generator for power, welding machine etc. is under contractor’s scope					
40.1	Supply (Angle 65 mm x 65 mm x 6 mm, Flat 50 mm x 6 mm & Wire Mesh 75 mm X 30 mm X 4 mm), fabrication, painting, transportation and installation of MRS cages for SKID by welding/bolting with structural steel elements for making covers for industrial/ commercial PNG meter-regulator systems as per detailed scope of work & Drawing.	MT	1015282			
40.2	Supply (Angle 40 mm x 40 mm x 5 mm, Flat 25 mm x 4 mm & Wire Mesh 75 mm X 30 mm X 4 mm), fabrication, painting, transportation and installation of MRS cages for WALL MOUNTED MRS by welding/bolting with structural steel elements for making covers for industrial/ commercial PNG meter-regulator systems as per detailed scope of work & Drawing.	MT	1015293			
41	Supply & Installation Crash Guard for Cage Protection					
	Supply, fabrication, painting, transportation and installation of Crash Guard for protection of Wall Mounted cages for industrial/ commercial PNG meter-regulator systems as per detailed scope of work & Drawing.	MT	1014813			
	Total Cost (INR)					2,06,52,29,357.60
	GST @ 18%					37,17,41,284.37
	Total Cost incl. GST (INR)					2,43,69,70,641.97
	Total Cost inc. GST (in Cr.)					243.70



**ATTACHMENT - 1: ESTIMATED COST
LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION
IN NCT OF DELHI, UP, HARYANA & RAJASTHAN**



TENDER NO. : IGL/ET2/CP/CP18519

SEGMENT - 4 HARYANA (KARNAL, KAITHAL, REWARI, GURUGRAM)

S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
PART-I	MDPE LAYING					
	Route survey of allotted areas and Preparation /Submission of detailed route plan for approval by EIC in AutoCAD format. Receiving, handling, loading, transportation and unloading of owner supplied MDPE pipes & fittings and other free issue items from IGL's designated stock yards to Contractor's own stock-yards/ work-sites. Proper storing, stacking, identification, providing security and insurance cover for the materials. Liaisoning with Landowning agencies / statutory authorities and obtaining permission from them (Separately payable as per SOR Item No.10), making trial pits to determine the underground utilities/ services etc., restoration of the abandoned excavation/ trial pits (excavated to depth of 1.5 m or more as per satisfaction to EIC / Site-in-charge) to original condition, barricading the work area as per the procedures & drawings provided in the tender and as per the directions of EIC / Site-in-charge; uncoiling / stringing of pipes, jointing of the pipe ends/ fittings / Transition fittings/ valves by qualified personnel, using approved electro fusion techniques as per specification.					
	Laying using any method (Open trench, Moling and HDD) with or without casing; it includes survey of the under ground utilities, submission of pre & post HDD profile for approval, execution of the work as per specification (as per trench dimension Drg No 14588-10-03--27), including excavation of pits, moling with hole size not exceeding 20% of the the carrier / casing pipe dia. jointing and insertion of the carrier pipe in casing pipe (on case to case basis) and subsequent padding with soft soil, laying of warning mat in open trench only, backfilling, compaction, submission of as built drawing, as graphs as per attached specification and instruction of EIC / Site Engineer of Owner. Includes laying of pipeline in all type of surface including Kutcha, metal, concrete (PCC/RCC), bituminous, tiled, brick lined etc. after raking up of hard surface of any type; Roads, Pavement, Footpaths etc. shall be made motorable once the pipeline is laid.					
	In case, it is impractical to provide 1.0-meter cover due to physical constrain, additional protective measures such as concrete slab or high impact resistance plastic sheet shall be installed (for the minimum top cover of 600 mm) by the contractor in consultation with EIC / Site-in-charge. EIC / Site-in-charge after examining thoroughly and considering the PNGRB Guidelines may allow the contractor. However, the contractor has to raise technical deviation for approval before commence of work. All the technical deviation shall be submitted with the RA bills.					
	Supply & installation of GI Sleeves, 2.5" NB x 300 mm length GI pipe Sleeve / Half Round Concrete Sleeves for domestic connections, 3" NB x 300 mm length GI Sleeve for commercial and industrial installations (as per GI Pipe Sleeve Drg No 14588-10-03--18), and 1/2 Round concrete sleeve, Drg No 14588-10-03--33) excavation, breaking through any obstructions, insertion of pipe, sealing the annulus, fixing of the sleeves with concrete mix, preparation of pedestal & restoration of excavated pits within the size of pedestal & the same pit with the laying of 20/32 mm dia MDPE pipe as defined in technical specification and instruction of EIC.					

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 4 HARYANA (KARNAL, KAITHAL, REWARI, GURUGRAM)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Flushing, cleaning ,Pneumatic testing, purging with nitrogen and commissioning as per specification and approved procedures providing all tools and tackles, nitrogen, instruments, manpower and other related accessories and as per instructions of the Engineer-in charge.					
	Maintaining the completed pipelines / installation for any defect, failures during defect liability period .					
	Handing over the completed works to IGL for their operation/ use, returning of all surplus material to IGL stores, reconciliation of free issue material area wise and obtaining no objection certificate.					
	On completion of gas charging of pipelines, preparation and submission of As built drawings, crossings details, termination, utility graphs and deviation statements.					
	Submission of all documents required for contract closure in numbers as mentioned in contract.					
	Note- Supply & installation of GI Sleeve / Half round Concrete sleeve and warning mat (open trench excavation) shall be included in laying of MDPE pipe.(Refer Drg No. 14588-20-03--18); Laying in Brick trench shall not payable in this SOR; In such cases SOR No. - 20 is valid.					
	GIS data shall be collected of laid MDPE pipeline network. Data like Geo Co-ordinates (latitude, longitude) of Pipeline and related features like fittings, valves, FRS, MRS, Markers etc. shall be collected as per given procedure along with 50 m land base corridor (25 m on either side of the pipeline) with min. accuracy of 50 cm. Data format shall be in shape (.shp) or Geo Database (.gdb)					
1	MDPE Pipe line laying in Soft soil & all type of surface (Including PCC/RCC Top Surface - Upto 12") , Open Cut / Moling or any other methodology ; Clear cover to pipeline min 1.0m; (Refer Drg No 14588-10-03-27))					
1.1	20 mm dia	M	1020533	10,000.00	365.69	36,56,860.28
1.2	32 mm Dia	M	1020534	2,43,940.94	316.98	7,73,24,049.92
1.3	63 mm Dia (Excluding HDD with casing)	M	1020535	78,615.11	367.56	2,88,95,760.55
1.4	125mm dia (Excluding HDD with/without casing)	M	1020536	1,148.98	470.41	5,40,491.80
1.5	180 mm dia (Excluding HDD with/without casing)	M	1020537	1,000.00	546.28	5,46,280.49
	MDPE Pipe line laying in common trench					-
1.6	32 mm Dia (in common trench with 32/63/125/180 mm Dia MDPE Pipe)	M	1020538	7,892.87	129.83	10,24,713.56
1.7	63 mm Dia (in common trench with 63/125/180 mm Dia MDPE Pipe)	M	1020539	1,000.00	155.96	1,55,961.42
1.8	125mm dia (in common trench with 125/180 mm Dia MDPE Pipe)	M	1020540	4,000.00	194.74	7,78,961.66
	All service lines left out initially during mainline laying, shall be laid under above mentioned SOR within six months of gas charging of a particular area by the same contractor. In Open trench method/ moiling, no extra rate shall be payable for casing installation. Roads, Pavement, Footpaths, Kutcha etc. shall be made motorable once the pipeline is laid. Liasoning and HSE shall not be paid wrt this SOR					
2	MDPE Pipe line laying by HDD Method. with Casing					

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 4 HARYANA (KARNAL, KAITHAL, REWARI, GURUGRAM)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Survey of the under ground utilities, submission of HDD profile for approval (excluding road and nalla crossings), execution of the work as per the standard procedure attached, including excavation of the pits, Jointing of casing and carrier pipe and insertion of the carrier pipe in casing of dia ranging from 110mm to 160mm for 63 mm, 200mm to 250 mm dia for 125 mm dia MDPE and 250 mm to 315 dia for 180 mm MDPE, subsequent sealing, backfilling, compaction, submission of as built graphs, final HDD profiles as per attached specification and the instruction of EIC / Site Engineer of Owner. The other activities are as per SOR Item No. 1 and as detailed in specification and as per the instructions of the EIC / Site engineer of Owner. The payment shall be made for length of casing pipe laid in HDD, remaining carrier pipe length without casing shall be paid under SOR item no.1					
2.1	63 mm Dia HDD with casing	M	1020541	252.35	478.84	1,20,835.98
2.2	125 mm Dia HDD with casing	M	1020542	391.71	1,082.44	4,23,998.43
2.3	180 mm Dia HDD with casing	M	1020543	4.00	1,310.06	5,240.23
3	MDPE Pipe line laying by HDD Method, without Casing					
	Survey of the under ground utilities, submission of profile for approval, execution of the work as per the standard procedure attached, including excavation of the pits, Jointing and insertion of the carrier pipe, subsequent backfilling, compaction, submission of as built graphs and final HDD profiles as per attached specification and the instruction of EIC / Site Engineer of Owner. The other activities are as per SOR Item No. 1 & 2 and as detailed in specification and as per the instructions of the EIC / Site engineer of Owner					
3.1	125 mm Dia HDD without casing	M	1020544	14,508.42	596.02	86,47,287.72
3.2	180 mm Dia HDD without casing	M	1020545	1,000.00	740.18	7,40,175.49
3.3	Laying of MDPE pipeline by HDD method (Maximum length 200m)- This SOR may be applicable only for spans less than 200m where additional mobilization of HDD m/c is required & HDD is the only option to execute the same. Note: There should be no consecutive HDD laying in upstream/downstream within a span of 1KM & This SOR would be applicable for allocations less than 200 m in a single stretch					
3.3.1	63 mm by HDD method (with casing)	Nos.	1020546	1	82,162.22	1,15,560.85
3.3.2	125/180 mm by HDD method(with/ without casing)	Nos.	1020547	1	1,29,862.92	1,62,117.23
4	MDPE Service Line laying in New & old Projects / O&M areas					
	Includes laying of pipeline (for 20 & 32mm) in all type of surface i.e. Kutcha, metal, concrete (PCC/RCC), bituminous, tiled, brick lined etc. after braking up of hard surface of any type by any methodology. Roads, Pavement, Footpaths etc. shall be made motorable once the pipeline is laid. Supply & installation of GI Sleeve / Half round Concrete sleeve shall be included in laying rates. All other activities mentioned in SOR no.1 are applicable.					
	Supply & installation of GI Sleeves, 2.5" NB x 300 mm length Half Round Concrete Sleeves for domestic connections, 3" NB x 300 mm length GI Sleeve for commercial and industrial installations (as per Drg No14588-20-03--18)) excavation, breaking through any obstructions, insertion of pipe, sealing the annulus, fixing of the sleeves with concrete mix, preparation of pedestal & restoration of excavated pits within the size of pedestal & the same pit with the laying of 20/32 mm as defined in technical specification and instruction of EIC.The rates shall include liaison rates with statutory bodies, HSE and no separate rates are payable under this SOR. Wherever service lines are to be laid as per Dwg.- 14885-10-03-46A.					

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 4 HARYANA (KARNAL, KAITHAL, REWARI, GURUGRAM)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Note:- a. Old Project area shall be defined as an area where any of following criteria are being met: 1. MDPE line is already been charged for more than 6 months. 2. MDPE is laid and gasified by another contractor (currently not working in respective zone) b. Additional rate for construction of RCC structure for protection of service line shall be payable under SOR no. 4.5					
4.1	For pipe length up to 8 meters (O&M area)	Nos	1020548	2,888	5,208.21	1,50,42,250.29
4.2	For pipe length up to 6 meters (Project area)	Nos	1020549	12,000	3,084.21	3,70,10,488.46
4.3	For pipe length more than 6 meters (Project area)	M	1020550	6,000.00	323.72	19,42,336.47
4.4	Per meter rate for pipeline more than 8 meters (Per meter additional rate shall be payable above SOR item no. 4.1)	M	1020551	6,856.47	323.72	22,19,596.17
4.5	Construction of RCC structure for protection of service line (20/32 mm dia.) for drain/nallah (adjacent to house / Boundry walls / Multistory Buildings) crossing as per Dwg.- 14885-10-03-46A					
	The scope includes construction providing and laying reinforced cement concrete of M-25 grade (Concrete shall be design mix/nominal mix) with 20mm & down size graded crushed stone aggregates in Non suspended slabs/pavement slabs including pedestal/ramp etc., laying in alternate panels to required slopes, all necessary form work and finishing the top surface rough/smooth as required in any position, shape, level and thickness etc. The rates includes grouting of pockets, supply of material, tools, shuttering, Reinforce ment etc.	Nos.	1013003	473	2,015.02	9,54,018.60
5	Excavation in Special Conditions:					
5.1	Excavation of trench or pits in Malba/Multiple layers of asphalt/ brick / PCC/RCC etc. The rates are payable over and above the Laying rates as per relevant SOR item no 1					
5.1.1	Cutting of PCC/RCC surface with thickness cumulative more than 12" (in case of multilayer)or Continuous asphalt multi-layer/Malba/Brick/Boulders more than 24". <i>(Malba shall be considered as a strata where soil is in mixed form of debris/building rubbish or discarded pieces of bricks/stones)</i>	M	1012920	1,21,584.35	188.84	2,29,59,608.77
5.1.2	Cutting of PCC/RCC surface with kneumatic braker and cutter thickness cumulative upto 10" (in case of multilayer) <i>(Malba shall be considered as a strata where soil is in mixed form of debris/building rubbish or discarded pieces of bricks/stones)</i>	M	1020552	30,396.09	145.26	44,15,309.38
5.2	Excavation of Hard Rock:					
	Trenching of Hard Rock is defined as trench material with a single piece of rock, dimension exceeding 1 meter in any direction, which requires cutting only by use of manual/pneumatic chisel/drill or sledge hammer and chisel or removal of same by additional techniques and supply of approved coarse sand (Size 0.6-2 mm as per IS 383) free from any impurities like clay, mica and soft flaky pieces for padding of 150 mm above and below laid pipeline as per the specifications ; The rates are payable over and above the Laying rates as per relevant SOR item no 1	Cu.M	1013004	10.00	3,598.86	35,988.60
5.3	Laying in Congested Area:					
	Congested area shall be defined as an area where MDPE pipeline has to be laid in narrow lanes (Less than 4.5 M including footpath/drain) & houses in such locations have only one side entrance i.e. there is no backlane between two back to back houses & pipeline has to be laid in front of the house. The rates are payable over and above the Laying rates as per relevant SOR item no 1.	M	1012982	10.00	50.58	505.81
5.4	Laying in continuous water seepage area:					
	The water seepage area shall be defined as an area where the MDPE pipeline has to be laid, in such locations where continuous water seepage occur during trench activity and the same shall not be possible. In that case, the contractor shall have to deploy additional equipment i.e. de-watering pumps etc. for continuous de-watering so that waterlogging shall be avoided. The rates are payable over and above the Laying rates as per relevant SOR item no 1.	M	1014791	10.00	26.98	269.77

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TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 4 HARYANA (KARNAL, KAITHAL, REWARI, GURUGRAM)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
5.5	Excavation of Trench / Pit for Tap-off or Hook-up Laocations of new connectivity (1.5 Mtr and above)					
	This item shall cover the deep excavation (depth beyond 1.5 m) of trenches or pits for the identification of existing MDPE pipelines and tap-off or hook-up for new connectivity. Also, required shoring work (including necessary close plank walling, framing, bulla piling, strutting, etc.) shall be done by the contractor. (This item should be executed on specific direction of the Engineer in charge).	No.	1015921	10	16,158.20	1,61,581.98
6	Restoration of trenches					
6.1	Restoration to original conditions of dismantled surface like Asphalted/Bituminous Road, Concrete Pavement, Agra /Kota Stones / Tiles (Chequered/interlocking etc.), Dry Brick Pavement as per the technical specifications attached in the tender after laying of pipeline in Built- Up surface, as per the directions of EIC / Site Incharge. Scope includes supply of the approved quality material, testing of materials by third party agencies as per technical specification / CPWD / IRC Standards, submission of the restoration reports, obtaining no objection certificates from the concern local authorities /land owners / third party inspection agencies designated by land owing agencies and Owner.	Cu.M	1007137	873.10	3,690.24	32,21,958.49
6.2	Providing & laying, Fixing, of cement concrete interlocking paver blocks of approved size, design shape as per the directions of EIC / Site Incharge. Scope includes supply of the approved quality material, testing of materials by third party agencies as per technical specification / CPWD / IRC Standards.	Sq.M	1014792	6,223.41	730.35	45,45,273.10
7	Survey GPR				-	-
7.1	For length up to 100 meters	Nos.	1015922	5	8,008.71	40,043.53
7.2	Per meter rate for more than 100 meters (Per meter additional rate shall be payable above SOR item no. 7.1)	M	1013010	10,721.67	50.58	5,42,316.08
8	Fabrication & Installation of Pipeline Markers:					
	Supply and Installation of Stone Route Markers, Powder Coated Plate / Pole Markers as per the attached drawings, along the route / along boundary wall, lamp posts including all associated civil works such as excavation and construction in all types of soils, construction of pedestals and grouting with concrete, cleaning, supply and application of approved colour and quality of primer and paint, stencil letter cutting of numbers, direction, chainage etc., restoration of area to original condition and performing all works as per drawings, specification and instruction of Engineer-in-Charge. The rates shall include liaison rates with statutory bodies and restoration rates and no separate rates are payable under this SOR.					
8.1	Stone Route Markers as per Drg No14588-10-03--29)	Nos	1013011	2,988	564.96	16,88,036.29
8.2	Installation of FRP MARKER	Nos	1020553	321	2,752.90	8,83,959.03
8.3	Pole markers with foundation as per Drawing No. Drg No14588-10-03-30 & 14588-10-03-31) and specification.	Nos	1013012	80	2,752.90	2,20,989.76
8.4	Plate marker as per Drg No Drg No 14588-10-03--28)	Nos	1013013	6,480	255.44	16,55,278.37
9	LIASONING WITH LAND OWNING AGENCIES FOR PERMISSION					
	Submission of applications as per approved drawings provided by owner / owner's representative (Initial Route Survey,Preperation of Drawings, measuring and providing details of surface type shall be in scope of Contractor with approval from Owner / Owner's representative), obtaining & submission of demand note, Coordination, Liaisoning, Obtaining written permissions from Land owing agencies like MCD, PWD, DDA, NDMC, NHAI, AAI, GDA, GNDA, GNN, Forest Dept, NHAI, Indian Railways, other government agencies who maintains the public lands and Private lands i.e. Apartments/institutions etc. Note: Service lines in SOR item no. 4 are not applicable;					
9.1	For All sizes - Liaisoning and getting permissions from NHAI/ Railway/ Forest (Protected & Un-Protected)/ Canal/ River crossings.	M	1012678	34,700.36	239.42	83,07,897.21
9.2	For All sizes - Liaisoning and getting permissions from New Delhi Municipal Corporation (NDMC)/ PWD	M	1015924	10.00	112.96	1,129.65

	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 4 HARYANA (KARNAL, KAITHAL, REWARI, GURUGRAM)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
9.3	For All sizes - Actual length of network laid against written permission statutory Authorities (except covered under SOR 9.1 & 9.2)	M	1013014	1,56,151.62	72.50	1,13,20,972.60
9.4	For All sizes - Actual length of network laid where written permissions are not available (other than pvt. Area)	M	1014446	1,56,151.62	45.52	71,08,517.68
	*above rates include all other sorts of liasioning including traffic dept.					
10	Charges for compliance to Health, Safety & Environment (HSE) as detailed in Scope of Work.					
10.1	MDPE Section-PPE, Contineous Barricades along the trenches as per approved drawing in tender, Use of Safety Boots, Hand gloves, Reflective jackets, Hard hats(helmets), Safety shoes, eye and ear safety equipments, Fire extinguishers and as per the detailed scope of work in tender specifications.	M	1010126	3,47,003.61	19.39	67,28,226.61
10.2	GI Section- Safety requirement per Rise- Use of Fall arrestor/ petzl, Ascendors/descendors, PPE, Barricades/ Warning Boards (03 Nos.) connected with warning/Caution tapes in areas where piping work is in progress , Use of Safety shoes, Walky talky, Hand gloves, Reflective jackets, Hard hats(helmets), eye and ear safety equipments, Fire extinguishers and as per the detailed scope of work in tender specifications; In case of non compliance- Refere SCC clause - for applicable penalty . Upto 4th GI (G+4) floor full body safety harness & assessories shall be of KARAM or equivalent make. Note- This SOR is applicable for Non LMC length of GI Section only.	Nos	1010127	13,529	469.56	63,52,531.45
10.3	GI Section- Safety requirement per Rise-Use of Fall arrestor/ petzl, Ascendors/descendors, PPE, Barricades/ Warning Boards (03 Nos.) connected with warning/Caution tapes in areas where piping work is in progress , Use of Safety shoes, Walky talky, Hand gloves, Reflective jackets, Hard hats(helmets), eye and ear safety equipments, Fire extinguishers and as per the detailed scope of work in tender specifications; In case of non compliance- Refere SCC clause - for applicable penalty . GI (G+5) and above including high rise Above 4th floor full body safety harness & assessories shall be of PETZL is compulsory. Note- This SOR is applicable for Non LMC length of GI Section only.	Nos	1010128	232	1,097.61	2,54,132.64
PART II	GI / COPPER SECTION					
	Supply & Installation of Powder Coated GI Service Pipe & Fittings					

 emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 4 HARYANA (KARNAL, KAITHAL, REWARI, GURUGRAM)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Assessment of material requirement for installation at site, Order placement and Purchasing of Powder coated GI Pipes, GI fittings, Copper pipes & fittings, Brass Fittings from approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, getting dispatch clearance, handling, loading, transportation and unloading of these items at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of owner supplied above ground fittings such as regulators, meters, Isolation Valves & appliance valves and other free issue items as defined in specification from Owner's designated stock yards to Contractor's own stores / work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches, schedules & execution procedures. Finalising optimum route with consent of customer from transition fitting to cooking oven / appliance and ensuring installations in well ventilated area. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices. Portal entry for new connections - New registration tracking and feasibility survey and its updation as per IGL defined TAT;printing of stationary as per approved IGL formats required during connections. Followup and attend complaints receives from customer regarding delay in new connection (ReferDrg No 14588-20-05--01, 02, 03)					
	Installation of GI service pipes & fittings, regulators, Valves etc. including NPT threading, as specified, Drillings of holes through the walls (Brick, RCC), Granite, Marble, Wood Cutting, Glass Cutting with proper heavy duty hammer drill machine, tools & tackles, using proper sealant/grout material and colours to match the original replacement of the damages during drilling, restoring the area to the original condition, Painting of scratched length of powder coated pipe and fittings after proper surface finish by one coat of approved primer paint and two coats of approved synthetic enamel paint. Restoring the wall surface to original conditions.					
	Supply & fixing of approved clamps & nylon rawl plugs with SS 304 2" screws, grout material, suitable thread sealant i.e. Teflon Tape, Joining of transition fitting to above ground service GI pipes, testing, purging and commission of the complete installation. The rates in connections also includes meter installation, tap off rates. The GI installation in already gas charged areas, planning & coordinating with existing consumer's for New tap offs from existing riser with or without tee, testing of these existing risers and commissioning of these connections with newly tapp offs etc.is inclusive.					
11	NON LMC					
11.1	Supply & installation powder coated 1/2" GI Pipe from TF to regulator - up to 1.5 Mtr Length	Nos	1013015	6,480	405.78	26,29,537.21
11.2	Supply & Installation of powder coated 1/2" GI Riser from regulator isolation valve to appliance for G+3 Apt and Individual kothi /Bungalow. Refer Drg No 14588-20-05--02)	M	1013016	1,95,663.93	383.89	7,51,13,545.78
11.3	Supply & installation of powder coated 3/4" GI Riser from regulator isolation valve to lateral isolation valve for Apt more than G+3 floors. Refer Drg No 14588-20-05-02)	M	1013017	6,154.54	409.99	25,23,291.19
11.4	Testing & Commissioioning of already installed Risers GI / Copper Pipe (1/2" / 3/4" / 12mm) Non LMC riser (1/2" / 3/4")	M	1012680	11,515.73	54.80	6,31,020.90
11.5	Testing & Commissioioning of already installed / Laterals GI / Copper Pipe (1/2" / 12mm / mlc) LMC	Nos	1015925	1,536	315.29	4,84,186.78

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 4 HARYANA (KARNAL, KAITHAL, REWARI, GURUGRAM)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
12	LMC					
12.1	PNG connection in Project area-low rise					
12.1.1	Installation of meter with required fittings	Nos.	1020554	18,812	1,427.80	2,68,60,381.93
12.1.2	Supply and installation of Gi/ Cu/ MLC pipe along with required fittings from Lateral isolation valve to appliance valve	M	1020555	75,249.51	445.51	3,35,24,037.25
12.2	PNG CONNECTIONS IN O&M AREA (ON EXISTING RISER)					
12.2.1	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2 m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter. Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4m. Payment against additional length of (GI + Cu) shall be as per item 12.2.3 of SOR.	Nos.	1013019	3,317	3,347.26	1,11,04,336.40
12.2.2	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 12.2.3 of SOR.	Nos.	1015927	5	3,367.46	16,837.31
12.2.3	Powder coated GI and Cu installations for pipes more than 4 m per connection					
12.2.3.1	1/2" Powder coated GI	M	1013020	72,417.98	346.01	2,50,57,105.55
12.2.3.2	12mm Copper /mlc Pipe - Inside kitchen location only	M	1013021	44.19	346.85	15,326.21
13	Collection of registration /KYC forms duly filled with required supporting documents, Submission to IGL marketing on schedule as decided by IGL; This SOR may be used only after instruction of EIC/Site-in-Charge.	Nos	1013022	6,843	211.60	14,47,949.53
PART III	HIGH RISE SEGMENT (14 Storey & Above)					
14	MDPE Pipe line laying (20mm / 32 mm / 63mm) in already excavated trench in Builder segment / Private Property i.e Multistorey buildings / apartments with no movement of Heavy Vehicles, surrounded with Boundary wall)					
	Laying in already excavated trench with or without casing ; it includes execution of the work as per specification (as per trench dimension Drg No 14588-10-03-16), laying, electrofusion joints and insertion of the carrier pipe in casing pipe (on case to case basis) laying of warning mat and re-installation of pre cast slabs as per specification and instruction of EIC / Site Engineer of Owner. In Case of sand filling required as instructed by EIC/IGL representative SOR no. 28.4 shall be paid over and above this rate.	M	1013034	100.00	228.46	22,845.89
15	Supply & Installation of Welded Riser - Non LMC					
15.1	Installation of welded riser 1/2 inch upto isolation valve	M	1013035	426.79	524.48	2,23,842.88
15.1	Installation of welded riser 3/4 inch upto isolation valve	M	1013036	11,564.75	562.37	65,03,624.78
15.1	Installation of welded riser 1 inch upto isolation valve	M	1013037	2,121.53	616.25	13,07,383.30
15.1	Installation of welded riser 2 inch upto isolation valve	M	1013038	2,026.22	1,161.77	23,54,013.09
16	LMC					
16.1	PNG CONNECTIONS IN PROJECT AREA					

 energizing Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 4 HARYANA (KARNAL, KAITHAL, REWARI, GURUGRAM)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
16.1.1	Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + Cu) shall be as per item 17 of SOR.	Nos.	1013039	431	3,316.95	14,28,332.17
16.1.2	Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 17 of SOR.	Nos.	1017154	684	3,269.81	22,36,546.74
16.2	PNG CONNECTIONS IN O&M AREA (ON EXISTING RISER)					
16.2.1	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2 m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter. Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4m. Payment against additional length of (GI + Cu) shall be as per item 17 of SOR.	Nos.	1013040	296	3,513.95	10,38,591.30
16.2.2	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 17 of SOR.	Nos.	1017155	460	3,494.58	16,07,508.29
17	Powder coated GI and Cu installations for pipes more than 4 m per connection.					
17.1	1/2" Powder coated GI	M	1013041	50,978.45	346.01	1,76,38,884.18
17.2	12mm Copper/mlc - Inside kitchen location only	M	1013042	8.00	383.05	3,064.39
18	NG conversion for domestic connection					
18.1	Providing services for NG conversion, monitoring the pendency and conversion of stoves including the supply of material required for conversion of appliance/stove + Tools & Tackles required, Printing of JMR sent by IGL In-charge on email, scanning of signed JMR and submission to In-charge, completion of NG conversion within the defined TAT.	Nos.	1013309	20,879	281.57	58,78,929.87
18.2	Perfoming Slab hole by using specific tools (wherever required)	Nos.	1015703	163	193.90	31,679.95
18.3	Perfoming Core cutting by using specific tools (wherever required)	Nos.	1015704	10	174.51	1,745.06
18.4	Perfoming glass cutting by using specific tools (wherever required)	Nos.	1015705	10	64.91	649.13
18.5	Replacement of defective Meter/Domestic Regulator/Meter Regulator with new ones (which are freely issued by IGL)	Nos.	1015706	5	256.28	1,190.66
18.6	Extension of existing / modification in GI pipeline	M	1015707	6.97	357.44	2,490.98
18.7	Extension of existing / modification in Cu pipeline	M	1015708	1,000.00	345.64	3,45,638.92
19	Installation of Service Regulator					

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 4 HARYANA (KARNAL, KAITHAL, REWARI, GURUGRAM)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
19.1	Receiving, taking over, handling, loading, transportation and unloading of owner supplied items such as Service Regulator/ SR module with canopy & Isolation Valves and other free issue items as per technical specification from Owner’s designated stock yards to Contractor’s stores / work sites. Fabrication, Erection, Welding, Testing & Installation of Service Regulators as per drawing no. Drg No 14588-20-05-37), Rev 0. Supply and installation of regulator boxes including fabrication as per drawing no. Drg No 14588-20-05-42), and painting as per technical specification. Any other material & activities not mentioned/covered above, but otherwise required for satisfactory completion/safety of work as defined in tender has to be supplied / done by contractor with in specified schedule at no extra cost to owner.					
19.1.1	Service Regulator with regulator cover and Transition Fittings installation	Nos	1013043	63	8,861.00	5,56,740.74
19.2	Receiving, taking over, handling, loading, transportation and unloading of owner supplied items such as Service Regulator module with canopy as per technical specification from Owner’s designated stock yards to Contractor’s stores / work sites. Testing, Commissioning & Installation of Service Regulators as per drawing no. Drg No 14588-20-05-37), Rev 0. Supply and installation of regulator boxes including fabrication as per drawing no. Drg No 14588-20-05-42), and painting as per technical specification. Any other material & activities not mentioned/covered above, but otherwise required for satisfactory completion/safety of work as defined in tender has to be supplied / done by contractor with in specified schedule at no extra cost to owner.					
19.2.1	installation and commissioning of SR module with canopy	Nos	1020556	1,000	5,050.01	50,50,010.70
20	Foundations works for Service Regulator					
	Providing and laying of Plain Cement Concrete (PCC - 1:2:4)					
	Providing, Fixing, Centering, Shuttering and laying of Cement Concrete with concrete of nominal mix 1:2:4 by mass (1 cement 2 coarse sand 4 coarse stone/aggregates/gravels) with 20 mm down size graded crushed stone / aggregates / gravels as per technical specification. Any other material & activities not mentioned/covered above, but otherwise required for satisfactory completion/safety of work as defined in tender has to be supplied / done by contractor with in specified schedule at no extra cost to owner.	Nos	1013044	62	5,450.61	3,39,573.71
21	Supply & Installation of Crash guard for Service Regulator					
	service will cover site clearance, RCC structure M-25 upto plinth level, painting s&t and S&f of steel structure of all levels	Nos	1020557	62	10,816.66	6,73,878.84
PART III	Civil Works					
22	Foundation works					
22.1	Excavation, Providing and Laying Reinforced Cement Concrete (M-20))					

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 4 HARYANA (KARNAL, KAITHAL, REWARI, GURUGRAM)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Excavation in any plane & dimension including disposal of excavated earth up to any lead in all conditions, backfilling using serviceable earth and disposal of surplus and unserviceable earth. Soil to be levelled and properly compacted complete in all respect as per scope of work, technical specification and directions of EIC / Site-in-charge. Providing and laying REINFORCED CEMENT CONCRETE OF M-20 Grade (Concrete shall be design mix / nominal mix) with 20mm & down size graded crushed stone aggregates in NON SUSPENDED slabs/pavement slabs including pedestals, ramps etc., laying in alternate panels to required slopes, all necessary form work and finishing the top surface rough or smooth as required and directed, providing pockets/openings etc. including vibrating, tampering, curing, rendering and making smooth if required in any position, shape, level and thickness etc. as specified and directed by EIC / Site-in-charge. The rates include grouting of pockets, supply of material, shuttering, tools & tackles, Reinforcement etc.	CuM	1008323	24.82	10,843.92	2,69,124.72
22.2	Providing and Laying Plain Cement Concrete (1:4:8)					
	Providing & laying, Fixing, Centering and Shuttering of plain cement concrete with nominal mix 1:4:8 by mass (1 cement: 4 coarse sand: 8 coarse stone/ aggregates/ gravels) with 20 mm down size graded etc as specified in specifications .	CuM	1007178	8.43	4,673.59	39,405.30
23	Shifting and Installation of Field Regulating Station (For weights ranging from 1 Ton to 10 Ton)					
	Dismantling/loading from IGL site/store and its transportation to IGL store/Site with its unloading and installation of FRS/MRS as per the instructions of Site In-charge/ EIC. The shifting of FRS/MRS skids on the platform / foundation shall be done using cranes / hydra as required by the site condition.	Nos	1013023	19	33,832.99	6,53,037.48
24	Supply & Installation of Half round concrete sleeve (Crush Guard)					
	Installation of half round concrete sleeve for service line shall be done by sealing the annulus between pipe & sleeve, firm fixing of concrete sleeve by concrete mix pedestal, clamping, sand filling etc. Half round concrete sleeve shall be made as per drawing no 14588-10-03-33. Installation shall be done after instruction of IGL/PMC.					
24.1	Project	CuM	1013024	400.00	587.88	2,35,153.46
24.2	O&M (existing regulator piece)	Nos	1013025	400	604.26	2,41,703.70
25	Supply & Installation of RCC Slab 100 mm thk X 300 mm width					
	Supply & Installation of RCC (M20) Slab 100 mm thk X 300 mm width; This SOR may be used only after instruction of EIC / Site-in-charge.	M	1014794	400.00	417.58	1,67,031.01
26	Installation of Valve Chambers:					
	All civil works including supply of materials, excavation of pit, piping supports including all PCC, RCC and Brick works for valve pits, sand filling to cover valve body, pedestals with insert plates as required, sealing of pipes in pits, providing cover etc., finishing, clean up and restoration. The work shall be executed as per specification. Also providing water proofing agents internal and external plaster of chamber to avoid water seepage. Refer Drg No 14588-20-03-- 20, 21, 22.& 23)					
26.1	Brick Valve Chambers- Size (L x W)- 2m x 1 m	Nos	1013026	2	59,042.17	1,18,084.34
26.2	RCC Valve Chambers- Size (L x W)- 2m x 1 m	Nos	1013027	6	62,917.47	4,05,519.20
26.3	Brick Valve Chambers- Size (L x W)- 1.5m x 1 m	Nos	1013028	4	51,901.09	2,23,501.72
26.4	RCC Valve Chambers- Size (L x W)- 1.5m x 1 m	Nos	1013029	186	48,956.06	91,14,609.42
26.5	Brick Valve Chambers- Size (L x W)- 1 m x 1 m	Nos	1014795	8	42,484.28	3,39,874.24
26.6	RCC Valve Chambers- Size (L x W)- 1 m x 1 m	Nos	1014796	2	39,494.55	78,989.09
26.7	RCC Valve Chambers- Size (L x W)- 0.85 m x 0.85 m	Nos	1014797	2	33,432.95	70,198.14
26.8	CONSTRUCTION OF LONG STEM VALVE CHAMBER	Nos	1020558	111	41,145.00	45,67,979.18

	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 4 HARYANA (KARNAL, KAITHAL, REWARI, GURUGRAM)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
26.9	PRE-CAST Valve Chambers- Size (L x W)- 2m x 1 m	Nos	1020559	2	69,209.21	1,38,418.43
26.10	PRE-CAST Valve Chambers- Size (L x W)- 1.5m x 1 m	Nos	1020560	74	53,851.67	39,78,063.53
26.11	PRE-CAST Valve Chambers- Size (L x W)- 1 m x 1 m	Nos	1020561	2	43,444.00	86,888.00
26.12	PRE-CAST Valve Chambers- Size (L x W)- 0.85 m x 0.85 m	Nos	1020562	2	36,776.25	73,552.49
26.13	PRE-CAST Valve Chambers- Size (L x W)- 0.6 m x 0.6 m	Nos	1020563	4	29,840.54	1,32,150.96
26.14	RCC Valve Chambers- Size (L x W)- 0.6 m x 0.6 m	Nos	1014798	16	27,127.76	4,34,044.22
27	Brick Work					
	Providing brick work with brick class designation M-7.5 of IS:1077 in cm1:4 (1 cement : 4 sand) in steps, walls, retaining walls and load bearing structures drains, or any shape with all lead, depths & height including curring, scaffolding, etc., as per specifications and drawings with all bye-works and direction of the Enfineer-incharge.	CuM	1014799	1.16	6,601.82	7,631.06
	Rate to include cost of all labour, tools, tackles, equipment, hire charges, supply of all materials such as minimum 43 grade cement, bricks, finishes, bitumen, other minor constrcution materials, shuttering, staging, masonry work, plastering, painting etc. with all bye-works and sundry works).					
	Note: The quantites of individual item can varied as per site requirement.The payment will be made as per actual certified measurement at site.					
28	Construction of trenches in Builder segment / Private Property i.e Multistory buildings / apartments with no movement of Heavy Vehicles, surrounded with Boundary wall)					
28.1	Construction of dedicated trench (as per approved drawing) with removable top cover, scope includes excavation of trench, construction of brick wall, waterproofing of trench, installation of precast RCC slab covers (including supply) Ref. drawing 14588-10-03--34 Tench Dimension- 0.6m x 0.66m x 1.0m (d x w x l)	M	1013030	100.00	5,498.92	5,49,892.28
28.2	Construction of dedicated trench (as per approved drawing) with removable top cover, scope includes excavation of trench, construction of brick wall, waterproofing of trench, RCC slab (150mm thick and 300mm width) at the top and RCC slab (100mm thick and 300mm width) at bottom. However, where MDPE laid on the basment top, roof of basment shall be treated as the bottom. There shall be sand filling across three sides of the line pipe of 100mm each shall be required to be taken by contractor in consultation with EIC / Site-in-charge as per latest PNGRB Guidelines. Minimum pipe top cover of 375 mm is required and the line pressure shall not exceed 110mbar. Tench Dimension- 0.375m x 0.66m x 1.0m (d x w x l)	M	1013031	100.00	4,688.33	4,68,833.12
28.3	Excavation of trench and installation of 6" GI Pipe C Class by any method (Open /Moiling) , and restoration for road crossing upto 7.0 m inside society as 14588-10-03-43 Note- In case of restoration SOR Item no. 5 shall be applicable over and above this SOR.	M	1013032	100.00	2,425.22	2,42,522.48
28.4	Sand Filling in any type of trenches in builder segment only; Scope includes supply of coarse sand (Size 0.6 To 2.0mm) as per IS 383 free from impurity like clay, mica and soft flaky pieces as per instruction of EIC / Site-in-charge. Note- Actual qty.(Cu.m) of sand filling for 28.1, 28.2 & 28.3 shall be claimed in this SOR	Cu.M	1013033	100.00	970.25	97,025.37
PART V	MRS FABRICATION AND INTERNAL PIPING WORKS FOR INSTALLATION OF INDUSTRIAL & COMMERCIAL CONNECTIONS					

 energising Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 4 HARYANA (KARNAL, KAITHAL, REWARI, GURUGRAM)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Receiving, handling, loading, transportation and unloading of owner supplied MDPE pipes & fittings, warning mat and other free issue items from IGL's designated stock yards to Contractor's own stock-yards/ work-sites. Proper storing, stacking, identification, providing security, and insurance cover for the materials. Liaisoning with Landowning agencies / statutory authorities, preparation of detailed route plan, making trial pits to determine the underground utilities/ services etc., obtaining permission from Land owning agencies, restoration of the abandoned trial pits (excavation to depth 1.5 m or more as satisfaction to EIC) to original condition. Barricading the work area as per the procedures & drawings provided in the tender and as per the directions of EIC / site-in charge. Trenching to the required depth in all type of surface, uncoiling / stringing of pipes, damping, jointing of the pipe ends/ fittings/ valves by qualified personnel, using approved electro fusion techniques as per specification. Restoration of extra excavated portion along the TF point is inclusive in connection rates irrespective of the size of pit excavated at TF point and shall not be charged separately.					
29	MDPE Pipeline laying in all type of surface by any method					
29.1	Laying rates of 32&63 mm Dia MDPE pipeline - pipe length upto 25.00 mtrs for industrial and commercial connections	Nos.	1020564	100	26,444.72	26,44,471.95
29.2	MRS Installation					
29.2.1	Connection rates for installation of CS MRS with 1" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014449	17	20,812.72	3,53,816.28
29.2.2	Connection rates for installation of CS MRS with 1-1/2" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014450	112	28,075.58	31,44,464.79
29.2.3	Connection rates for installation of CS MRS with 2" pipe & fittings with RPD Meter up to G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1012050	110	39,977.70	43,97,547.45
29.2.4	Connection rates for installation of CS MRS with 3" pipe & fittings with RPD Meter above G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1014451	19	47,272.56	8,98,178.55
	Note: a. Supply & Installation of required size of brass fittings in all type of meters supplied by IGL shall be in scope of contractor. B. Supply & installation of SS Tubing with fitting shall be in scope of contractor; Maximum length is 2.0m per MRS installation. C. 10% payment shall be released only after instllation of caging.					
30	CS Common Headers for MRS installation - Supply, Erection, welding & Installation of CS pipes & fittings (all types) except Ball Valves as common headers along with branching for commercial connections.					
	In addition to other activities under SOR item no. 29 and as detailed in specification and as per the instructions of the EIC / Site engineer of Owner. Erection, Fabrication, Welding & Installation of common headers of CS pipes & Fittings till isolation valves for fixing of numerous meters through a single header and includes connecting of common Regulators on headers, NPT threading, Radiography, as specified, Drillings of holes through the walls Brick, RCC, Granite, Marble, Wood Cutting, Glass Cutting with proper heavy duty hammer drill machine, tools & tackles, using proper sealant/grout material and colors to match the original replacement of the damages during drilling, restoring the area to the original condition, Painting of entire length of pipe along with fittings after proper surface finish by one coat of approved primer paint and two coats of approved synthetic enamel paint. Restoring the wall surface to original conditions. Supply & fixing of approved MS angle clamps, Ceiling					

 Integrating Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 4 HARYANA (KARNAL, KAITHAL, REWARI, GURUGRAM)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	clamps & dowel plugs with screws, supply and insertion of insulation material i.e. PVC, PTFE sheet between pipe/ meter support and pipe/ meter, grout material, suitable thread sealant i.e. Teflon Tape / lock tight, Supply of different sizes 1" to 4" , 150# spiral wound gasket, studs & bolts (various sizes with wire sealing arrangement wherever required), Joining of transition ftg. to above ground CS pipes, testing, purging and commission of the complete installation. Supply and installation of STANDARD Y TYPE FLANGE END STRAINER between T.F. I.V. to Regulator Inlet. Strainer size may be 1", 2", 3" & 4" corresponding to installed TF size. The payment for supply and installation of Y type strainer is included in MRS fabrication. The meters installed on tap offs from common header will be paid separately as per SOR No. 30.3 to 30.6					
30.1	2" pipes & fittings	RM	1007245	369.60	2,374.03	8,77,440.06
30.2	4" pipes & fittings	RM	1007246	480.00	3,269.89	15,69,544.82
30.3	Connection rates for installation of CS MRS with 1" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014449	2	19,468.93	46,725.44
30.4	Connection rates for installation of CS MRS with 1-1/2" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014450	12	24,716.11	2,96,593.29
30.5	Connection rates for installation of CS MRS with 2" pipe & fittings with RPD Meter up to G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1012050	7	37,290.13	2,68,488.92
30.6	Connection rates for installation of CS MRS with 3" pipe & fittings with RPD Meter above G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1014451	5	43,913.08	2,10,782.80
	Note: a. Supply & Installation of required size of brass fittings in all type of meters supplied by IGL shall be in scope of contractor. B. Supply & installation of SS Tubing with fitting shall be in scope of contractor; Maximum length is 2.0m per MRS installation C. 10% payment shall be released only after installation of caging					
30.7	Supply & Installation of Pressure Gauges					
30.7a	RANGE 0-100 MBAR - 4"- DIAL SIZE	Nos.	1012127	109	1,510.16	1,64,909.71
30.7b	RANGE 0-1 BAR - 4"- DIAL SIZE	Nos.	1007252	5	1,366.18	6,557.69
30.7c	RANGE 0-4 BAR - 4"- DIAL SIZE	Nos.	1007253	115	1,414.18	1,62,913.22
30.7d	RANGE 0-6 BAR - 4"- DIAL SIZE	Nos.	1007254	10	1,494.16	14,343.98
30.8	Supply & Installation of FLANGE END BALL VALVES, MAOP- 4 BAR				-	-
30.8a	4"	Nos.	1007181	10	13,461.56	1,29,230.98
30.8b	2"	Nos.	1007182	36	5,592.40	2,01,326.37
30.8c	1-1/2"	Nos.	1009365	36	3,982.41	1,43,366.86
30.8d	1"	Nos.	1007283	11	2,812.36	30,373.46
30.9	Supply & Installation of FLANGE END GLOBE VALVES, MAOP- 4 BAR				-	-
30.9a	2"	Nos.	1007182	25	10,727.91	2,70,343.34
30.9b	1-1/2"	Nos.	1012130	312	8,105.92	25,29,048.11
30.9c	1"	Nos.	1007283	48	3,982.41	1,91,155.82
30.10	Supply & Installation of BRASS ISOLATION VALVE				-	-
30.10a	2"	Nos.	1007182	25	2,178.54	54,899.13
30.10b	1-1/2"	Nos.	1012130	312	1,832.35	5,71,693.65
30.10c	1"	Nos.	1007283	11	706.13	7,626.19
30.10d	1/2"	Nos.	1012135	48	475.77	22,836.72
30.11	Supply & Installation of STRAINER				-	-
30.11a	2"	Nos.	1007182	115	10,590.33	12,20,006.27
30.11b	1"	Nos.	1007283	119	8,606.64	10,22,469.38
30.12	WELDING OF JOINTS - Butt Weld Joints				-	-
30.12a	4"	Nos.	1007181	30	364.74	10,942.28
30.12b	3"	Nos.	1007287	30	313.55	9,406.52

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 4 HARYANA (KARNAL, KAITHAL, REWARI, GURUGRAM)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
30.12c	2"	Nos.	1007182	61	313.55	19,189.30
30.12d	1-1/2"	Nos.	1012130	32	284.76	9,226.07
30.12e	1"	Nos.	1007283	14	83.19	1,197.89
30.12f	1/2"	Nos.	1012135	18	76.79	1,382.18
30.13	Fillet Joints & Supply of Socolet				-	-
30.13a	1"	Nos.	1007283	25	1,002.08	25,252.47
30.13b	1/2"	Nos.	1012135	31	877.62	27,381.80
30.14	RADIOGRAPHY OF JOINTS				-	-
30.14a	4"	Nos.	1007181	5	801.15	3,845.54
30.14b	3"	Nos.	1007287	5	616.22	2,957.87
30.14c	2"	Nos.	1007182	6	676.69	4,060.16
30.14d	1-1/2"	Nos.	1012130	5	600.23	2,881.08
30.14e	1"	Nos.	1007283	2	523.76	1,257.02
30.14f	1/2"	Nos.	1012135	2	523.76	1,257.02
30.15	SUPPLY/ INSTALLATION OF CLAMPS, SUPPORTS FOR ERECTION OF ALL SIZES OF PIPELINE				-	-
30.15a	TYPE-1, SIDE WALL MOUNTED AS PER DRAWING	KG	1015931	546.00	134.38	73,370.85
30.15b	TYPE-2, GROUND BASED AS PER DRAWING	KG	1015932	234.00	131.18	30,695.97
30.15c	TYPE-3, CEILING MOUNTED AS PER DRAWING	KG	1015933	82.80	124.78	10,331.81
30.16	SUPPLY OF THREADED END BALL VALVE				-	-
30.16a	1"	Nos.	1007283	10	770.12	7,393.14
30.16b	1/2"	Nos.	1012135	10	507.76	4,874.50
30.17	SUPPLY OF FLANGES AS PER SPECIFICATION				-	-
30.17a	WNRF 3"	Nos.	1012136	102	1,146.70	1,16,963.34
30.17b	WNRF 2"	Nos.	1012137	348	876.02	3,04,855.67
30.17c	BLRF 3"	Nos.	1012138	11	717.97	7,754.04
30.17d	BLRF 2"	Nos.	1012139	101	546.47	55,084.57
30.17e	Spectacle Blind 3"	Nos.	1012140	11	2,035.84	21,987.07
30.17f	Spectacle Blind 2"	Nos.	1012141	101	1,862.11	1,87,700.36
30.18	SUPPLY OF REDUCER				-	-
30.18a	3" X 2"	Nos.	1012142	11	236.76	2,557.04
30.18b	2" x 1-1/2"	Nos.	1012143	76	166.37	12,577.86
31	Modifications & Installation of Meters & Regulators in existing MRS/Skids/DRS:				-	-
	Assessment of material requirement for installation at site, Order placement for purchasing of CS Pipes & fittings from anyone of approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, Dispatch clearance, handling, loading, transportation and unloading of these at respective contractor’s store. Receiving, taking over, handling, loading, transportation and unloading of owner supplied above ground fittings like regulators, meter & Isolation Valve and other free issue items as defined in specification from Owner’s designated stock yards to Contractor’s own stores / work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches for modification, schedules & execution procedures and all others necessary documentation. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices.				-	-
	Taking shutdown of existing MRS, dismantling meters/regulators, replacement/fixing of meters/regulators with associated inlet and outlet connections / fittings, supply of pipes & fittings (excluding flange end Ball Valve), pipe cutting, threading, welding, testing, Radiography of Joints & firmly fixing with approved meter clamps/brackets and other supports by proper grouting and necessary documentation. Restoring the area to the original condition as per the specifications and to complete satisfaction of consumer and EIC. The rates includes all as above along with testing of joints till re-commissioning.				-	-

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 4 HARYANA (KARNAL, KAITHAL, REWARI, GURUGRAM)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
31.1	Diaphragm meter	Nos.	1012153	7	5,160.15	37,153.06
31.2	RPD Meter	Nos.	1012154	7	6,752.54	48,618.26
31.3	Turbine Meter	Nos.	1012155	2	6,752.54	16,206.09
31.4	300 mbar regulator	Nos.	1012156	11	3,295.48	35,591.19
31.5	500 mar regulator	Nos.	1012157	11	4,063.36	43,884.29
31.6	2 bar regulator	Nos.	1012158	2	4,479.29	10,750.31
31.7	Butt Weld Joints				-	-
31.7a	4"	Nos.	1007181	48	1,679.74	80,627.30
31.7b	3"	Nos.	1007287	96	1,295.80	1,24,396.41
31.7c	2"	Nos.	1007182	120	1,343.79	1,61,254.60
31.7d	1-1/2"	Nos.	1012130	120	1,103.83	1,32,459.14
31.7e	1"	Nos.	1007283	120	767.88	92,145.49
31.8	Supply & Installation of CS Piping (Seamless A 106 Gr-B, Sch-40)- 150 #				-	-
31.8a	4"	MR	1009386	24.00	3,455.46	82,930.94
31.8b	3"	MR	1007287	24.00	3,215.49	77,171.85
31.8c	2"	MR	1007182	24.00	3,071.52	73,716.39
31.8d	1-1/2"	MR	1012130	24.00	2,620.39	62,889.30
31.8e	1"	MR	1007283	24.00	1,814.11	43,538.74
	Modifications/ replacements (meter or regulator or both) in existing MRS/Skids/DRS using threaded fittings/ flanged end (same size or bigger) shall be payable through SOR Item No. 31.1 to 31.6.				-	-
	Modifications/ replacements (meter or regulator or both) in existing MRS/Skids/DRS using welding (same size or bigger upto 3.00 mtrs) shall be payable through SOR Item No.31.7				-	-
	Modifications/ replacements (meter or regulator or both) in existing MRS/Skids/DRS using welding (in case, erected length after modification is more than 3.00 mtrs) shall be payable through SOR Item No. 31.8				-	-
	The payments of flange end ball valve shall be paid as per SOR Item No. 30.8.				-	-
32	Restoration of old MRS (after 1 year/Complete defect liability)				-	-
	Cleaning, Repair,Testing, painting, tightening of bolts of old Metering and Regulating skids	Nos.	1015934	120	4,711.00	5,65,320.47
33	Conversion of Commercial Appliances:				-	-
	Conversions of all types of appliances to NG based appliances. Supply & changing of the nozzles /jets and associated controls for Non-domestic appliances (imported appliances included) with proper tools and tackles. Cleaning and performing minor maintenance, greasing etc. of the appliance. Testing and showing the performance to the customer, signing of joint meter records (JMR) and instructing the customer on use & safety norms, complete as per specifications & to satisfaction of owner / Engineer in Charge and includes supply of reinforced rubber hose with requisite pressure rating.				-	-
33.1	NG conversion for domestic appliances (G 1.6)	Nos.	1015935	24	1,562.07	37,489.67
33.2	NG conversion for all commercial appliances	Nos.	1007175	234	1,884.40	4,40,949.97
	Note: The payments of conversion shall be as per burners.				-	-
34	Supply of lock & Keys for MRS Cages				-	-
	Padlock with Lever mechanism shall be durable solid body to resist corrosion. Shackle shall be hardened electroplated to resists hacksaw cutting and rusting under normal atmospheric conditions.	Nos.	1015936	234	1,103.83	2,58,295.32
	Civil Works				-	-
35	Demolition of PCC work below plinth level				-	-
	Demolishing plain cement concrete (PCC) work (taking all necessary safety precautions) for all depths below plinth level including supply of all tools & tackles, necessary scaffolding, propping, underpinning, etc. , disposal of unserviceable material outside the IGL boundary limits kipping the IGL indemnified of any liabilities from statutory/ local bodies, all complete work as specified and directed	Cu. M	1009367	264.00	2,082.76	5,49,848.54
36	Excavation for foundation works				-	-

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 4 HARYANA (KARNAL, KAITHAL, REWARI, GURUGRAM)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Excavation as per plan, upto 3 meters and upto any lead in all conditions, backfilling using serviceable earth and disposal of surplus and unserviceable earth. Soil to be levelled and neatly dressed complete in all respect as per scope of work, technical specification and directions of EIC.				-	-
	Upto 3.0 Mtrs	Cu. M	1007176	264.00	570.28	1,50,553.77
37	Foundation works				-	-
37.1	Providing and Laying Plain Cement Concrete (1:2:4)				-	-
	Providing & laying, Fixing, Centering and Shuttering of plain cement concrete with nominal mix 1:2:4 by mass (1 cement: 2 coarse sand: 4 coarse aggregates) with 20 mm down size graded aggregates/ gravels as specified in specifications and satisfaction to the EIC.	Cu. M	1007177	40.80	11,287.82	4,60,543.15
37.2	Providing and Laying Plain Cement Concrete (1:4:8)				-	-
	Providing & laying, Fixing, Centering and Shuttering of plain cement concrete with nominal mix 1:4:8 by mass (1 cement: 4 coarse sand: 8 coarse stone/ aggregates/ gravels) with 20 mm down size graded etc as specified in specifications and satisfaction to the EIC.	Cu. M	1017159	40.80	7,678.79	3,13,294.66
37.2	Supply and Fixing of Deformed Steel Bars Reinforcement				-	-
	Supply and placing in position high strength deformed steel bars reinforcement (conforming to IS: 1786, Grade Fe 415) for RCC work including transporting, straightening, cleaning, de-coiling, cutting & binding to required shapes and length as per details, binding with contractor's own 16 SWG black soft annealed binding wire at every intersection, supplying and placing with proper cover blocks, supports, chairs, overlaps, welding, spacers, fan hooks etc. for all heights and depths etc. complete the work as directed.	KG	1009380	1,200.00	95.98	1,15,181.86
37.4	Providing and Laying Reinforced Cement Concrete (M-25)				-	-
	Providing and laying REINFORCED CEMENT CONCRETE OF M-25 Grade (Concrete shall be design / nominal mix) with 20mm & down size graded aggregates in NON SUSPENDED slabs / pavement slabs including pedestals, ramps etc. filling pockets with grouting, laying in alternate panels to required slopes, all necessary form work and finishing the top surface rough or smooth as required and directed, providing pockets/openings, recesses, chamfering etc. wherever required, vibrating, tamping, curing, and rendering smooth if required in any position, shape, level and thickness etc. all complete as specified, shown and directed. Rates to include all materials (other than steel), labour, shuttering and necessary works required to make work complete.	Cu. M	1007179	48.00	11,278.22	5,41,354.74
37.5	Dismantling of RCC & cutting of reinforcement (Thickness above 3")	Cu. M	1012161	48.00	5,206.90	2,49,931.16
	Internal Piping Work				-	-
38	Internal Piping - Supply, Erection & welding of CS pipes & fittings (all types) except Ball Valves for commercial connections.				-	-
	Assessment of material requirement for installation at site, Order placement for purchasing of CS Pipes & fittings from anyone of approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, Dispatch clearance, handling, loading, transportation and unloading of these at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of contractor supplied material as defined in specification from Contractor's designated stock yards to IGL's work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches, schedules & execution procedures and all others necessary documentation. Finalising Piping location with optimum route in consent of customer from Meter Outlet till Customer's Appliance. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices.				-	-

	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 4 HARYANA (KARNAL, KAITHAL, REWARI, GURUGRAM)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
38.1	Supply, Erection, Welding, Radiography & Testing of CS Seamless A 106 Gr-B Pipeline. It includes supply of all type of fittings (except ball valves), Supply Of Consumables Like Spiral Wound Gaskets (Winding ANSI 304 Graphite Centering Ring Cs), Stud Bolts (ASTM A 193 B 7, Hexagonal Nuts, ASTM A194 Gr 2H) and is inclusive in rates.				-	-
38.1a	4" NB, Sch-40	MR	1007159	240.00	3,325.88	7,98,210.29
38.1b	3" NB, Sch-40	MR	1007160	240.00	2,783.56	6,68,054.79
38.1c	2" NB, Sch-80	MR	1007161	526.80	2,543.60	13,39,968.17
38.1d	1-1/2" NB, Sch-80	MR	1007162	2,632.80	2,255.64	59,38,661.55
38.1e	1" NB, Sch-80	MR	1007163	351.60	1,823.71	6,41,217.42
38.2	Supply, Erection, Welding, Radiography & Testing of CS Seamless / HFW API 5L GR-B Pipeline. It includes supply of all type of fittings (except ball valves), Supply Of Consumables Like Spiral Wound Gaskets (Winding ANSI 304 Graphite Centering Ring CS), Stud Bolts (ASTM A 193 B 7, Hexagonal Nuts, ASTM A194 Gr 2H) and is inclusive in rates.				-	-
38.2a	4" NB	MR	1007164	240.00	3,325.88	7,98,210.29
38.2b	3" NB	MR	1007165	240.00	2,217.25	5,32,140.20
38.3	Supply & Installation of Safety Devices as per PNGRB gudelines				-	-
38.3a	1" Solenoid Valves	Nos.	1012145	7	15,117.62	1,08,846.86
38.3b	1.5" Solenoid Valves	Nos.	1012146	53	17,637.22	9,31,245.34
38.3c	2" Solenoid Valves	Nos.	1012147	11	24,188.19	2,61,232.46
38.3d	2.5" Solenoid Valves	Nos.	1012148	2	24,692.11	59,261.07
38.3e	ATEX/PESO/CMRI approved Gas detectors	Nos.	1012144	71	17,637.22	12,48,715.35
38.3f	1" Shutoff valve	Nos.	1012149	12	11,590.17	1,39,082.10
38.3g	1.5" Shutoff valve	Nos.	1012150	12	13,605.86	1,63,270.29
38.3h	2" Shutoff valve	Nos.	1012151	12	17,133.30	2,05,599.62
38.3f	2.5" Shutoff valve	Nos.	1012152	12	18,141.14	2,17,693.72
39	Internal Piping - Supply & Installation of Powder Coated GI pipes & fittings (all types) except Ball Valves for commercial connections.					
	Assessment of material requirement for installation at site, Order placement and Purchasing of Powder coated GI Pipes & GI fittings from approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, getting dispatch clearance, handling, loading, transportation and unloading of these items at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of owner supplied above ground fittings such as Isolation Valves and other free issue items as defined in specification from Owner's designated stock yards to Contractor's own stores / work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches, schedules & execution procedures and all others necessary documentation. Finalising Piping location with optimum route in consent of customer from Meter Outlet till Customer's Appliance. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices.					
39.1	Supply installation & Testing of Powder coated GI Pipes. It includes supply of all type of fittings (except Isolation valves), Supply & fixing of approved clamps & nylon rawl plugs with SS 304 2" screws, grout material, suitable thread sealant i.e. Teflon Tape, etc. and is inclusive in rates.				-	-
39.1a	1/2" GI Pipe	Mtr	1015937	1,200.00	483.76	5,80,516.58
39.1b	3/4" GI Pipe	Mtr	1015938	1,200.00	544.23	6,53,081.15
39.1c	1" GI Pipe	Mtr	1015939	1,200.00	675.25	8,10,304.39
40	Supply & Fabrication/Erection of Wired cages for MRS				-	-

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 4 HARYANA (KARNAL, KAITHAL, REWARI, GURUGRAM)						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Assessment of material requirement for installation at site, Order placement for purchasing of MS Angle, Flat, wire mesh & fittings from anyone of approved vendors of IGL, Scheduling, Planning of material & handling, loading, transportation and unloading of these at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of contractor supplied material as defined in specification from Contractor's designated stock yards to IGL's work sites, proper storing, stacking, identification, providing security and insurance cover. Finalising Cage location with in consent of customer & IGL. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices. Supplying & Fixing 4 mm thick MS welded wire mesh (30 mm x 75 mm) by welding/bolting with structural steel elements (Angle & Flat) for making covers for MRS and various other equipments for protection of equipments. Rates to include one coat of primer and two coats of synthetic enamel paint (both side of wired cages), labour, material, transportation, loading/ unloading of material, welding charges etc complete in all respects. For fabrication of cage structure, all the essential jobs viz. cutting, welding, grinding, finishing, painting including all materials like Angle, channel, wire net, support sheet, hardware, electrode, grinding wheel, gas cylinder, paint, primer, grouting, equipment, tools, generator for power, welding machine etc. is under contractor's scope					
40.1	Supply (Angle 65 mm x 65 mm x 6 mm, Flat 50 mm x 6 mm & Wire Mesh 75 mm X 30 mm X 4 mm), fabrication, painting, transportation and installation of MRS cages for SKID by welding/bolting with structural steel elements for making covers for industrial/ commercial PNG meter-regulator systems as per detailed scope of work & Drawing.	MT	1015282	2.88	1,36,058.57	3,91,848.69
40.2	Supply (Angle 40 mm x 40 mm x 5 mm, Flat 25 mm x 4 mm & Wire Mesh 75 mm X 30 mm X 4 mm), fabrication, painting, transportation and installation of MRS cages for WALL MOUNTED MRS by welding/bolting with structural steel elements for making covers for industrial/ commercial PNG meter-regulator systems as per detailed scope of work & Drawing.	MT	1015293	29.92	1,25,980.16	37,68,822.47
41	Supply & Installation Crash Guard for Cage Protection				-	-
	Supply, fabrication, painting, transportation and installation of Crash Guard for protection of Wall Mounted cages for industrial/ commercial PNG meter-regulator systems as per detailed scope of work & Drawing.	MT	1014813	158.40	95,744.92	1,51,65,995.58
	Total Cost (INR)					57,27,75,080.59
	GST @ 18%					10,30,99,514.51
	Total Cost incl. GST (INR)					67,58,74,595.10
	Total Cost inc. GST (in Cr.)					67.59

		ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 5 : MUZZAFARNAGAR, MEERUT, SHAMLI, KANPUR, FATEHPUR, HAMIRPUR, BANDA, CHITRAKOOT & MAHOBA							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
PART-I	MDPE LAYING						
	Route survey of allotted areas and Preparation /Submission of detailed route plan for approval by EIC in AutoCAD format. Receiving, handling, loading, transportation and unloading of owner supplied MDPE pipes & fittings and other free issue items from IGL's designated stock yards to Contractor's own stock-yards/ work-sites. Proper storing, stacking, identification, providing security and insurance cover for the materials. Liaisoning with Landowning agencies / statutory authorities and obtaining permission from them (Separately payable as per SOR Item No.10), making trial pits to determine the underground utilities/ services etc., restoration of the abandoned excavation/ trial pits (excavated to depth of 1.5 m or more as per satisfaction to EIC / Site-in-charge) to original condition, barricading the work area as per the procedures & drawings provided in the tender and as per the directions of EIC / Site-in-charge; uncoiling / stringing of pipes, jointing of the pipe ends/ fittings / Transition fittings/ valves by qualified personnel, using approved electro fusion techniques as per specification.						
	Laying using any method (Open trench, Moling and HDD) with or without casing; it includes survey of the under ground utilities, submission of pre & post HDD profile for approval, execution of the work as per specification (as per trench dimension Drg No 14588-10-03--27), including excavation of pits, moling with hole size not exceeding 20% of the the carrier / casing pipe dia. jointing and insertion of the carrier pipe in casing pipe (on case to case basis) and subsequent padding with soft soil, laying of warning mat in open trench only, backfilling, compaction, submission of as built drawing, as graphs as per attached specification and instruction of EIC / Site Engineer of Owner. Includes laying of pipeline in all type of surface including Kutcha, metal, concrete (PCC/RCC), bituminous, tiled, brick lined etc. after raking up of hard surface of any type; Roads, Pavement, Footpaths etc. shall be made motorable once the pipeline is laid.						
	In case, it is impractical to provide 1.0-meter cover due to physical constrain, additional protective measures such as concrete slab or high impact resistance plastic sheet shall be installed (for the minimum top cover of 600 mm) by the contractor in consultation with EIC / Site-in-charge. EIC / Site-in-charge after examining thoroughly and considering the PNGRB Guidelines may allow the contractor. However, the contractor has to raise technical deviation for approval before commence of work. All the technical deviation shall be submitted with the RA bills.						
	Supply & installation of GI Sleeves, 2.5" NB x 300 mm length GI pipe Sleeve / Half Round Concrete Sleeves for domestic connections, 3" NB x 300 mm length GI Sleeve for commercial and industrial installations (as per GI Pipe Sleeve Drg No 14588-10-03--18), and 1/2 Round concrete sleeve, Drg No 14588-10-03--33) excavation, breaking through any obstructions, insertion of pipe, sealing the annulus, fixing of the sleeves with concrete mix, preparation of pedestal & restoration of excavated pits within the size of pedestal & the same pit with the laying of 20/32 mm dia MDPE pipe as defined in technical specification and instruction of EIC.						

		ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 5 : MUZZAFARNAGAR, MEERUT, SHAMLI, KANPUR, FATEHPUR, HAMIRPUR, BANDA, CHITRAKOOT & MAHOBA							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
1	Flushing, cleaning ,Pneumatic testing, purging with nitrogen and commissioning as per specification and approved procedures providing all tools and tackles, nitrogen, instruments, manpower and other related accessories and as per instructions of the Engineer-in charge.						
	Maintaining the completed pipelines / installation for any defect, failures during defect liability period .						
	Handing over the completed works to IGL for their operation/ use, returning of all surplus material to IGL stores, reconciliation of free issue material area wise and obtaining no objection certificate.						
	On completion of gas charging of pipelines, preparation and submission of As built drawings, crossings details, termination, utility graphs and deviation statements.						
	Submission of all documents required for contract closure in numbers as mentioned in contract.						
	Note- Supply & installation of GI Sleeve / Half round Concrete sleeve and warning mat (open trench excavation) shall be included in laying of MDPE pipe.(Refer Drg No. 14588-20-03--18); Laying in Brick trench shall not payable in this SOR; In such cases SOR No. -20 is valid.						
	GIS data shall be collected of laid MDPE pipeline network. Data like Geo Co-ordinates (latitude, longitude) of Pipeline and related features like fittings, valves, FRS, MRS, Markers etc. shall be collected as per given procedure along with 50 m land base corridor (25 m on either side of the pipeline) with min. accuracy of 50 cm. Data format shall be in shape (.shp) or Geo Database (.gdb)						
	MDPE Pipe line laying in Soft soil & all type of surface (Including PCC/RCC Top Surface - Upto 12") , Open Cut / Molding or any other methodology ; Clear cover to pipeline min 1.0m; (Refer Drg No 14588-10-03-27))						
	1.1 20 mm dia	M	1020533	5000	371.96	18,59,783.69	
	1.2 32 mm Dia	M	1020534	417234	304.56	12,70,71,755.55	
1.3 63 mm Dia (Excluding HDD with casing)	M	1020535	352070	353.16	12,43,36,324.60		
1.4 125mm dia (Excluding HDD with/without casing)	M	1020536	902	451.98	4,07,779.26		
1.5 180 mm dia (Excluding HDD with/without casing)	M	1020537	10	524.88	5,248.78		
	MDPE Pipe line laying in common trench						
1.6 32 mm Dia (in common trench with 32/63/125/180 mm Dia MDPE Pipe)	M	1020538	3460	124.74	4,31,606.63		
1.7 63 mm Dia (in common trench with 63/125/180 mm Dia MDPE Pipe)	M	1020539	10	149.85	1,498.48		
1.8 125mm dia (in common trench with 125/180 mm Dia MDPE Pipe)	M	1020540	2000	187.11	3,74,215.44		
	All service lines left out initially during mainline laying, shall be laid under above mentioned SOR within six months of gas charging of a particular area by the same contractor. In Open trench method/ moiling, no extra rate shall be payable for casing installation. Roads, Pavement, Footpaths, Kutcha etc. shall be made motorable once the pipeline is laid. Liasoning and HSE shall not be paid wrt this SOR						
2	MDPE Pipe line laying by HDD Method, with Casing						

 Emerging Quality		ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 5 : MUZZAFARNAGAR, MEERUT, SHAMLI, KANPUR, FATEHPUR, HAMIRPUR, BANDA, CHITRAKOOT & MAHOBA							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	Survey of the under ground utilities, submission of HDD profile for approval (excluding road and nalla crossings), execution of the work as per the standard procedure attached, including excavation of the pits, Jointing of casing and carrier pipe and insertion of the carrier pipe in casing of dia ranging from 110mm to 160mm for 63 mm, 200mm to 250 mm dia for 125 mm dia MDPE and 250 mm to 315 dia for 180 mm MDPE, subsequent sealing, backfilling, compaction, submission of as built graphs, final HDD profiles as per attached specification and the instruction of EIC / Site Engineer of Owner. The other activities are as per SOR Item No. 1 and as detailed in specification and as per the instructions of the EIC / Site engineer of Owner. The payment shall be made for length of casing pipe laid in HDD, remaining carrier pipe length without casing shall be paid under SOR item no.1						
2.1	63 mm Dia HDD with casing	M	1020541	99	460.08	45,492.25	
2.2	125 mm Dia HDD with casing	M	1020542	607	1,040.04	6,31,219.72	
2.3	180 mm Dia HDD with casing	M	1020543	10	1,258.74	12,587.39	
3	MDPE Pipe line laying by HDD Method, without Casing						
	Survey of the under ground utilities, submission of profile for approval, execution of the work as per the standard procedure attached, including excavation of the pits, Jointing and insertion of the carrier pipe, subsequent backfilling, compaction, submission of as built graphs and final HDD profiles as per attached specification and the instruction of EIC / Site Engineer of Owner. The other activities are as per SOR Item No. 1 & 2 and as detailed in specification and as per the instructions of the EIC / Site engineer of Owner						
3.1	125 mm Dia HDD without casing	M	1020544	87969	572.67	5,03,77,068.77	
3.2	180 mm Dia HDD without casing	M	1020545	10	711.18	7,111.78	
3.3	Laying of MDPE pipeline by HDD method (Maximum length 200m)- This SOR may be applicable only for spans less than 200m where additional mobilization of HDD m/c is required & HDD is the only option to execute the same. Note: There should be no consecutive HDD laying in upstream/downstream within a span of 1KM & This SOR would be applicable for allocations less than 200 m in a single stretch						
3.3.1	63 mm by HDD method (with casing)	Nos.	1020546	1	78,943.00	40,655.41	
3.3.2	125/180 mm by HDD method(with/ without casing)	Nos.	1020547	10	1,24,775.28	12,47,752.84	
4	MDPE Service Line laying in New & old Projects / O&M areas						
	Includes laying of pipeline (for 20 & 32mm) in all type of surface i.e. Kutcha, metal, concrete (PCC/RCC), bituminous, tiled, brick lined etc. after braking up of hard surface of any type by any methodology. Roads, Pavement, Footpaths etc. shall be made motorable once the pipeline is laid. Supply & installation of GI Sleeve / Half round Concrete sleeve shall be included in laying rates. All other activities mentioned in SOR no.1 are applicable.						
	Supply & installation of GI Sleeves, 2.5" NB x 300 mm length Half Round Concrete Sleeves for domestic connections, 3" NB x 300 mm length GI Sleeve for commercial and industrial installations (as per Drg No14588-20-03--18)) excavation, breaking through any obstructions, insertion of pipe, sealing the annulus, fixing of the sleeves with concrete mix, preparation of pedestal & restoration of excavated pits within the size of pedestal & the same pit with the laying of 20/32 mm as defined in technical specification and instruction of EIC.The rates shall include liaison rates with statutory bodies, HSE and no separate rates are payable under this SOR. Wherever service lines are to be laid as per Dwg.-14885-10-03-46A.						

	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 5 : MUZZAFARNAGAR, MEERUT, SHAMLI, KANPUR, FATEHPUR, HAMIRPUR, BANDA, CHITRAKOOT & MAHOBA						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Note:- a. Old Project area shall be defined as an area where any of following criteria are being met: 1. MDPE line is already been charged for more than 6 months. 2. MDPE is laid and gasified by another contractor (currently not working in respective zone) b. Additional rate for construction of RCC structure for protection of service line shall be payable under SOR no. 4.5					
4.1	For pipe length up to 8 meters (O&M area)	Nos	1020548	4160	5,004.17	2,08,16,601.68
4.2	For pipe length up to 6 meters (Project area)	Nos	1020549	33000	2,963.37	9,77,91,302.57
4.3	For pipe length more than 6 meters (Project area)	M	1020550	16500	311.04	51,32,124.70
4.4	Per meter rate for pipeline more than 8 meters (Per meter additional rate shall be payable above SOR item no. 4.1)	M	1020551	32963	311.04	1,02,52,849.13
4.5	Construction of RCC structure for protection of service line (20/32 mm dia.) for drain/nallah (adjacent to house / Boundry walls / Multistory Buildings) crossing as per Dwg.- 14885-10-03-46A					
	The scope includes construction providing and laying reinforced cement concrete of M-25 grade (Concrete shall be design mix/nominal mix) with 20mm & down size graded crushed stone aggregates in Non suspended slabs/pavement slabs including pedestal/ramp etc., laying in alternate panels to required slopes, all necessary form work and finishing the top surface rough/smooth as required in any position, shape, level and thickness etc. The rates includes grouting of pockets, supply of material, tools, shuttering, Reinforce ment etc.	Nos.	1013003	2145	2,159.63	46,31,810.92
5	Excavation in Special Conditions:					
5.1	Excavation of trench or pits in Malba/Multiple layers of asphalt/ brick / PCC/RCC etc. The rates are payable over and above the Laying rates as per relevant SOR item no 1					
5.1.1	Cutting of PCC/RCC surface with thickness cumulative more than 12" (in case of multilayer)or Continuous asphalt multi-layer/Malba/Brick/Boulders more than 24". (Malba shall be considered as a strata where soil is in mixed form of debris/building rubbish or discarded pieces of bricks/stones)	M	1012920	6528	181.44	11,84,393.14
5.1.2	Cutting of PCC/RCC surface with kneumatic braker and cutter thickness cumulative upto 10" (in case of multilayer) (Malba shall be considered as a strata where soil is in mixed form of debris/building rubbish or discarded pieces of bricks/stones)	M	1020552	1632	139.57	2,27,767.91
5.2	Excavation of Hard Rock:					
	Trenching of Hard Rock is defined as trench material with a single piece of rock, dimension exceeding 1 meter in any direction, which requires cutting only by use of manual/pneumatic chisel/drill or sledge hammer and chisel or removal of same by additional techniques and supply of approved coarse sand (Size 0.6-2 mm as per IS 383) free from any impurities like clay, mica and soft flaky pieces for padding of 150 mm above and below laid pipeline as per the specifications ; The rates are payable over and above the Laying rates as per relevant SOR item no 1	Cu.M	1013004	27	3,457.89	92,661.49
5.3	Laying in Congested Area:					
	Congested area shall be defined as an area where MDPE pipeline has to be laid in narrow lanes (Less than 4.5 M including footpath/drains) & houses in such locations have only one side entrance i.e. there is no backlane between two back to back houses & pipeline has to be laid in front of the house. The rates are payable over and above the Laying rates as per relevant SOR item no 1.	M	1012982	10	48.60	486.00
5.4	Laying in continuous water seepage area:					
	The water seepage area shall be defined as an area where the MDPE pipeline has to be laid, in such locations where continuous water seepage occur during trench activity and the same shall not be possible. In that case, the contractor shall have to deploy additional equipment i.e. de-watering pumps etc. for continuous de-watering so that waterlogging shall be avoided. The rates are payable over and above the Laying rates as per relevant SOR item no 1.	M	1014791	10	25.92	259.20

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TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 5 : MUZZAFARNAGAR, MEERUT, SHAMLI, KANPUR, FATEHPUR, HAMIRPUR, BANDA, CHITRAKOOT & MAHOBA							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
5.5	Excavation of Trench / Pit for Tap-off or Hook-up Laocations of new connectivity (1.5 Mtr and above)						
	This item shall cover the deep excavation (depth beyond 1.5 m) of trenches or pits for the identification of existing MDPE pipelines and tap-off or hook-up for new connectivity. Also, required shoring work (including necessary close plank walling, framing, bulla piling, strutting, etc.) shall be done by the contractor. (This item should be executed on specific direction of the Engineer in charge).	No.	1015921	10	15,525.29	1,55,252.88	
6	Restoration of trenches						
6.1	Restoration to original conditions of dismantled surface like Asphalted/Bituminous Road, Concrete Pavement, Agra /Kota Stones / Tiles (Chequered/interlocking etc.), Dry Brick Pavement as per the technical specifications attached in the tender after laying of pipeline in Built- Up surface, as per the directions of EIC / Site Incharge. Scope includes supply of the approved quality material, testing of materials by third party agencies as per technical specification / CPWD / IRC Standards, submission of the restoration reports, obtaining no objection certificates from the concern local authorities /land owners / third party inspection agencies designated by land owing agencies and Owner.	Cu.M	1007137	518	3,955.07	20,48,947.57	
6.2	Providing & laying, Fixing, of cement concrete interlocking paver blocks of approved size, design shape as per the directions of EIC / Site Incharge. Scope includes supply of the approved quality material, testing of materials by third party agencies as per technical specification / CPWD / IRC Standards.	Sq.M	1014792	628	782.76	4,91,832.68	
7	Survey GPR						
7.1	For length up to 100 meters	Nos.	1015922	10	7,695.01	76,950.09	
7.2	Per meter rate for more than 100 meters (Per meter additional rate shall be payable above SOR item no. 7.1)	M	1013010	10	48.60	486.00	
8	Fabrication & Installation of Pipeline Markers:						
	Supply and Installation of Stone Route Markers, Powder Coated Plate / Pole Markers as per the attached drawings, along the route / along boundary wall, lamp posts including all associated civil works such as excavation and construction in all types of soils, construction of pedestals and grouting with concrete, cleaning, supply and application of approved colour and quality of primer and paint, stencil letter cutting of numbers, direction, chainage etc., restoration of area to original condition and performing all works as per drawings, specification and instruction of Engineer-in-Charge. The rates shall include liaison rates with statutory bodies and restoration rates and no separate rates are payable under this SOR.						
8.1	Stone Route Markers as per Drg No14588-10-03--29)	Nos	1013011	5237	605.50	31,71,289.18	
8.2	Installation of FRP MARKER	Nos	1020553	225	2,629.86	5,91,220.07	
8.3	Pole markers with foundation as per Drawing No. Drg No14588-10-03-30 & 14588-10-03-31) and specification.	Nos	1013012	899	2,629.86	23,64,880.27	
8.4	Plate marker as per Drg No Drg No 14588-10-03--28)	Nos	1013013	20880	245.43	51,24,463.77	
9	LIASONING WITH LAND OWNING AGENCIES FOR PERMISSION						
	Submission of applications as per approved drawings provided by owner / owner's representative (Initial Route Survey,Preperation of Drawings, measuring and providing details of surface type shall be in scope of Contractor with approval from Owner / Owner's representative), obtaining & submission of demand note, Coordination, Liaisoning, Obtaining written permissions from Land owing agencies like MCD, PWD, DDA, NDMC, NHAI, AAI, GDA, GNDA, GNN, Forest Dept, NHAI, Indian Railways, other government agencies who maintains the public lands and Private lands i.e. Apartments/institutions etc. Note: Service lines in SOR item no. 4 are not applicable;						
9.1	For All sizes - Liaisoning and getting permissions from NHAI/ Railway/ Forest (Protected & Un-Protected)/ Canal/ River crossings.	M	1012678	86250	230.04	1,98,40,881.53	
9.2	For All sizes - Liaisoning and getting permissions from New Delhi Municipal Corporation (NDMC)/ PWD	M	1015924	10	108.54	1,085.40	

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TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 5 : MUZZAFARNAGAR, MEERUT, SHAMLI, KANPUR, FATEHPUR, HAMIRPUR, BANDA, CHITRAKOOT & MAHOBA							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
9.3	For All sizes - Actual length of network laid against written permission statutory Authorities (except covered under SOR 9.1 & 9.2)	M	1013014	388123	69.66	2,70,36,694.20	
9.4	For All sizes - Actual length of network laid where written permissions are not available (other than pvt. Area)	M	1014446	388123	43.74	1,69,76,528.91	
	*above rates include all other sorts of liasioning including traffic dept.						
10	Charges for compliance to Health, Safety & Environment (HSE) as detailed in Scope of Work.						
10.1	MDPE Section-PPE, Contineous Barricades along the trenches as per approved drawing in tender, Use of Safety Boots, Hand gloves, Reflective jackets, Hard hats(helmets), Safety shoes, eye and ear safety equipments, Fire extinguishers and as per the detailed scope of work in tender specifications.	M	1010126	862496	18.63	1,60,68,319.55	
10.2	GI Section- Safety requirement per Rise- Use of Fall arrestor/ petzl, Ascendons/descendons, PPE, Barricades/ Warning Boards (03 Nos.) connected with warning/Caution tapes in areas where piping work is in progress , Use of Safety shoes, Walky talky, Hand gloves, Reflective jackets, Hard hats(helmets), eye and ear safety equipments, Fire extinguishers and as per the detailed scope of work in tender specifications; In case of non compliance- Refere SCC clause - for applicable penalty . Upto 4th GI (G+4) floor full body safety harness & assessoris shall be of KARAM or equivalent make. Note- This SOR is applicable for Non LMC length of GI Section only.	Nos	1010127	56790	451.17	2,56,22,069.45	
10.3	GI Section- Safety requirement per Rise-Use of Fall arrestor/ petzl, Ascendons/descendons, PPE, Barricades/ Warning Boards (03 Nos.) connected with warning/Caution tapes in areas where piping work is in progress , Use of Safety shoes, Walky talky, Hand gloves, Reflective jackets, Hard hats(helmets), eye and ear safety equipments, Fire extinguishers and as per the detailed scope of work in tender specifications; In case of non compliance- Refere SCC clause - for applicable penalty . GI (G+5) and above including high rise Above 4th floor full body safety harness & assessoris shall be of PETZL is compulsory. Note- This SOR is applicable for Non LMC length of GI Section only.	Nos	1010128	65	1,054.62	68,864.28	
PART II	GI / COPPER SECTION						
	Supply & Installation of Powder Coated GI Service Pipe & Fittings						

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SEGMENT - 5 : MUZZAFARNAGAR, MEERUT, SHAMLI, KANPUR, FATEHPUR, HAMIRPUR, BANDA, CHITRAKOOT & MAHOBA							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	Assessment of material requirement for installation at site, Order placement and Purchasing of Powder coated GI Pipes, GI fittings, Copper pipes & fittings, Brass Fittings from approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, getting dispatch clearance, handling, loading, transportation and unloading of these items at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of owner supplied above ground fittings such as regulators, meters, Isolation Valves & appliance valves and other free issue items as defined in specification from Owner's designated stock yards to Contractor's own stores / work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches, schedules & execution procedures. Finalising optimum route with consent of customer from transition fitting to cooking oven / appliance and ensuring installations in well ventilated area. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices. Portal entry for new connections - New registration tracking and feasibility survey and its updation as per IGL defined TAT;printing of stationary as per approved IGL formats required during connections. Followup and attend complaints receives from customer regarding delay in new connection (ReferDrg No 14588-20-05--01, 02, 03)						
	Installation of GI service pipes & fittings, regulators, Valves etc. including NPT threading, as specified, Drillings of holes through the walls (Brick, RCC), Granite, Marble, Wood Cutting, Glass Cutting with proper heavy duty hammer drill machine, tools & tackles, using proper sealant/grout material and colours to match the original replacement of the damages during drilling, restoring the area to the original condition, Painting of scratched length of powder coated pipe and fittings after proper surface finish by one coat of approved primer paint and two coats of approved synthetic enamel paint. Restoring the wall surface to original conditions.						
	Supply & fixing of approved clamps & nylon rawl plugs with SS 304 2" screws, grout material, suitable thread sealant i.e. Teflon Tape, Joining of transition fitting to above ground service GI pipes, testing, purging and commission of the complete installation. The rates in connections also includes meter installation, tap off rates. The GI installation in already gas charged areas, planning & coordinating with existing consumer's for New tap offs from existing riser with or without tee, testing of these existing risers and commissioning of these connections with newly tapp offs etc.is inclusive.						
11	NON LMC						
11.1	Supply & installation powder coated 1/2" GI Pipe from TF to regulator - up to 1.5 Mtr Length	Nos	1013015	20880	387.64	80,93,809.44	
11.2	Supply & Installation of powder coated 1/2" GI Riser from regulator isolation valve to appliance for G+3 Apt and Individual kothi /Bungalow. Refer Drg No 14588-20-05--02)	M	1013016	737552	366.73	27,04,84,876.96	
11.3	Supply & installation of powder coated 3/4" GI Riser from regulator isolation valve to lateral isolation valve for Apt more than G+3 floors. Refer Drg No 14588-20-05-02)	M	1013017	1626	391.66	6,36,854.16	
11.4	Testing & Commissionioining of already installed Risers GI / Copper Pipe (1/2" / 3/4" / 12mm) Non LMC riser (1/2" / 3/4")	M	1012680	24194	52.65	12,73,790.79	
11.5	Testing & Commissionioining of already installed / Laterals GI / Copper Pipe (1/2" / 12mm / mlc) LMC	Nos	1015925	1071	302.94	3,24,413.19	

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SEGMENT - 5 : MUZZAFARNAGAR, MEERUT, SHAMLI, KANPUR, FATEHPUR, HAMIRPUR, BANDA, CHITRAKOOT & MAHOBA						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
12	LMC					
12.1	PNG connection in Project area-low rise					
12.1.1	Installation of meter with required fittings	Nos.	1020554	65287	1,363.99	8,90,50,871.51
12.1.2	Supply and installation of Gi/ Cu/ MLC pipe along with required fittings from Lateral isolation valve to appliance valve	M	1020555	261148	425.59	11,11,43,048.57
12.2	PNG CONNECTIONS IN O&M AREA (ON EXISTING RISER)					
12.2.1	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2 m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter. Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4m. Payment against additional length of (GI + Cu) shall be as per item 12.2.3 of SOR.	Nos.	1013019	111	2,686.16	2,98,180.05
12.2.2	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 12.2.3 of SOR.	Nos.	1015927	10	2,707.88	27,078.76
12.2.3	Powder coated GI and Cu installations for pipes more than 4 m per connection					
12.2.3.1	1/2" Powder coated GI	M	1013020	262516	330.54	8,67,72,846.09
12.2.3.2	12mm Copper /mlc Pipe - Inside kitchen location only	M	1013021	10	331.35	3,313.47
13	Collection of registration /KYC forms duly filled with required supporting documents, Submission to IGL marketing on schedule as decided by IGL; This SOR may be used only after instruction of EIC/Site-in-Charge.	Nos	1013022	8551	203.31	17,38,489.33
PART III	HIGH RISE SEGMENT (14 Storey & Above)					
14	MDPE Pipe line laying (20mm / 32 mm / 63mm) in already excavated trench in Builder segment / Private Property i.e Multistorey buildings / apartments with no movement of Heavy Vehicles, surrounded with Boundary wall)					
	Laying in already excavated trench with or without casing ; it includes execution of the work as per specification (as per trench dimension Drg No 14588-10-03-16), laying, electrofusion joints and insertion of the carrier pipe in casing pipe (on case to case basis) laying of warning mat and re-installation of pre cast slabs as per specification and instruction of EIC / Site Engineer of Owner. In Case of sand filling required as instructed by EIC/IGL representative SOR no. 28.4 shall be paid over and above this rate.	M	1013034	43	219.51	9,356.40
15	Supply & Installation of Welded Riser - Non LMC					
15.1	Installation of welded riser 1/2 inch upto isolation valve	M	1013035	10	501.04	5,010.42
15.1	Installation of welded riser 3/4 inch upto isolation valve	M	1013036	10	537.23	5,372.32
15.1	Installation of welded riser 1 inch upto isolation valve	M	1013037	10	588.70	5,887.04
15.1	Installation of welded riser 2 inch upto isolation valve	M	1013038	10	1,109.85	11,098.51
16	LMC					
16.1	PNG CONNECTIONS IN PROJECT AREA					

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SEGMENT - 5 : MUZZAFARNAGAR, MEERUT, SHAMLI, KANPUR, FATEHPUR, HAMIRPUR, BANDA, CHITRAKOOT & MAHOBA							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
16.1.1	Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + Cu) shall be as per item 17 of SOR.	Nos.	1013039	10	3,168.71	31,687.05	
16.1.2	Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 17 of SOR.	Nos.	1017154	342	3,123.67	10,68,294.47	
16.2	PNG CONNECTIONS IN O&M AREA (ON EXISTING RISER)						
16.2.1	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2 m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter. Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4m. Payment against additional length of (GI + Cu) shall be as per item 17 of SOR.	Nos.	1013040	10	3,356.90	33,568.98	
16.2.2	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 17 of SOR.	Nos.	1017155	230	3,338.40	7,67,832.03	
17	Powder coated GI and Cu installations for pipes more than 4 m per connection.						
17.1	1/2" Powder coated GI	M	1013041	10	330.54	3,305.43	
17.2	12mm Copper/mlc - Inside kitchen location only	M	1013042	10	365.93	3,659.29	
18	NG conversion for domestic connection						
18.1	Providing services for NG conversion, monitoring the pendency and conversion of stoves including the supply of material required for conversion of appliance/stove + Tools & Tackles required, Printing of JMR sent by IGL In-charge on email, scanning of signed JMR and submission to In-charge, completion of NG conversion within the defined TAT.	Nos.	1013309	59203	270.54	1,60,16,671.18	
18.2	Performing Slab hole by using specific tools (wherever required)	Nos.	1015703	10	186.30	1,863.00	
18.3	Performing Core cutting by using specific tools (wherever required)	Nos.	1015704	10	167.67	1,676.70	
18.4	Performing glass cutting by using specific tools (wherever required)	Nos.	1015705	10	62.37	623.70	
18.5	Replacement of defective Meter/Domestic Regulator/Meter Regulator with new ones (which are freely issued by IGL)	Nos.	1015706	10	246.24	2,462.40	
18.6	Extension of existing / modification in GI pipeline	M	1015707	10	343.44	3,434.40	
18.7	Extension of existing / modification in Cu pipeline	M	1015708	10	332.10	3,321.00	
19	Installation of Service Regulator						

		ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 5 : MUZZAFARNAGAR, MEERUT, SHAMLI, KANPUR, FATEHPUR, HAMIRPUR, BANDA, CHITRAKOOT & MAHOBA							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
19.1	Receiving, taking over, handling, loading, transportation and unloading of owner supplied items such as Service Regulator/ SR module with canopy & Isolation Valves and other free issue items as per technical specification from Owner’s designated stock yards to Contractor’s stores / work sites. Fabrication, Erection, Welding, Testing & Installation of Service Regulators as per drawing no. Drg No 14588-20-05-37), Rev 0. Supply and installation of regulator boxes including fabrication as per drawing no. Drg No 14588-20-05-42), and painting as per technical specification. Any other material & activities not mentioned/covered above, but otherwise required for satisfactory completion/safety of work as defined in tender has to be supplied / done by contractor with in specified schedule at no extra cost to owner.						
19.1.1	Service Regulator with regulator cover and Transition Fittings installation	Nos	1013043	33	8,513.92	2,84,143.09	
19.2	Receiving, taking over, handling, loading, transportation and unloading of owner supplied items such as Service Regulator module with canopy as per technical specification from Owner’s designated stock yards to Contractor’s stores / work sites. Testing, Commissioning & Installation of Service Regulators as per drawing no. Drg No 14588-20-05-37), Rev 0. Supply and installation of regulator boxes including fabrication as per drawing no. Drg No 14588-20-05-42), and painting as per technical specification. Any other material & activities not mentioned/covered above, but otherwise required for satisfactory completion/safety of work as defined in tender has to be supplied / done by contractor with in specified schedule at no extra cost to owner.						
19.2.1	installation and commissioning of SR module with canopy	Nos	1020556	78	5,050.01	3,93,257.15	
20	Foundations works for Service Regulator						
	Providing and laying of Plain Cement Concrete (PCC - 1:2:4)						
	Providing, Fixing, Centering, Shuttering and laying of Cement Concrete with concrete of nominal mix 1:2:4 by mass (1 cement 2 coarse sand 4 coarse stone/aggregates/gravels) with 20 mm down size graded crushed stone / aggregates / gravels as per technical specification. Any other material & activities not mentioned/covered above, but otherwise required for satisfactory completion/safety of work as defined in tender has to be supplied / done by contractor with in specified schedule at no extra cost to owner.	Nos	1013044	111	5,841.78	6,49,877.94	
21	Supply & Installation of Crash guard for Service Regulator						
	service will cover site clearance, RCC structure M-25 upto plinth level, painting s&t and S&f of steel structure of all levels	Nos	1020557	111	10,816.66	12,03,315.58	
PART III	Civil Works						
22	Foundation works						
22.1	Excavation, Providing and Laying Reinforced Cement Concrete (M-20))						

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TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 5 : MUZZAFARNAGAR, MEERUT, SHAMLI, KANPUR, FATEHPUR, HAMIRPUR, BANDA, CHITRAKOOT & MAHOBA							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	Excavation in any plane & dimension including disposal of excavated earth up to any lead in all conditions, backfilling using serviceable earth and disposal of surplus and unserviceable earth. Soil to be levelled and properly compacted complete in all respect as per scope of work, technical specification and directions of EIC / Site-in-charge. Providing and laying REINFORCED CEMENT CONCRETE OF M-20 Grade (Concrete shall be design mix / nominal mix) with 20mm & down size graded crushed stone aggregates in NON SUSPENDED slabs/pavement slabs including pedestals, ramps etc., laying in alternate panels to required slopes, all necessary form work and finishing the top surface rough or smooth as required and directed, providing pockets/openings etc. including vibrating, tampering, curing, rendering and making smooth if required in any position, shape, level and thickness etc. as specified and directed by EIC / Site-in-charge. The rates include grouting of pockets, supply of material, shuttering, tools & tackles, Reinforcement etc.	CuM	1008323	22	11,622.14	2,54,907.13	
22.2	Providing and Laying Plain Cement Concrete (1:4:8)						
	Providing & laying, Fixing, Centering and Shuttering of plain cement concrete with nominal mix 1:4:8 by mass (1 cement: 4 coarse sand: 8 coarse stone/ aggregates/ gravels) with 20 mm down size graded etc as specified in specifications .	CuM	1007178	130	5,009.00	6,52,449.76	
23	Shifting and Installation of Field Regulating Station (For weights ranging from 1 Ton to 10 Ton)						
	Dismantling/loading from IGL site/store and its transportation to IGL store/Site with its unloading and installation of FRS/MRS as per the instructions of Site In-charge/ EIC. The shifting of FRS/MRS skids on the platform / foundation shall be done using cranes / hydra as required by the site condition.	Nos	1013023	7	32,507.77	2,19,567.04	
24	Supply & Installation of Half round concrete sleeve (Crush Guard)						
	Installation of half round concrete sleeve for service line shall be done by sealing the annulus between pipe & sleeve, firm fixing of concrete sleeve by concrete mix pedestal, clamping, sand filling etc. Half round concrete sleeve shall be made as per drawing no 14588-10-03-33. Installation shall be done after instruction of IGL/PMC.						
24.1	Project	CuM	1013024	200	630.36	1,26,072.54	
24.2	O&M (existing regulator piece)	Nos	1013025	200	647.63	1,29,525.73	
25	Supply & Installation of RCC Slab 100 mm thk X 300 mm width						
	Supply & Installation of RCC (M20) Slab 100 mm thk X 300 mm width; This SOR may be used only after instruction of EIC / Site-in-charge.	M	1014794	200	447.55	89,509.29	
26	Installation of Valve Chambers:						
	All civil works including supply of materials, excavation of pit, piping supports including all PCC, RCC and Brick works for valve pits, sand filling to cover valve body, pedestals with insert plates as required, sealing of pipes in pits, providing cover etc., finishing, clean up and restoration. The work shall be executed as per specification. Also providing water proofing agents internal and external plaster of chamber to avoid water seepage. Refer Drg No 14588-20-03-- 20, 21, 22.& 23)						
26.1	Brick Valve Chambers- Size (L x W)- 2m x 1 m	Nos	1013026	1	59042	59,042.17	
26.2	RCC Valve Chambers- Size (L x W)- 2m x 1 m	Nos	1013027	211	62917	1,32,95,186.29	
26.3	Brick Valve Chambers- Size (L x W)- 1.5m x 1 m	Nos	1013028	1	51901	51,901.09	
26.4	RCC Valve Chambers- Size (L x W)- 1.5m x 1 m	Nos	1013029	211	48956	1,03,44,980.28	
26.5	Brick Valve Chambers- Size (L x W)- 1 m x 1 m	Nos	1014795	4	42484	1,69,937.12	
26.6	RCC Valve Chambers- Size (L x W)- 1 m x 1 m	Nos	1014796	5	39495	1,99,719.77	
26.7	RCC Valve Chambers- Size (L x W)- 0.85 m x 0.85 m	Nos	1014797	1	33433	33,432.95	
26.8	CONSTRUCTION OF LONG STEM VALVE CHAMBER	Nos	1020558	259	41,145.00	1,06,46,219.85	

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TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 5 : MUZZAFARNAGAR, MEERUT, SHAMLI, KANPUR, FATEHPUR, HAMIRPUR, BANDA, CHITRAKOOT & MAHOBA							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
26.9	PRE-CAST Valve Chambers- Size (L x W)- 2m x 1 m	Nos	1020559	91	69209	62,67,730.68	
26.10	PRE-CAST Valve Chambers- Size (L x W)- 1.5m x 1 m	Nos	1020560	91	53852	48,76,919.27	
26.11	PRE-CAST Valve Chambers- Size (L x W)- 1 m x 1 m	Nos	1020561	1	43444	43,444.00	
26.12	PRE-CAST Valve Chambers- Size (L x W)- 0.85 m x 0.85 m	Nos	1020562	1	36776	36,776.25	
26.13	PRE-CAST Valve Chambers- Size (L x W)- 0.6 m x 0.6 m	Nos	1020563	3	29841	1,02,310.42	
26.14	RCC Valve Chambers- Size (L x W)- 0.6 m x 0.6 m	Nos	1014798	8	27128	2,17,022.11	
27	Brick Work						
	Providing brick work with brick class designation M-7.5 of IS:1077 in cm1:4 (1 cement : 4 sand) in steps, walls, retaining walls and load bearing structures drains, or any shape with all lead, depths & height including curring, scaffolding, etc., as per specifications and drawings with all bye-works and direction of the Enfineer-incharge.	CuM	1014799	10	7,075.61	70,756.06	
	Rate to include cost of all labour, tools, tackles, equipment, hire charges, supply of all materials such as minimum 43 grade cement, bricks, finishes, bitumen, other minor constrcution materials, shuttering, staging, masonry work, plastering, painting etc. with all bye-works and sundry works).						
	Note: The quantites of individual item can varied as per site requirement.The payment will be made as per actual certified measurement at site.						
28	Construction of trenches in Builder segment / Private Property i.e Multistorey buildings / apartments with no movement of Heavy Vehicles, surrounded with Boundary wall)						
28.1	Construction of dedicated trench (as per approved drawing) with removable top cover, scope includes excavation of trench, construction of brick wall, waterproofing of trench, installation of precast RCC slab covers (including supply) Ref. drawing 14588-10-03--34 Tench Dimension- 0.6m x 0.66m x 1.0m (d x w x l)	M	1013030	10	5,893.56	58,935.60	
28.2	Construction of dedicated trench (as per approved drawing) with removable top cover, scope includes excavation of trench, construction of brick wall, waterproofing of trench, RCC slab (150mm thick and 300mm width) at the top and RCC slab (100mm thick and 300mm width) at bottom. However, where MDPE laid on the basment top, roof of basment shall be treated as the bottom. There shall be sand filling across three sides of the line pipe of 100mm each shall be required to be taken by contractor in consultation with EIC / Site-in-charge as per latest PNGRB Guidelines. Minimum pipe top cover of 375 mm is required and the line pressure shall not exceed 110mbar. Tench Dimension- 0.375m x 0.66m x 1.0m (d x w x l)	M	1013031	10	5,024.80	50,247.97	
28.3	Excavation of trench and installation of 6" GI Pipe C Class by any method (Open /Moiling) , and restoration for road crossing upto 7.0 m inside society as 14588-10-03-43 Note- In case of restoration SOR Item no. 5 shall be applicable over and above this SOR.	M	1013032	10	2,599.27	25,992.69	
28.4	Sand Filling in any type of trenches in builder segment only; Scope includes supply of coarse sand (Size 0.6 To 2.0mm) as per IS 383 free from impurity like clay, mica and soft flaky pieces as per instruction of EIC / Site-in-charge. Note- Actual qty.(Cu.m) of sand filling for 28.1, 28.2 & 28.3 shall be claimed in this SOR	Cu.M	1013033	10	1,039.89	10,398.89	
PART V	MRS FABRICATION AND INTERNAL PIPING WORKS FOR INSTALLATION OF INDUSTRIAL & COMMERCIAL CONNECTIONS						

		ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 5 : MUZZAFARNAGAR, MEERUT, SHAMLI, KANPUR, FATEHPUR, HAMIRPUR, BANDA, CHITRAKOOT & MAHOBA							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	Receiving, handling, loading, transportation and unloading of owner supplied MDPE pipes & fittings, warning mat and other free issue items from IGL's designated stock yards to Contractor's own stock-yards/ work-sites. Proper storing, stacking, identification, providing security, and insurance cover for the materials. Liaisoning with Landowning agencies / statutory authorities, preparation of detailed route plan, making trial pits to determine the underground utilities/ services etc., obtaining permission from Land owning agencies, restoration of the abandoned trial pits (excavation to depth 1.5 m or more as satisfaction to EIC) to original condition. Barricading the work area as per the procedures & drawings provided in the tender and as per the directions of EIC / site-in charge. Trenching to the required depth in all type of surface, uncoiling / stringing of pipes, damping, jointing of the pipe ends/ fittings/ valves by qualified personnel, using approved electro fusion techniques as per specification. Restoration of extra excavated portion along the TF point is inclusive in connection rates irrespective of the size of pit excavated at TF point and shall not be charged separately.						
29	MDPE Pipeline laying in all type of surface by any method						
29.1	Laying rates of 32&63 mm Dia MDPE pipeline - pipe length upto 25.00 mtrs for industrial and commercial connections	Nos.	1020564	100	21,368.42	21,36,841.68	
29.2	MRS Installation						
29.2.1	Connection rates for installation of CS MRS with 1" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014449	14	20,960.25	2,93,443.48	
29.2.2	Connection rates for installation of CS MRS with 1-1/2" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014450	30	28,274.59	8,48,237.58	
29.2.3	Connection rates for installation of CS MRS with 2" pipe & fittings with RPD Meter up to G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1012050	66	40,261.08	26,57,231.08	
29.2.4	Connection rates for installation of CS MRS with 3" pipe & fittings with RPD Meter above G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1014451	10	47,607.64	4,76,076.36	
	Note: a. Supply & Installation of required size of brass fittings in all type of meters supplied by IGL shall be in scope of contractor. B. Supply & installation of SS Tubing with fitting shall be in scope of contractor; Maximum length is 2.0m per MRS installation. C. 10% payment shall be released only after instillation of caging.						
30	CS Common Headers for MRS installation - Supply, Erection, welding & Installation of CS pipes & fittings (all types) except Ball Valves as common headers along with branching for commercial connections.						
	In addition to other activities under SOR item no. 29 and as detailed in specification and as per the instructions of the EIC / Site engineer of Owner. Erection, Fabrication, Welding & Installation of common headers of CS pipes & Fittings till isolation valves for fixing of numerous meters through a single header and includes connecting of common Regulators on headers, NPT threading, Radiography, as specified, Drillings of holes through the walls Brick, RCC, Granite, Marble, Wood Cutting, Glass Cutting with proper heavy duty hammer drill machine, tools & tackles, using proper sealant/grout material and colors to match the original replacement of the damages during drilling, restoring the area to the original condition, Painting of entire length of pipe along with fittings after proper surface finish by one coat of approved primer paint and two coats of approved synthetic enamel paint. Restoring the wall surface to original conditions. Supply & fixing of approved MS angle clamps. Ceiling						

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 5 : MUZZAFARNAGAR, MEERUT, SHAMLI, KANPUR, FATEHPUR, HAMIRPUR, BANDA, CHITRAKOOT & MAHOBA						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	clamps & dowel plugs with screws, supply and insertion of insulation material i.e. PVC, PTFE sheet between pipe/ meter support and pipe/ meter, grout material, suitable thread sealant i.e. Teflon Tape / lock tight, Supply of different sizes 1" to 4", 150# spiral wound gasket, studs & bolts (various sizes with wire sealing arrangement wherever required), Joining of transition ftg. to above ground CS pipes, testing, purging and commission of the complete installation. Supply and installation of STANDARD Y TYPE FLANGE END STRAINER between T.F. I.V. to Regulator Inlet. Strainer size may be 1", 2", 3" & 4" corresponding to installed TF size. The payment for supply and installation of Y type strainer is included in MRS fabrication. The meters installed on tap offs from common header will be paid separately as per SOR No. 30.3 to 30.6					
30.1	2" pipes & fittings	RM	1007245	7	2,390.85	17,214.15
30.2	4" pipes & fittings	RM	1007246	1	3,293.06	3,951.68
30.3	Connection rates for installation of CS MRS with 1" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014449	10	19,606.94	1,96,069.35
30.4	Connection rates for installation of CS MRS with 1-1/2" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014450	6	24,891.30	1,49,347.81
30.5	Connection rates for installation of CS MRS with 2" pipe & fittings with RPD Meter up to G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1012050	15	37,554.45	5,63,316.75
30.6	Connection rates for installation of CS MRS with 3" pipe & fittings with RPD Meter above G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1014451	5	44,224.35	2,12,276.89
	Note: a. Supply & Installation of required size of brass fittings in all type of meters supplied by IGL shall be in scope of contractor. B. Supply & installation of SS Tubing with fitting shall be in scope of contractor; Maximum length is 2.0m per MRS installation C. 10% payment shall be released only after installation of caging					
30.7	Supply & Installation of Pressure Gauges					
30.7a	RANGE 0-100 MBAR - 4"- DIAL SIZE	Nos.	1012127	18	1,520.87	27,375.60
30.7b	RANGE 0-1 BAR - 4"- DIAL SIZE	Nos.	1007252	5	1,375.87	6,604.17
30.7c	RANGE 0-4 BAR - 4"- DIAL SIZE	Nos.	1007253	12	1,424.20	17,090.42
30.7d	RANGE 0-6 BAR - 4"- DIAL SIZE	Nos.	1007254	155	1,504.76	2,32,936.19
30.8	Supply & Installation of FLANGE END BALL VALVES, MAOP- 4 BAR					
30.8a	4"	Nos.	1007181	12	13,556.98	1,62,683.75
30.8b	2"	Nos.	1007182	155	5,632.04	8,71,839.75
30.8c	1-1/2"	Nos.	1009365	575	4,010.64	23,05,316.60
30.8d	1"	Nos.	1007283	24	2,832.29	67,975.00
30.9	Supply & Installation of FLANGE END GLOBE VALVES, MAOP- 4 BAR					
30.9a	2"	Nos.	1007182	37	10,803.95	4,01,907.05
30.9b	1-1/2"	Nos.	1012130	14	8,163.38	1,17,552.68
30.9c	1"	Nos.	1007283	14	4,010.64	57,753.23
30.10	Supply & Installation of BRASS ISOLATION VALVE					
30.10a	2"	Nos.	1007182	17	2,193.98	36,858.85
30.10b	1-1/2"	Nos.	1012130	7	1,845.34	13,286.45
30.10c	1"	Nos.	1007283	8	711.13	5,973.53
30.10d	1/2"	Nos.	1012135	12	479.14	5,749.65
30.11	Supply & Installation of STRAINER					
30.11a	2"	Nos.	1007182	2	10,665.40	25,596.96
30.11b	1"	Nos.	1007283	2	8,667.65	20,802.36
30.12	WELDING OF JOINTS - Butt Weld Joints					
30.12a	4"	Nos.	1007181	1	367.33	440.79
30.12b	3"	Nos.	1007287	1	315.77	378.93

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SEGMENT - 5 : MUZZAFARNAGAR, MEERUT, SHAMLI, KANPUR, FATEHPUR, HAMIRPUR, BANDA, CHITRAKOOT & MAHOBA						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
30.12c	2"	Nos.	1007182	1	315.77	378.93
30.12d	1-1/2"	Nos.	1012130	271	286.77	77,772.99
30.12e	1"	Nos.	1007283	116	83.78	9,751.59
30.12f	1/2"	Nos.	1012135	41	77.33	3,155.15
30.13	Fillet Joints & Supply of Socolet					
30.13a	1"	Nos.	1007283	5	1,009.19	4,844.09
30.13b	1/2"	Nos.	1012135	52	883.84	45,606.28
30.14	RADIOGRAPHY OF JOINTS					
30.14a	4"	Nos.	1007181	6	806.83	4,841.00
30.14b	3"	Nos.	1007287	50	620.59	31,277.78
30.14c	2"	Nos.	1007182	6	681.49	4,088.94
30.14d	1-1/2"	Nos.	1012130	50	604.48	30,465.79
30.14e	1"	Nos.	1007283	6	527.47	3,164.82
30.14f	1/2"	Nos.	1012135	37	527.47	19,621.89
30.15	SUPPLY/ INSTALLATION OF CLAMPS, SUPPORTS FOR ERECTION OF ALL SIZES OF PIPELINE					
30.15a	TYPE-1, SIDE WALL MOUNTED AS PER DRAWING	KG	1015931	11	135.33	1,461.58
30.15b	TYPE-2, GROUND BASED AS PER DRAWING	KG	1015932	11	132.11	1,426.78
30.15c	TYPE-3, CEILING MOUNTED AS PER DRAWING	KG	1015933	16	125.66	1,960.37
30.16	SUPPLY OF THREADED END BALL VALVE					
30.16a	1"	Nos.	1007283	5	775.58	3,722.77
30.16b	1/2"	Nos.	1012135	24	511.36	12,272.62
30.17	SUPPLY OF FLANGES AS PER SPECIFICATION					
30.17a	WNRF 3"	Nos.	1012136	61	1,154.83	70,675.44
30.17b	WNRF 2"	Nos.	1012137	61	882.23	53,992.57
30.17c	BLRF 3"	Nos.	1012138	61	723.06	44,251.03
30.17d	BLRF 2"	Nos.	1012139	12	550.35	6,604.17
30.17e	Spectacle Blind 3"	Nos.	1012140	12	2,050.27	24,603.24
30.17f	Spectacle Blind 2"	Nos.	1012141	12	1,875.31	22,503.67
30.18	SUPPLY OF REDUCER					
30.18a	3" X 2"	Nos.	1012142	12	238.44	2,861.29
30.18b	2" x 1-1/2"	Nos.	1012143	60	167.55	10,053.19
31	Modifications & Installation of Meters & Regulators in existing MRS/Skids/DRS:					
	Assessment of material requirement for installation at site, Order placement for purchasing of CS Pipes & fittings from anyone of approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, Dispatch clearance, handling, loading, transportation and unloading of these at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of owner supplied above ground fittings like regulators, meter & Isolation Valve and other free issue items as defined in specification from Owner's designated stock yards to Contractor's own stores / work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches for modification, schedules & execution procedures and all others necessary documentation. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices.					
	Taking shutdown of existing MRS, dismantling meters/regulators, replacement/fixing of meters/regulators with associated inlet and outlet connections / fittings, supply of pipes & fittings (excluding flange end Ball Valve), pipe cutting, threading, welding, testing, Radiography of Joints & firmly fixing with approved meter clamps/brackets and other supports by proper grouting and necessary documentation. Restoring the area to the original condition as per the specifications and to complete satisfaction of consumer and EIC. The rates includes all as above along with testing of joints till re-commissioning.					

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 5 : MUZZAFARNAGAR, MEERUT, SHAMLI, KANPUR, FATEHPUR, HAMIRPUR, BANDA, CHITRAKOOT & MAHOBA						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
31.1	Diaphragm meter	Nos.	1012153	132	5,196.72	6,85,967.55
31.2	RPD Meter	Nos.	1012154	41	6,800.40	2,77,456.34
31.3	Turbine Meter	Nos.	1012155	41	6,800.40	2,77,456.34
31.4	300 mbar regulator	Nos.	1012156	600	3,318.84	19,91,304.17
31.5	500 mar regulator	Nos.	1012157	60	4,092.16	2,45,529.74
31.6	2 bar regulator	Nos.	1012158	60	4,511.05	2,70,662.70
31.7	Butt Weld Joints					
31.7a	4"	Nos.	1007181	120	1,691.64	2,02,997.03
31.7b	3"	Nos.	1007287	576	1,304.98	7,51,668.99
31.7c	2"	Nos.	1007182	2876	1,353.31	38,92,670.99
31.7d	1-1/2"	Nos.	1012130	384	1,111.65	4,26,873.75
31.7e	1"	Nos.	1007283	120	773.32	92,798.64
31.8	Supply & Installation of CS Piping (Seamless A 106 Gr-B, Sch-40)- 150 #					
31.8a	4"	MR	1009386	8	3,479.95	29,231.57
31.8b	3"	MR	1007287	58	3,238.29	1,86,525.27
31.8c	2"	MR	1007182	11	3,093.29	33,407.51
31.8d	1-1/2"	MR	1012130	2	2,638.96	6,333.51
31.8e	1"	MR	1007283	77	1,826.97	1,40,311.54
	Modifications/ replacements (meter or regulator or both) in existing MRS/Skids/DRS using threaded fittings/ flanged end (same size or bigger) shall be payable through SOR Item No. 31.1 to 31.6.					
	Modifications/ replacements (meter or regulator or both) in existing MRS/Skids/DRS using welding (same size or bigger upto 3.00 mtrs) shall be payable through SOR Item No31.7					
	Modifications/ replacements (meter or regulator or both) in existing MRS/Skids/DRS using welding (in case, erected length after modification is more than 3.00 mtrs) shall be payable through SOR Item No. 31.8					
	The payments of flange end ball valve shall be paid as per SOR Item No. 30.8.					
32	Restoration of old MRS (after 1 year/Complete defect liability)					
	Cleaning, Repair,Testing, painting, tightening of bolts of old Metering and Regulating skids	Nos.	1015934	600	4,803.34	28,82,003.68
33	Conversion of Commercial Appliances:					
	Conversions of all types of appliances to NG based appliances. Supply & changing of the nozzles /jets and associated controls for Non-domestic appliances (imported appliances included) with proper tools and tackles. Cleaning and performing minor maintenance, greasing etc. of the appliance. Testing and showing the performance to the customer, signing of joint meter records (JMR) and instructing the customer on use & safety norms, complete as per specifications & to satisfaction of owner / Engineer in Charge and includes supply of reinforced rubber hose with requisite pressure rating.					
33.1	NG conversion for domestic appliances (G 1.6)	Nos.	1015935	12	1,592.69	19,112.23
33.2	NG conversion for all commercial appliances	Nos.	1007175	118	1,921.34	2,25,949.09
	Note: The payments of conversion shall be as per burners.					
34	Supply of lock & Keys for MRS Cages					
	Padlock with Lever mechanism shall be durable solid body to resist corrosion. Shackle shall be hardened electroplated to resists hacksaw cutting and rusting under normal atmospheric conditions.	Nos.	1015936	41	1,111.65	45,355.34
	Civil Works					
35	Demolition of PCC work below plinth level					
	Demolishing plain cement concrete (PCC) work (taking all necessary safety precautions) for all depths below plinth level including supply of all tools & tackles, necessary scaffolding, propping, underpinning, etc. , disposal of unserviceable material outside the IGL boundary limits kipping the IGL indemnified of any liabilities from statutory/ local bodies, all complete work as specified and directed	Cu. M	1009367	60	2,123.58	1,27,414.90
36	Excavation for foundation works					

 Emerging Quality		ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 5 : MUZZAFARNAGAR, MEERUT, SHAMLI, KANPUR, FATEHPUR, HAMIRPUR, BANDA, CHITRAKOOT & MAHOBA							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	Excavation as per plan, upto 3 meters and upto any lead in all conditions, backfilling using serviceable earth and disposal of surplus and unserviceable earth. Soil to be levelled and neatly dressed complete in all respect as per scope of work, technical specification and directions of EIC.						
	Upto 3.0 Mtrs	Cu. M	1007176	120	581.46	69,774.83	
37	Foundation works						
37.1	Providing and Laying Plain Cement Concrete (1:2:4)						
	Providing & laying, Fixing, Centering and Shuttering of plain cement concrete with nominal mix 1:2:4 by mass (1 cement: 2 coarse sand: 4 coarse aggregates) with 20 mm down size graded aggregates/ gravels as specified in specifications and satisfaction to the EIC.	Cu. M	1007177	384	11,367.83	43,65,248.07	
37.2	Providing and Laying Plain Cement Concrete (1:4:8)						
	Providing & laying, Fixing, Centering and Shuttering of plain cement concrete with nominal mix 1:4:8 by mass (1 cement: 4 coarse sand: 8 coarse stone/ aggregates/ gravels) with 20 mm down size graded etc as specified in specifications and satisfaction to the EIC.	Cu. M	1017159	120	7,733.22	9,27,986.41	
37.2	Supply and Fixing of Deformed Steel Bars Reinforcement						
	Supply and placing in position high strength deformed steel bars reinforcement (conforming to IS: 1786, Grade Fe 415) for RCC work including transporting, straightening, cleaning, de-coiling, cutting & binding to required shapes and length as per details, binding with contractor's own 16 SWG black soft annealed binding wire at every intersection, supplying and placing with proper cover blocks, supports, chairs, overlaps, welding, spacers, fan hooks etc. for all heights and depths etc. complete the work as directed.	KG	1009380	58	96.67	5,567.92	
37.4	Providing and Laying Reinforced Cement Concrete (M-25)						
	Providing and laying REINFORCED CEMENT CONCRETE OF M-25 Grade (Concrete shall be design / nominal mix) with 20mm & down size graded aggregates in NON SUSPENDED slabs / pavement slabs including pedestals, ramps etc. filling pockets with grouting, laying in alternate panels to required slopes, all necessary form work and finishing the top surface rough or smooth as required and directed, providing pockets/openings, recesses, chamfering etc. wherever required, vibrating, tamping, curing, and rendering smooth if required in any position, shape, level and thickness etc. all complete as specified, shown and directed. Rates to include all materials (other than steel), labour, shuttering and necessary works required to make work complete.	Cu. M	1007179	2	11,358.17	27,259.60	
37.5	Dismantling of RCC & cutting of reinforcement (Thickness above 3")	Cu. M	1012161	77	5,308.95	4,07,727.68	
	Internal Piping Work						
38	Internal Piping - Supply, Erection & welding of CS pipes & fittings (all types) except Ball Valves for commercial connections.						
	Assessment of material requirement for installation at site, Order placement for purchasing of CS Pipes & fittings from anyone of approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, Dispatch clearance, handling, loading, transportation and unloading of these at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of contractor supplied material as defined in specification from Contractor's designated stock yards to IGL's work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches, schedules & execution procedures and all others necessary documentation. Finalising Piping location with optimum route in consent of customer from Meter Outlet till Customer's Appliance. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices.						

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 5 : MUZZAFARNAGAR, MEERUT, SHAMLI, KANPUR, FATEHPUR, HAMIRPUR, BANDA, CHITRAKOOT & MAHOBA						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
38.1	Supply, Erection, Welding, Radiography & Testing of CS Seamless A 106 Gr-B Pipeline. It includes supply of all type of fittings (except ball valves), Supply Of Consumables Like Spiral Wound Gaskets (Winding ANSI 304 Graphite Centering Ring Cs), Stud Bolts (ASTM A 193 B 7, Hexagonal Nuts, ASTM A194 Gr 2H) and is inclusive in rates.					
38.1a	4" NB, Sch-40	MR	1007159	600	3,349.45	20,09,670.57
38.1b	3" NB, Sch-40	MR	1007160	600	2,803.29	16,81,975.37
38.1c	2" NB, Sch-80	MR	1007161	600	2,561.63	15,36,977.49
38.1d	1-1/2" NB, Sch-80	MR	1007162	3	2,271.63	6,542.30
38.1e	1" NB, Sch-80	MR	1007163	33	1,836.64	60,036.08
38.2	Supply, Erection, Welding, Radiography & Testing of CS Seamless / HFW API 5L GR-B Pipeline. It includes supply of all type of fittings (except ball valves), Supply Of Consumables Like Spiral Wound Gaskets (Winding ANSI 304 Graphite Centering Ring CS), Stud Bolts (ASTM A 193 B 7, Hexagonal Nuts, ASTM A194 Gr 2H) and is inclusive in rates.					
38.2a	4" NB	MR	1007164	120	3,349.45	4,01,934.11
38.2b	3" NB	MR	1007165	120	2,232.97	2,67,956.08
38.3	Supply & Installation of Safety Devices as per PNGRB gudelines					
38.3a	1" Solenoid Valves	Nos.	1012145	58	15,224.78	8,76,947.16
38.3b	1.5" Solenoid Valves	Nos.	1012146	11	17,762.24	1,91,832.19
38.3c	2" Solenoid Valves	Nos.	1012147	2	24,359.64	58,463.14
38.3d	2.5" Solenoid Valves	Nos.	1012148	77	24,867.14	19,09,796.03
38.3e	ATEX/PESO/CMRI approved Gas detectors	Nos.	1012144	6	17,762.24	1,06,573.44
38.3f	1" Shutoff valve	Nos.	1012149	6	11,672.33	70,033.97
38.3g	1.5" Shutoff valve	Nos.	1012150	6	13,702.30	82,213.80
38.3h	2" Shutoff valve	Nos.	1012151	6	17,254.75	1,03,528.48
38.3f	2.5" Shutoff valve	Nos.	1012152	600	18,269.73	1,09,61,839.45
39	Internal Piping - Supply & Installation of Powder Coated GI pipes & fittings (all types) except Ball Valves for commercial connections.					
	Assessment of material requirement for installation at site, Order placement and Purchasing of Powder coated GI Pipes & GI fittings from approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, getting dispatch clearance, handling, loading, transportation and unloading of these items at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of owner supplied above ground fittings such as Isolation Valves and other free issue items as defined in specification from Owner's designated stock yards to Contractor's own stores / work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches, schedules & execution procedures and all others necessary documentation. Finalising Piping location with optimum route in consent of customer from Meter Outlet till Customer's Appliance. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices.					
39.1	Supply installation & Testing of Powder coated GI Pipes. It includes supply of all type of fittings (except Isolation valves), Supply & fixing of approved clamps & nylon rawl plugs with SS 304 2" screws, grout material, suitable thread sealant i.e. Teflon Tape, etc. and is inclusive in rates.					
39.1a	1/2" GI Pipe	Mtr	1015937	33	487.19	15,925.36
39.1b	3/4" GI Pipe	Mtr	1015938	173	548.09	94,710.29
39.1c	1" GI Pipe	Mtr	1015939	600	680.04	4,08,024.02
40	Supply & Fabrication/Erection of Wired cages for MRS					

 Emerging Quality		ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 5 : MUZZAFARNAGAR, MEERUT, SHAMLI, KANPUR, FATEHPUR, HAMIRPUR, BANDA, CHITRAKOOT & MAHOBA							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	Assessment of material requirement for installation at site, Order placement for purchasing of MS Angle, Flat, wire mesh & fittings from anyone of approved vendors of IGL, Scheduling, Planning of material & handling, loading, transportation and unloading of these at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of contractor supplied material as defined in specification from Contractor's designated stock yards to IGL's work sites, proper storing, stacking, identification, providing security and insurance cover. Finalising Cage location with in consent of customer & IGL. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices. Supplying & Fixing 4 mm thick MS welded wire mesh (30 mm x 75 mm) by welding/bolting with structural steel elements (Angle & Flat) for making covers for MRS and various other equipments for protection of equipments. Rates to include one coat of primer and two coats of synthetic enamel paint (both side of wired cages), labour, material, transportation, loading/ unloading of material, welding charges etc complete in all respects. For fabrication of cage structure, all the essential jobs viz. cutting, welding, grinding, finishing, painting including all materials like Angle, channel, wire net, support sheet, hardware, electrode, grinding wheel, gas cylinder, paint, primer, grouting, equipment, tools, generator for power, welding machine etc. is under contractor's scope						
40.1	Supply (Angle 65 mm x 65 mm x 6 mm, Flat 50 mm x 6 mm & Wire Mesh 75 mm X 30 mm X 4 mm), fabrication, painting, transportation and installation of MRS cages for SKID by welding/bolting with structural steel elements for making covers for industrial/ commercial PNG meter-regulator systems as per detailed scope of work & Drawing.	MT	1015282	3	1,37,022.99	3,94,626.22	
40.2	Supply (Angle 40 mm x 40 mm x 5 mm, Flat 25 mm x 4 mm & Wire Mesh 75 mm X 30 mm X 4 mm), fabrication, painting, transportation and installation of MRS cages for WALL MOUNTED MRS by welding/bolting with structural steel elements for making covers for industrial/ commercial PNG meter-regulator systems as per detailed scope of work & Drawing.	MT	1015293	33	1,26,873.14	41,47,229.26	
41	Supply & Installation Crash Guard for Cage Protection					-	
	Supply, fabrication, painting, transportation and installation of Crash Guard for protection of Wall Mounted cages for industrial/ commercial PNG meter-regulator systems as per detailed scope of work & Drawing.	MT	1014813	173	96,423.59	1,66,61,995.96	
Total Cost (INR)						1,27,80,93,311.38	
GST @ 18%						23,00,56,796.05	
Total Cost incl. GST (INR)						1,50,81,50,107.43	
Total Cost inc. GST (in Cr.)						150.82	

		ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 6 : AJMER, PALI & RAJASMAND							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
PART-I	MDPE LAYING						
	Route survey of allotted areas and Preparation /Submission of detailed route plan for approval by EIC in AutoCAD format. Receiving, handling, loading, transportation and unloading of owner supplied MDPE pipes & fittings and other free issue items from IGL's designated stock yards to Contractor's own stock-yards/ work-sites. Proper storing, stacking, identification, providing security and insurance cover for the materials. Liaisoning with Landowning agencies / statutory authorities and obtaining permission from them (Separately payable as per SOR Item No.10), making trial pits to determine the underground utilities/ services etc., restoration of the abandoned excavation/ trial pits (excavated to depth of 1.5 m or more as per satisfaction to EIC / Site-in-charge) to original condition, barricading the work area as per the procedures & drawings provided in the tender and as per the directions of EIC / Site-in-charge; uncoiling / stringing of pipes, jointing of the pipe ends/ fittings / Transition fittings/ valves by qualified personnel, using approved electro fusion techniques as per specification.						
	Laying using any method (Open trench, Moling and HDD) with or without casing; it includes survey of the under ground utilities, submission of pre & post HDD profile for approval, execution of the work as per specification (as per trench dimension Drg No 14588-10-03--27), including excavation of pits, moling with hole size not exceeding 20% of the the carrier / casing pipe dia. jointing and insertion of the carrier pipe in casing pipe (on case to case basis) and subsequent padding with soft soil, laying of warning mat in open trench only, backfilling, compaction, submission of as built drawing, as graphs as per attached specification and instruction of EIC / Site Engineer of Owner. Includes laying of pipeline in all type of surface including Kutcha, metal, concrete (PCC/RCC), bituminous, tiled, brick lined etc. after raking up of hard surface of any type; Roads, Pavement, Footpaths etc. shall be made motorable once the pipeline is laid.						
	In case, it is impractical to provide 1.0-meter cover due to physical constrain, additional protective measures such as concrete slab or high impact resistance plastic sheet shall be installed (for the minimum top cover of 600 mm) by the contractor in consultation with EIC / Site-in-charge. EIC / Site-in-charge after examining thoroughly and considering the PNGRB Guidelines may allow the contractor. However, the contractor has to raise technical deviation for approval before commence of work. All the technical deviation shall be submitted with the RA bills.						
	Supply & installation of GI Sleeves, 2.5" NB x 300 mm length GI pipe Sleeve / Half Round Concrete Sleeves for domestic connections, 3" NB x 300 mm length GI Sleeve for commercial and industrial installations (as per GI Pipe Sleeve Drg No 14588-10-03--18), and 1/2 Round concrete sleeve, Drg No 14588-10-03--33) excavation, breaking through any obstructions, insertion of pipe, sealing the annulus, fixing of the sleeves with concrete mix, preparation of pedestal & restoration of excavated pits within the size of pedestal & the same pit with the laying of 20/32 mm dia MDPE pipe as defined in technical specification and instruction of EIC.						

 Energising Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 6 : AJMER, PALI & RAJASMAND						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Flushing, cleaning ,Pneumatic testing, purging with nitrogen and commissioning as per specification and approved procedures providing all tools and tackles, nitrogen, instruments, manpower and other related accessories and as per instructions of the Engineer-in charge.					
	Maintaining the completed pipelines / installation for any defect, failures during defect liability period .					
	Handing over the completed works to IGL for their operation/ use, returning of all surplus material to IGL stores, reconciliation of free issue material area wise and obtaining no objection certificate.					
	On completion of gas charging of pipelines, preparation and submission of As built drawings, crossings details, termination, utility graphs and deviation statements.					
	Submission of all documents required for contract closure in numbers as mentioned in contract.					
	Note- Supply & installation of GI Sleeve / Half round Concrete sleeve and warning mat (open trench excavation) shall be included in laying of MDPE pipe.(Refer Drg No. 14588-20-03--18); Laying in Brick trench shall not payable in this SOR; In such cases SOR No. -20 is valid.					
	GIS data shall be collected of laid MDPE pipeline network. Data like Geo Co-ordinates (latitude, longitude) of Pipeline and related features like fittings, valves, FRS, MRS, Markers etc. shall be collected as per given procedure along with 50 m land base corridor (25 m on either side of the pipeline) with min. accuracy of 50 cm. Data format shall be in shape (.shp) or Geo Database (.gdb)					
1	MDPE Pipe line laying in Soft soil & all type of surface (Including PCC/RCC Top Surface - Upto 12") , Open Cut / Moling or any other methodology ; Clear cover to pipeline min 1.0m; (Refer Drg No 14588-10-03-27))					
1.1	20 mm dia	M	1020533	5000	374.68	18,73,403.09
1.2	32 mm Dia	M	1020534	396531	317.83	12,60,30,309.10
1.3	63 mm Dia (Excluding HDD with casing)	M	1020535	331995	368.55	12,23,56,478.35
1.4	125mm dia (Excluding HDD with/without casing)	M	1020536	79297	471.68	3,74,02,400.77
1.5	180 mm dia (Excluding HDD with/without casing)	M	1020537	4496	547.75	24,62,604.20
	MDPE Pipe line laying in common trench					
1.6	32 mm Dia (in common trench with 32/63/125/180 mm Dia MDPE Pipe)	M	1020538	8148	130.18	10,60,748.88
1.7	63 mm Dia (in common trench with 63/125/180 mm Dia MDPE Pipe)	M	1020539	43	156.38	6,709.96
1.8	125mm dia (in common trench with 125/180 mm Dia MDPE Pipe)	M	1020540	1900	195.26	3,71,003.08
	All service lines left out initially during mainline laying, shall be laid under above mentioned SOR within six months of gas charging of a particular area by the same contractor. In Open trench method/ moling, no extra rate shall be payable for casing installation. Roads, Pavement, Footpaths, Kutcha etc. shall be made motorable once the pipeline is laid. Liasoning and HSE shall not be paid wrt this SOR					
2	MDPE Pipe line laying by HDD Method, with Casing					

 Emerging Quality		ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 6 : AJMER, PALI & RAJASMAND							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	Survey of the under ground utilities, submission of HDD profile for approval (excluding road and nalla crossings), execution of the work as per the standard procedure attached, including excavation of the pits, Jointing of casing and carrier pipe and insertion of the carrier pipe in casing of dia ranging from 110mm to 160mm for 63 mm, 200mm to 250 mm dia for 125 mm dia MDPE and 250 mm to 315 dia for 180 mm MDPE, subsequent sealing, backfilling, compaction, submission of as built graphs, final HDD profiles as per attached specification and the instruction of EIC / Site Engineer of Owner. The other activities are as per SOR Item No. 1 and as detailed in specification and as per the instructions of the EIC / Site engineer of Owner. The payment shall be made for length of casing pipe laid in HDD, remaining carrier pipe length without casing shall be paid under SOR item no.1						
2.1	63 mm Dia HDD with casing	M	1020541	367	480.13	1,76,304.71	
2.2	125 mm Dia HDD with casing	M	1020542	343	1,085.36	3,72,349.94	
2.3	180 mm Dia HDD with casing	M	1020543	100	1,313.59	1,31,358.62	
3	MDPE Pipe line laying by HDD Method, without Casing						
	Survey of the under ground utilities, submission of profile for approval, execution of the work as per the standard procedure attached, including excavation of the pits, Jointing and insertion of the carrier pipe, subsequent backfilling, compaction, submission of as built graphs and final HDD profiles as per attached specification and the instruction of EIC / Site Engineer of Owner. The other activities are as per SOR Item No. 1 & 2 and as detailed in specification and as per the instructions of the EIC / Site engineer of Owner						
3.1	125 mm Dia HDD without casing	M	1020544	13051	597.62	77,99,547.99	
3.2	180 mm Dia HDD without casing	M	1020545	998	742.17	7,40,347.55	
3.3	Laying of MDPE pipeline by HDD method (Maximum length 200m)- This SOR may be applicable only for spans less than 200m where additional mobilization of HDD m/c is required & HDD is the only option to execute the same. Note: There should be no consecutive HDD laying in upstream/downstream within a span of 1KM & This SOR would be applicable for allocations less than 200 m in a single stretch						
3.3.1	63 mm by HDD method (with casing)	Nos.	1020546	4	82,383.47	3,54,596.23	
3.3.2	125/180 mm by HDD method(with/ without casing)	Nos.	1020547	13	1,30,212.63	17,49,434.89	
4	MDPE Service Line laying in New & old Projects / O&M areas						
	Includes laying of pipeline (for 20 & 32mm) in all type of surface i.e. Kutcha, metal, concrete (PCC/RCC), bituminous, tiled, brick lined etc. after braking up of hard surface of any type by any methodology. Roads, Pavement, Footpaths etc. shall be made motorable once the pipeline is laid. Supply & installation of GI Sleeve / Half round Concrete sleeve shall be included in laying rates. All other activities mentioned in SOR no.1 are applicable.						
	Supply & installation of GI Sleeves, 2.5" NB x 300 mm length Half Round Concrete Sleeves for domestic connections, 3" NB x 300 mm length GI Sleeve for commercial and industrial installations (as per Drg No14588-20-03--18)) excavation, breaking through any obstructions, insertion of pipe, sealing the annulus, fixing of the sleeves with concrete mix, preparation of pedestal & restoration of excavated pits within the size of pedestal & the same pit with the laying of 20/32 mm as defined in technical specification and instruction of EIC.The rates shall include liaison rates with statutory bodies, HSE and no separate rates are payable under this SOR. Wherever service lines are to be laid as per Dwg.-14885-10-03-46A.						

	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 6 : AJMER, PALI & RAJASMAND						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Note:- a. Old Project area shall be defined as an area where any of following criteria are being met: 1. MDPE line is already been charged for more than 6 months. 2. MDPE is laid and gasified by another contractor (currently not working in respective zone) b. Additional rate for construction of RCC structure for protection of service line shall be payable under SOR no. 4.5					
4.1	For pipe length up to 8 meters (O&M area)	Nos	1020548	5589	5,222.23	2,91,84,495.59
4.2	For pipe length up to 6 meters (Project area)	Nos	1020549	30000	3,092.51	9,27,75,341.76
4.3	For pipe length more than 6 meters (Project area)	M	1020550	15000	324.59	48,68,916.93
4.4	Per meter rate for pipeline more than 8 meters (Per meter additional rate shall be payable above SOR item no. 4.1)	M	1020551	570	324.59	1,85,161.19
4.5	Construction of RCC structure for protection of service line (20/32 mm dia.) for drain/nallah (adjecent to house / Boundry walls / Multistory Buildings) crossing as per Dwg.- 14885-10-03-46A					
	The scope includes construction providing and laying reinforced cement concrete of M-25 grade (Concrete shall be design mix/nominal mix) with 20mm & down size graded crushed stone aggregates in Non suspended slabs/pavement slabs including pedestal/ramp etc., laying in alternate panels to required slopes, all necessary form work and finishing the top surface rough/smooth as required in any position, shape, level and thickness etc. The rates includes grouting of pockets, supply of material, tools, shuttering, Reinforce ment etc.	Nos.	1013003	1290	1,990.84	25,68,404.27
5	Excavation in Special Conditions:					
5.1	Excavation of trench or pits in Malba/Multiple layers of asphalt/ brick / PCC/RCC etc. The rates are payable over and above the Laying rates as per relevant SOR item no 1					
5.1.1	Cutting of PCC/RCC surface with thickness cumulative more than 12" (in case of multilayer)or Continuous asphalt multi-layer/Malba/Brick/Boulders more than 24". (Malba shall be considered as a strata where soil is in mixed form of debris/building rubbish or discarded pieces of bricks/stones)	M	1012920	82777	189.35	1,56,73,504.88
5.1.2	Cutting of PCC/RCC surface with kneumatic braker and cutter thickness cumulative upto 10" (in case of multilayer) (Malba shall be considered as a strata where soil is in mixed form of debris/building rubbish or discarded pieces of bricks/stones)	M	1020552	20694.3	145.65	30,14,135.55
5.2	Excavation of Hard Rock:					
	Trenching of Hard Rock is defined as trench material with a single piece of rock, dimension exceeding 1 meter in any direction, which requires cutting only by use of manual/pneumatic chisel/drill or sledge hammer and chisel or removal of same by additional techniques and supply of approved coarse sand (Size 0.6-2 mm as per IS 383) free from any impurities like clay, mica and soft flaky pieces for padding of 150 mm above and below laid pipeline as per the specifications ; The rates are payable over and above the Laying rates as per relevant SOR item no 1	Cu.M	1013004	1937	3,608.55	69,88,176.40
5.3	Laying in Congested Area:					
	Congested area shall be defined as an area where MDPE pipeline has to be laid in narrow lanes (Less than 4.5 M including footpath/drains) & houses in such locations have only one side entrance i.e. there is no backlane between two back to back houses & pipeline has to be laid in front of the house. The rates are payable over and above the Laying rates as per relevant SOR item no 1.	M	1012982	100	50.72	5,071.75
5.4	Laying in continuous water seepage area:					

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TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 6 : AJMER, PALI & RAJASMAND							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	The water seepage area shall be defined as an area where the MDPE pipeline has to be laid, in such locations where continuous water seepage occur during trench activity and the same shall not be possible. In that case, the contractor shall have to deploy additional equipment i.e. de-watering pumps etc. for continuous de-watering so that waterlogging shall be avoided. The rates are payable over and above the Laying rates as per relevant SOR item no 1.	M	1014791	100	27.05	2,704.93	
5.5	Excavation of Trench / Pit for Tap-off or Hook-up Laocations of new connectivity (1.5 Mtr and above)						
	This item shall cover the deep excavation (depth beyond 1.5 m) of trenches or pits for the identification of existing MDPE pipelines and tap-off or hook-up for new connectivity. Also, required shoring work (including necessary close plank walling, framing, bulla piling, strutting, etc.) shall be done by the contractor. (This item should be executed on specific direction of the Engineer in charge).	No.	1015921	100	16,201.71	16,20,171.28	
6	Restoration of trenches						
6.1	Restoration to original conditions of dismantled surface like Asphalted/Bituminous Road, Concrete Pavement, Agra /Kota Stones / Tiles (Chequered/interlocking etc.), Dry Brick Pavement as per the technical specifications attached in the tender after laying of pipeline in Built- Up surface, as per the directions of EIC / Site Incharge. Scope includes supply of the approved quality material, testing of materials by third party agencies as per technical specification / CPWD / IRC Standards, submission of the restoration reports, obtaining no objection certificates from the concern local authorities /land owners / third party inspection agencies designated by land owing agencies and Owner.	Cu.M	1007137	7083	3,645.97	2,58,23,690.76	
6.2	Providing & laying, Fixing, of cement concrete interlocking paver blocks of approved size, design shape as per the directions of EIC / Site Incharge. Scope includes supply of the approved quality material, testing of materials by third party agencies as per technical specification / CPWD / IRC Standards.	Sq.M	1014792	1459	721.59	10,52,508.84	
7	Survey GPR						
7.1	For length up to 100 meters	Nos.	1015922	10	8,030.27	80,302.75	
7.2	Per meter rate for more than 100 meters (Per meter additional rate shall be payable above SOR item no. 7.1)	M	1013010	100	50.72	5,071.75	
8	Fabrication & Installation of Pipeline Markers:						
	Supply and Installation of Stone Route Markers, Powder Coated Plate / Pole Markers as per the attached drawings, along the route / along boundary wall, lamp posts including all associated civil works such as excavation and construction in all types of soils, construction of pedestals and grouting with concrete, cleaning, supply and application of approved colour and quality of primer and paint, stencil letter cutting of numbers, direction, chainage etc., restoration of area to original condition and performing all works as per drawings, specification and instruction of Engineer-in-Charge. The rates shall include liaison rates with statutory bodies and restoration rates and no separate rates are payable under this SOR.						
8.1	Stone Route Markers as per Drg No14588-10-03--29)	Nos	1013011	12784	558.18	71,35,815.74	
8.2	Installation of FRP MARKER	Nos	1020553	193	2,739.75	5,28,297.03	
8.3	Pole markers with foundation as per Drawing No. Drg No14588-10-03-30 & 14588-10-03-31) and specification.	Nos	1013012	771	2,739.75	21,13,188.11	
8.4	Plate marker as per Drg No Drg No 14588-10-03--28)	Nos	1013013	11792	256.12	30,20,324.65	
9	LIASONING WITH LAND OWNING AGENCIES FOR PERMISSION						

		ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 6 : AJMER, PALI & RAJASMAND							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	Submission of applications as per approved drawings provided by owner / owner's representative (Initial Route Survey,Preperation of Drawings, measuring and providing details of surface type shall be in scope of Contractor with approval from Owner / Owner's representative), obtaining & submission of demand note, Coordination, Liaisoning, Obtaining written permissions from Land owing agencies like MCD, PWD, DDA, NDMC, NHAI, AAI, GDA, GNDA, GNN, Forest Dept, NHAI, Indian Railways, other government agencies who maintains the public lands and Private lands i.e. Apartments/institutions etc. Note: Service lines in SOR item no. 4 are not applicable;						
9.1	For All sizes - Liaisoning and getting permissions from NHAI/ Railway/ Forest (Protected & Un-Protected)/ Canal/ River crossings.	M	1012678	83774	240.06	2,01,11,071.64	
9.2	For All sizes - Liaisoning and getting permissions from New Delhi Municipal Corporation (NDMC)/ PWD	M	1015924	0	113.27	-	
9.3	For All sizes - Actual length of network laid against written permission statutory Authorities (except covered under SOR 9.1 & 9.2)	M	1013014	376984	72.70	2,74,04,875.78	
9.4	For All sizes - Actual length of network laid where written permissions are not available (other than pvt. Area)	M	1014446	376984	45.65	1,72,07,712.70	
	*above rates include all other sorts of liasioning including traffic dept.						
10	Charges for compliance to Health, Safety & Environment (HSE) as detailed in Scope of Work.						
10.1	MDPE Section- PPE, Contineous Barricades along the trenches as per approved drawing in tender, Use of Safety Boots, Hand gloves, Reflective jackets, Hard hats(helmets), Safety shoes, eye and ear safety equipments, Fire extinguishers and as per the detailed scope of work in tender specifications.	M	1010126	837742	19.44	1,62,87,135.48	
10.2	GI Section- Safety requirement per Rise- Use of Fall arrestor/ petzl, Ascendors/descendors, PPE, Barricades/ Warning Boards (03 Nos.) connected with warning/Caution tapes in areas where piping work is in progress , Use of Safety shoes, Walky talky, Hand gloves, Reflective jackets, Hard hats(helmets), eye and ear safety equipments, Fire extinguishers and as per the detailed scope of work in tender specifications; In case of non compliance- Refere SCC clause - for applicable penalty . Upto 4th GI (G+4) floor full body safety harness & assessories shall be of KARAM or equivalent make. Note- This SOR is applicable for Non LMC length of GI Section only.	Nos	1010127	50599	470.83	2,38,23,430.15	
10.3	GI Section- Safety requirement per Rise-Use of Fall arrestor/ petzl, Ascendors/descendors, PPE, Barricades/ Warning Boards (03 Nos.) connected with warning/Caution tapes in areas where piping work is in progress , Use of Safety shoes, Walky talky, Hand gloves, Reflective jackets, Hard hats(helmets), eye and ear safety equipments, Fire extinguishers and as per the detailed scope of work in tender specifications; In case of non compliance- Refere SCC clause - for applicable penalty . GI (G+5) and above including high rise Above 4th floor full body safety harness & assessories shall be of PETZL is compulsory. Note- This SOR is applicable for Non LMC length of GI Section only.	Nos	1010128	300	1,100.57	3,30,409.81	
PART II	GI / COPPER SECTION						
	Supply & Installation of Powder Coated GI Service Pipe & Fittings						

 Emerging Quality		ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 6 : AJMER, PALI & RAJASMAND							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	Assessment of material requirement for installation at site, Order placement and Purchasing of Powder coated GI Pipes, GI fittings, Copper pipes & fittings, Brass Fittings from approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, getting dispatch clearance, handling, loading, transportation and unloading of these items at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of owner supplied above ground fittings such as regulators, meters, Isolation Valves & appliance valves and other free issue items as defined in specification from Owner's designated stock yards to Contractor's own stores / work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches, schedules & execution procedures. Finalising optimum route with consent of customer from transition fitting to cooking oven / appliance and ensuring installations in well ventilated area. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices. Portal entry for new connections - New registration tracking and feasibility survey and its updation as per IGL defined TAT;printing of stationary as per approved IGL formats required during connections. Followup and attend complaints receives from customer regarding delay in new connection (ReferDrg No 14588-20-05--01, 02, 03)						
	Installation of GI service pipes & fittings, regulators, Valves etc. including NPT threading, as specified, Drillings of holes through the walls (Brick, RCC), Granite, Marble, Wood Cutting, Glass Cutting with proper heavy duty hammer drill machine, tools & tackles, using proper sealant/grout material and colours to match the original replacement of the damages during drilling, restoring the area to the original condition, Painting of scratched length of powder coated pipe and fittings after proper surface finish by one coat of approved primer paint and two coats of approved synthetic enamel paint. Restoring the wall surface to original conditions.						
	Supply & fixing of approved clamps & nylon rawl plugs with SS 304 2" screws, grout material, suitable thread sealant i.e. Teflon Tape, Joining of transition fitting to above ground service GI pipes, testing, purging and commission of the complete installation. The rates in connections also includes meter installation, tap off rates. The GI installation in already gas charged areas, planning & coordinating with existing consumer's for New tap offs from existing riser with or without tee, testing of these existing risers and commissioning of these connections with newly tapp offs etc.is inclusive.						
11	NON LMC						
11.1	Supply & installation powder coated 1/2" GI Pipe from TF to regulator - up to 1.5 Mtr Length	Nos	1013015	11792	403.84	47,62,279.41	
11.2	Supply & Installation of powder coated 1/2" GI Riser from regulator isolation valve to appliance for G+3 Apt and Individual kothi /Bungalow. Refer Drg No 14588-20-05--02)	M	1013016	734296	382.06	28,05,42,997.18	
11.3	Supply & installation of powder coated 3/4" GI Riser from regulator isolation valve to lateral isolation valve for Apt more than G+3 floors. Refer Drg No 14588-20-05-02)	M	1013017	10907	408.03	44,50,219.17	
11.4	Testing & Commissioning of already installed Risers GI / Copper Pipe (1/2" / 3/4" / 12mm) Non LMC riser (1/2" / 3/4")	M	1012680	26661	54.94	14,64,849.99	
11.5	Testing & Commissioning of already installed / Laterals GI / Copper Pipe (1/2" / 12mm / mlc) LMC	Nos	1015925	1839	316.14	5,81,531.60	

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TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 6 : AJMER, PALI & RAJASMAND							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
12	LMC						
12.1	PNG connection in Project area-low rise						
12.1.1	Installation of meter with required fittings	Nos.	1020554	59394	1,420.98	8,43,97,978.77	
12.1.2	Supply and installation of Gi/ Cu/ MLC pipe along with required fittings from Lateral isolation valve to appliance valve	M	1020555	237576	443.38	10,53,35,843.38	
12.2	PNG CONNECTIONS IN O&M AREA (ON EXISTING RISER)						
12.2.1	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2 m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter. Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4m. Payment against additional length of (GI + Cu) shall be as per item 12.2.3 of SOR.	Nos.	1013019	14	3,331.27	46,637.80	
12.2.2	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 12.2.3 of SOR.	Nos.	1015927	10	3,351.38	33,513.80	
12.2.3	Powder coated GI and Cu installations for pipes more than 4 m per connection						
12.2.3.1	1/2" Powder coated GI	M	1013020	101540	344.35	3,49,65,754.87	
12.2.3.2	12mm Copper /mlc Pipe - Inside kitchen location only	M	1013021	100	345.19	34,519.21	
13	Collection of registration /KYC forms duly filled with required supporting documents, Submission to IGL marketing on schedule as decided by IGL; This SOR may be used only after instruction of EIC/Site-in-Charge.	Nos	1013022	23613	212.17	50,09,933.43	
PART III	HIGH RISE SEGMENT (14 Storey & Above)						
14	MDPE Pipe line laying (20mm / 32 mm / 63mm) in already excavated trench in Builder segment / Private Property i.e Multistorey buildings / apartments with no movement of Heavy Vehicles, surrounded with Boundary wall)						
	Laying in already excavated trench with or without casing ; it includes execution of the work as per specification (as per trench dimension Drg No 14588-10-03-16), laying, electrofusion joints and insertion of the carrier pipe in casing pipe (on case to case basis) laying of warning mat and re-installation of pre cast slabs as per specification and instruction of EIC / Site Engineer of Owner. In Case of sand filling required as instructed by EIC/IGL representative SOR no. 28.4 shall be paid over and above this rate.	M	1013034	15	229.07	3,422.52	
15	Supply & Installation of Welded Riser - Non LMC						
15.1	Installation of welded riser 1/2 inch upto isolation valve	M	1013035	50	521.98	26,098.87	
15.1	Installation of welded riser 3/4 inch upto isolation valve	M	1013036	50	559.68	27,984.02	
15.1	Installation of welded riser 1 inch upto isolation valve	M	1013037	50	613.30	30,665.12	
15.1	Installation of welded riser 2 inch upto isolation valve	M	1013038	50	1,156.23	57,811.30	
16	LMC						
16.1	PNG CONNECTIONS IN PROJECT AREA						

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 6 : AJMER, PALI & RAJASMAND						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
16.1.1	Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + Cu) shall be as per item 17 of SOR.	Nos.	1013039	5	3,301.11	16,505.54
16.1.2	Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 17 of SOR.	Nos.	1017154	342	3,254.19	11,12,932.82
16.2	PNG CONNECTIONS IN O&M AREA (ON EXISTING RISER)					
16.2.1	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2 m & Cu pipe within 2m or (GI + Cu) within 4m after lateral isolation valve upto appliance along with installation of meter. Additional quantity above 4 Meters (GI + Cu) shall be payable only in case cumulative length exceeds 4m. Payment against additional length of (GI + Cu) shall be as per item 17 of SOR.	Nos.	1013040	5	3,497.16	17,485.82
16.2.2	Supply and installation from existing riser to appliance along with meter installation - Supply and installation from lateral isolation valve to appliance along with meter installation, The cumulative length of 1/2 "GI pipe within 2m & MLC (Multilayer Composite) pipe within 2m or (GI + MLC) within 4m after lateral isolation valve upto appliance along with installation of meter, Additional quantity above 4 Meters (GI + MLC) shall be payable only in case cumulative length exceeds 4 m. Payment against additional length of (GI + MLC) shall be as per item 17 of SOR.	Nos.	1017155	230	3,477.89	7,99,915.65
17	Powder coated GI and Cu installations for pipes more than 4 m per connection.					
17.1	1/2" Powder coated GI	M	1013041	10	344.35	3,443.54
17.2	12mm Copper/mlc - Inside kitchen location only	M	1013042	10	381.22	3,812.19
18	NG conversion for domestic connection					
18.1	Providing services for NG conversion, monitoring the pendency and conversion of stoves including the supply of material required for conversion of appliance/stove + Tools & Tackles required, Printing of JMR sent by IGL In-charge on email, scanning of signed JMR and submission to In-charge, completion of NG conversion within the defined TAT.	Nos.	1013309	30000	282.33	84,69,826.40
18.2	Perfoming Slab hole by using specific tools (wherever required)	Nos.	1015703	100	194.42	19,441.72
18.3	Perfoming Core cutting by using specific tools (wherever required)	Nos.	1015704	100	174.98	17,497.55
18.4	Perfoming glass cutting by using specific tools (wherever required)	Nos.	1015705	100	65.09	6,508.75
18.5	Replacement of defective Meter/Domestic Regulator/Meter Regulator with new ones (which are freely issued by IGL)	Nos.	1015706	52	256.97	13,377.98
18.6	Extension of existing / modification in GI pipeline	M	1015707	307	358.40	1,10,204.90
18.7	Extension of existing / modification in Cu pipeline	M	1015708	30	346.57	10,397.09
19	Installation of Service Regulator					

		ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 6 : AJMER, PALI & RAJASMAND							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
19.1	Receiving, taking over, handling, loading, transportation and unloading of owner supplied items such as Service Regulator/ SR module with canopy & Isolation Valves and other free issue items as per technical specification from Owner’s designated stock yards to Contractor’s stores / work sites. Fabrication, Erection, Welding, Testing & Installation of Service Regulators as per drawing no. Drg No 14588-20-05-37), Rev 0. Supply and installation of regulator boxes including fabrication as per drawing no. Drg No 14588-20-05-42), and painting as per technical specification. Any other material & activities not mentioned/covered above, but otherwise required for satisfactory completion/safety of work as defined in tender has to be supplied / done by contractor with in specified schedule at no extra cost to owner.						
19.1.1	Service Regulator with regulator cover and Transition Fittings installation	Nos	1013043	37	8,884.86	3,24,583.71	
19.2	Receiving, taking over, handling, loading, transportation and unloading of owner supplied items such as Service Regulator module with canopy as per technical specification from Owner’s designated stock yards to Contractor’s stores / work sites. Testing, Commissioning & Installation of Service Regulators as per drawing no. Drg No 14588-20-05-37), Rev 0. Supply and installation of regulator boxes including fabrication as per drawing no. Drg No 14588-20-05-42), and painting as per technical specification. Any other material & activities not mentioned/covered above, but otherwise required for satisfactory completion/safety of work as defined in tender has to be supplied / done by contractor with in specified schedule at no extra cost to owner.						
19.2.1	installation and commissioning of SR module with canopy	Nos	1020556	85	4,786.74	4,08,030.39	
20	Foundations works for Service Regulator						
	Providing and laying of Plain Cement Concrete (PCC - 1:2:4)						
	Providing, Fixing, Centering, Shuttering and laying of Cement Concrete with concrete of nominal mix 1:2:4 by mass (1 cement 2 coarse sand 4 coarse stone/aggregates/gravels) with 20 mm down size graded crushed stone / aggregates / gravels as per technical specification. Any other material & activities not mentioned/covered above, but otherwise required for satisfactory completion/safety of work as defined in tender has to be supplied / done by contractor with in specified schedule at no extra cost to owner.	Nos	1013044	118	5,385.23	6,33,550.69	
21	Supply & Installation of Crash guard for Service Regulator						
	service will cover site clearance, RCC structure M-25 upto plinth level, painting s&t and S&f of steel structure of all levels	Nos	1020557	118	10,252.76	12,06,197.07	
PART III	Civil Works						
22	Foundation works						
22.1	Excavation, Providing and Laying Reinforced Cement Concrete (M-20)						

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519						
SEGMENT - 6 : AJMER, PALI & RAJASMAND						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	Excavation in any plane & dimension including disposal of excavated earth up to any lead in all conditions, backfilling using serviceable earth and disposal of surplus and unserviceable earth. Soil to be levelled and properly compacted complete in all respect as per scope of work, technical specification and directions of EIC / Site-in-charge. Providing and laying REINFORCED CEMENT CONCRETE OF M-20 Grade (Concrete shall be design mix / nominal mix) with 20mm & down size graded crushed stone aggregates in NON SUSPENDED slabs/pavement slabs including pedestals, ramps etc., laying in alternate panels to required slopes, all necessary form work and finishing the top surface rough or smooth as required and directed, providing pockets/openings etc. including vibrating, tampering, curing, rendering and making smooth if required in any position, shape, level and thickness etc. as specified and directed by EIC / Site-in-charge. The rates include grouting of pockets, supply of material, shuttering, tools & tackles, Reinforcement etc.	CuM	1008323	67	10,713.82	7,18,108.02
22.2	Providing and Laying Plain Cement Concrete (1:4:8)					
	Providing & laying, Fixing, Centering and Shuttering of plain cement concrete with nominal mix 1:4:8 by mass (1 cement: 4 coarse sand: 8 coarse stone/ aggregates/ gravels) with 20 mm down size graded etc as specified in specifications .	CuM	1007178	27	4,617.53	1,25,472.71
23	Shifting and Installation of Field Regulating Station (For weights ranging from 1 Ton to 10 Ton)					
	Dismantling/loading from IGL site/store and its transportation to IGL store/Site with its unloading and installation of FRS/MRS as per the instructions of Site In-charge/ EIC. The shifting of FRS/MRS skids on the platform / foundation shall be done using cranes / hydra as required by the site condition.	Nos	1013023	14	33,924.11	4,70,963.73
24	Supply & Installation of Half round concrete sleeve (Crush Guard)					
	Installation of half round concrete sleeve for service line shall be done by sealing the annulus between pipe & sleeve, firm fixing of concrete sleeve by concrete mix pedestal, clamping, sand filling etc. Half round concrete sleeve shall be made as per drawing no 14588-10-03-33. Installation shall be done after instruction of IGL/PMC.					
24.1	Project	CuM	1013024	200	580.83	1,16,166.20
24.2	O&M (existing regulator piece)	Nos	1013025	200	597.01	1,19,402.02
25	Supply & Installation of RCC Slab 100 mm thk X 300 mm width					
	Supply & Installation of RCC (M20) Slab 100 mm thk X 300 mm width; This SOR may be used only after instruction of EIC / Site-in-charge.	M	1014794	200	412.57	82,513.59
26	Installation of Valve Chambers:					
	All civil works including supply of materials, excavation of pit, piping supports including all PCC, RCC and Brick works for valve pits, sand filling to cover valve body, pedestals with insert plates as required, sealing of pipes in pits, providing cover etc., finishing, clean up and restoration. The work shall be executed as per specification. Also providing water proofing agents internal and external plaster of chamber to avoid water seepage. Refer Drg No 14588-20-03-- 20, 21, 22.& 23)					
26.1	Brick Valve Chambers- Size (L x W)- 2m x 1 m	Nos	1013026	1	59042	58,193.09
26.2	RCC Valve Chambers- Size (L x W)- 2m x 1 m	Nos	1013027	205	62917	1,29,13,602.20
26.3	Brick Valve Chambers- Size (L x W)- 1.5m x 1 m	Nos	1013028	12	51901	6,13,856.55
26.4	RCC Valve Chambers- Size (L x W)- 1.5m x 1 m	Nos	1013029	205	48956	1,00,48,069.82
26.5	Brick Valve Chambers- Size (L x W)- 1 m x 1 m	Nos	1014795	4	42484	1,69,937.12
26.6	RCC Valve Chambers- Size (L x W)- 1 m x 1 m	Nos	1014796	11	39495	4,35,977.73
26.7	RCC Valve Chambers- Size (L x W)- 0.85 m x 0.85 m	Nos	1014797	1	33433	23,066.51
26.8	CONSTRUCTION OF LONG STEM VALVE CHAMBER	Nos	1020558	251	41,145.00	1,03,40,663.53

 Emerging Quality		ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 6 : AJMER, PALI & RAJASMAND							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
26.9	PRE-CAST Valve Chambers- Size (L x W)- 2m x 1 m	Nos	1020559	88	69209	60,87,841.04	
26.10	PRE-CAST Valve Chambers- Size (L x W)- 1.5m x 1 m	Nos	1020560	88	53852	47,36,947.20	
26.11	PRE-CAST Valve Chambers- Size (L x W)- 1 m x 1 m	Nos	1020561	1	43444	43,444.00	
26.12	PRE-CAST Valve Chambers- Size (L x W)- 0.85 m x 0.85 m	Nos	1020562	1	36776	36,776.25	
26.13	PRE-CAST Valve Chambers- Size (L x W)- 0.6 m x 0.6 m	Nos	1020563	2	29841	71,617.30	
26.14	RCC Valve Chambers- Size (L x W)- 0.6 m x 0.6 m	Nos	1014798	6	27128	1,51,915.48	
27	Brick Work						
	Providing brick work with brick class designation M-7.5 of IS:1077 in cm1:4 (1 cement : 4 sand) in steps, walls, retaining walls and load bearing structures drains, or any shape with all lead, depths & height including curring, scaffolding, etc., as per specifications and drawings with all bye-works and direction of the Engineer-in-charge.	CuM	1014799	1	6,522.62	6,906.59	
	Rate to include cost of all labour, tools, tackles, equipment, hire charges, supply of all materials such as minimum 43 grade cement, bricks, finishes, bitumen, other minor construction materials, shuttering, staging, masonry work, plastering, painting etc. with all bye-works and sundry works).						
	Note: The quantities of individual item can varied as per site requirement.The payment will be made as per actual certified measurement at site.						
28	Construction of trenches in Builder segment / Private Property i.e Multistorey buildings / apartments with no movement of Heavy Vehicles, surrounded with Boundary wall)						
28.1	Construction of dedicated trench (as per approved drawing) with removable top cover, scope includes excavation of trench, construction of brick wall, waterproofing of trench, installation of precast RCC slab covers (including supply) Ref. drawing 14588-10-03--34 Trench Dimension- 0.6m x 0.66m x 1.0m (d x w x l)	M	1013030	10	5,432.95	54,329.54	
28.2	Construction of dedicated trench (as per approved drawing) with removable top cover, scope includes excavation of trench, construction of brick wall, waterproofing of trench, RCC slab (150mm thick and 300mm width) at the top and RCC slab (100mm thick and 300mm width) at bottom. However, where MDPE laid on the basement top, roof of basement shall be treated as the bottom. There shall be sand filling across three sides of the line pipe of 100mm each shall be required to be taken by contractor in consultation with EIC / Site-in-charge as per latest PNGRB Guidelines. Minimum pipe top cover of 375 mm is required and the line pressure shall not exceed 110mbar. Trench Dimension- 0.375m x 0.66m x 1.0m (d x w x l)	M	1013031	10	4,632.09	46,320.87	
28.3	Excavation of trench and installation of 6" GI Pipe C Class by any method (Open /Moiling) , and restoration for road crossing upto 7.0 m inside society as 14588-10-03-43 Note- In case of restoration SOR Item no. 5 shall be applicable over and above this SOR.	M	1013032	10	2,174.39	21,743.87	
28.4	Sand Filling in any type of trenches in builder segment only; Scope includes supply of coarse sand (Size 0.6 To 2.0mm) as per IS 383 free from impurity like clay, mica and soft flaky pieces as per instruction of EIC / Site-in-charge. Note- Actual qty.(Cu.m) of sand filling for 28.1, 28.2 & 28.3 shall be claimed in this SOR	Cu.M	1013033	10	958.61	9,586.14	
PART V	MRS FABRICATION AND INTERNAL PIPING WORKS FOR INSTALLATION OF INDUSTRIAL & COMMERCIAL CONNECTIONS						

 Emerging Quality		ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN					
TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 6 : AJMER, PALI & RAJASMAND							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	Receiving, handling, loading, transportation and unloading of owner supplied MDPE pipes & fittings, warning mat and other free issue items from IGL's designated stock yards to Contractor's own stock-yards/ work-sites. Proper storing, stacking, identification, providing security, and insurance cover for the materials. Liaisoning with Landowning agencies / statutory authorities, preparation of detailed route plan, making trial pits to determine the underground utilities/ services etc., obtaining permission from Land owning agencies, restoration of the abandoned trial pits (excavation to depth 1.5 m or more as satisfaction to EIC) to original condition. Barricading the work area as per the procedures & drawings provided in the tender and as per the directions of EIC / site-in charge. Trenching to the required depth in all type of surface, uncoiling / stringing of pipes, damping, jointing of the pipe ends/ fittings/ valves by qualified personnel, using approved electro fusion techniques as per specification. Restoration of extra excavated portion along the TF point is inclusive in connection rates irrespective of the size of pit excavated at TF point and shall not be charged separately.						
29	MDPE Pipeline laying in all type of surface by any method						
29.1	Laying rates of 32&63 mm Dia MDPE pipeline - pipe length upto 25.00 mtrs for industrial and commercial connections	Nos.	1020564	100	21,493.01	21,49,301.33	
29.2	MRS Installation						
29.2.1	Connection rates for installation of CS MRS with 1" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014449	5	21,005.00	1,05,024.98	
29.2.2	Connection rates for installation of CS MRS with 1-1/2" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014450	22	28,334.95	6,23,368.89	
29.2.3	Connection rates for installation of CS MRS with 2" pipe & fittings with RPD Meter up to G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1012050	15	40,347.03	6,05,205.46	
29.2.4	Connection rates for installation of CS MRS with 3" pipe & fittings with RPD Meter above G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1014451	15	47,709.27	7,15,639.12	
	Note: a. Supply & Installation of required size of brass fittings in all type of meters supplied by IGL shall be in scope of contractor. B. Supply & installation of SS Tubing with fitting shall be in scope of contractor; Maximum length is 2.0m per MRS installation. C. 10% payment shall be released only after instllation of caging.						
30	CS Common Headers for MRS installation - Supply, Erection, welding & Installation of CS pipes & fittings (all types) except Ball Valves as common headers along with branching for commercial connections.						
	In addition to other activities under SOR item no. 29 and as detailed in specification and as per the instructions of the EIC / Site engineer of Owner. Erection, Fabrication, Welding & Installation of common headers of CS pipes & Fittings till isolation valves for fixing of numerous meters through a single header and includes connecting of common Regulators on headers, NPT threading, Radiography, as specified, Drillings of holes through the walls Brick, RCC, Granite, Marble, Wood Cutting, Glass Cutting with proper heavy duty hammer drill machine, tools & tackles, using proper sealant/grout material and colors to match the original replacement of the damages during drilling, restoring the area to the original condition, Painting of entire length of pipe along with fittings after proper surface finish by one coat of approved primer paint and two coats of approved synthetic enamel paint. Restoring the wall surface to original conditions, Supply & fixing of approved MS angle clamps, Ceiling						

 Emerging Quality	ATTACHMENT - 1: ESTIMATED COST LAYING OF MDPE NETWORK, GI/CU/MLC INSTALLATION AND MRS FABRICATION IN NCT OF DELHI, UP, HARYANA & RAJASTHAN TENDER NO. : IGL/ET2/CP/CP18519					
SEGMENT - 6 : AJMER, PALI & RAJASMAND						
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)
	clamps & dowel plugs with screws, supply and insertion of insulation material i.e. PVC, PTFE sheet between pipe/ meter support and pipe/ meter, grout material, suitable thread sealant i.e. Teflon Tape / lock tight, Supply of different sizes 1" to 4", 150# spiral wound gasket, studs & bolts (various sizes with wire sealing arrangement wherever required), Joining of transition ftg. to above ground CS pipes, testing, purging and commission of the complete installation. Supply and installation of STANDARD Y TYPE FLANGE END STRAINER between T.F. I.V. to Regulator Inlet. Strainer size may be 1", 2", 3" & 4" corresponding to installed TF size. The payment for supply and installation of Y type strainer is included in MRS fabrication. The meters installed on tap offs from common header will be paid separately as per SOR No. 30.3 to 30.6					
30.1	2" pipes & fittings	RM	1007245	185	2,395.96	4,42,773.06
30.2	4" pipes & fittings	RM	1007246	120	3,300.09	3,96,011.19
30.3	Connection rates for installation of CS MRS with 1" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014449	2	19,648.79	47,157.11
30.4	Connection rates for installation of CS MRS with 1-1/2" pipe & fittings with Diaphragm meter installation as per standard drawing including supply of MS Clamps/supports.	Nos.	1014450	6	24,944.44	1,49,666.66
30.5	Connection rates for installation of CS MRS with 2" pipe & fittings with RPD Meter up to G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1012050	4	37,634.63	1,35,484.65
30.6	Connection rates for installation of CS MRS with 3" pipe & fittings with RPD Meter above G-65 as per standard drawing including supply of MS Clamps/supports.	Nos.	1014451	1	44,318.77	53,182.52
	Note: a. Supply & Installation of required size of brass fittings in all type of meters supplied by IGL shall be in scope of contractor. B. Supply & installation of SS Tubing with fitting shall be in scope of contractor; Maximum length is 2.0m per MRS installation C. 10% payment shall be released only after installation of caging					
30.7	Supply & Installation of Pressure Gauges					
30.7a	RANGE 0-100 MBAR - 4"- DIAL SIZE	Nos.	1012127	58	1,524.11	87,788.94
30.7b	RANGE 0-1 BAR - 4"- DIAL SIZE	Nos.	1007252	2	1,378.81	3,309.13
30.7c	RANGE 0-4 BAR - 4"- DIAL SIZE	Nos.	1007253	30	1,427.24	42,817.26
30.7d	RANGE 0-6 BAR - 4"- DIAL SIZE	Nos.	1007254	2	1,507.97	3,619.12
30.8	Supply & Installation of FLANGE END BALL VALVES, MAOP- 4 BAR					
30.8a	4"	Nos.	1007181	6	13,585.92	81,515.53
30.8b	2"	Nos.	1007182	22	5,644.06	1,21,911.78
30.8c	1-1/2"	Nos.	1009365	22	4,019.20	86,814.80
30.8d	1"	Nos.	1007283	6	2,838.34	17,030.03
30.9	Supply & Installation of FLANGE END GLOBE VALVES, MAOP- 4 BAR					
30.9a	2"	Nos.	1007182	14	10,827.02	1,55,909.06
30.9b	1-1/2"	Nos.	1012130	185	8,180.81	15,11,813.42
30.9c	1"	Nos.	1007283	29	4,019.20	1,15,753.06
30.10	Supply & Installation of BRASS ISOLATION VALVE					
30.10a	2"	Nos.	1007182	14	2,198.66	31,660.75
30.10b	1-1/2"	Nos.	1012130	185	1,849.28	3,41,746.81
30.10c	1"	Nos.	1007283	6	712.65	4,275.91
30.10d	1/2"	Nos.	1012135	29	480.16	13,828.62
30.11	Supply & Installation of STRAINER					
30.11a	2"	Nos.	1007182	58	10,688.17	6,15,638.54
30.11b	1"	Nos.	1007283	32	8,686.16	2,81,431.44
30.12	WELDING OF JOINTS - Butt Weld Joints					
30.12a	4"	Nos.	1007181	18	368.11	6,626.02
30.12b	3"	Nos.	1007287	18	316.45	5,696.05

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TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 6 : AJMER, PALI & RAJASMAND							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
30.12c	2"	Nos.	1007182	36	316.45	11,392.10	
30.12d	1-1/2"	Nos.	1012130	19	287.39	5,517.81	
30.12e	1"	Nos.	1007283	8	83.96	705.23	
30.12f	1/2"	Nos.	1012135	11	77.50	836.97	
30.13	Fillet Joints & Supply of Socolet						
30.13a	1"	Nos.	1007283	14	1,011.34	14,563.29	
30.13b	1/2"	Nos.	1012135	19	885.73	17,006.01	
30.14	RADIOGRAPHY OF JOINTS						
30.14a	4"	Nos.	1007181	2	808.56	1,940.53	
30.14b	3"	Nos.	1007287	2	621.92	1,492.60	
30.14c	2"	Nos.	1007182	4	682.94	2,458.60	
30.14d	1-1/2"	Nos.	1012130	2	605.77	1,453.85	
30.14e	1"	Nos.	1007283	1	528.60	634.32	
30.14f	1/2"	Nos.	1012135	1	528.60	634.32	
30.15	SUPPLY/ INSTALLATION OF CLAMPS, SUPPORTS FOR ERECTION OF ALL SIZES OF PIPELINE						
30.15a	TYPE-1, SIDE WALL MOUNTED AS PER DRAWING	KG	1015931	323	135.62	43,778.22	
30.15b	TYPE-2, GROUND BASED AS PER DRAWING	KG	1015932	138	132.39	18,269.99	
30.15c	TYPE-3, CEILING MOUNTED AS PER DRAWING	KG	1015933	49	125.93	6,195.91	
30.16	SUPPLY OF THREADED END BALL VALVE						
30.16a	1"	Nos.	1007283	6	777.23	4,663.40	
30.16b	1/2"	Nos.	1012135	6	512.45	3,074.71	
30.17	SUPPLY OF FLANGES AS PER SPECIFICATION						
30.17a	WNRF 3"	Nos.	1012136	60	1,157.29	69,437.58	
30.17b	WNRF 2"	Nos.	1012137	205	884.12	1,81,420.40	
30.17c	BLRF 3"	Nos.	1012138	6	724.60	4,347.60	
30.17d	BLRF 2"	Nos.	1012139	60	551.52	33,091.35	
30.17e	Spectacle Blind 3"	Nos.	1012140	6	2,054.65	12,327.88	
30.17f	Spectacle Blind 2"	Nos.	1012141	60	1,879.31	1,12,758.57	
30.18	SUPPLY OF REDUCER						
30.18a	3" X 2"	Nos.	1012142	6	238.95	1,433.70	
30.18b	2" x 1-1/2"	Nos.	1012143	44	167.91	7,455.24	
31	Modifications & Installation of Meters & Regulators in existing MRS/Skids/DRS:						
	Assessment of material requirement for installation at site, Order placement for purchasing of CS Pipes & fittings from anyone of approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, Dispatch clearance, handling, loading, transportation and unloading of these at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of owner supplied above ground fittings like regulators, meter & Isolation Valve and other free issue items as defined in specification from Owner's designated stock yards to Contractor's own stores / work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches for modification, schedules & execution procedures and all others necessary documentation. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices.						
	Taking shutdown of existing MRS, dismantling meters/regulators, replacement/fixing of meters/regulators with associated inlet and outlet connections / fittings, supply of pipes & fittings (excluding flange end Ball Valve), pipe cutting, threading, welding, testing, Radiography of Joints & firmly fixing with approved meter clamps/brackets and other supports by proper grouting and necessary documentation. Restoring the area to the original condition as per the specifications and to complete satisfaction of consumer and EIC. The rates includes all as above along with testing of joints till re-commissioning.						

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TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 6 : AJMER, PALI & RAJASMAND							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
31.1	Diaphragm meter	Nos.	1012153	7	5,207.82	37,496.29	
31.2	RPD Meter	Nos.	1012154	7	6,814.92	49,067.41	
31.3	Turbine Meter	Nos.	1012155	2	6,814.92	16,355.80	
31.4	300 mbar regulator	Nos.	1012156	11	3,325.93	35,920.00	
31.5	500 mar regulator	Nos.	1012157	11	4,100.90	44,289.71	
31.6	2 bar regulator	Nos.	1012158	2	4,520.68	10,849.62	
31.7	Butt Weld Joints						
31.7a	4"	Nos.	1007181	24	1,695.25	40,686.08	
31.7b	3"	Nos.	1007287	48	1,307.77	62,772.81	
31.7c	2"	Nos.	1007182	60	1,356.20	81,372.16	
31.7d	1-1/2"	Nos.	1012130	60	1,114.02	66,841.42	
31.7e	1"	Nos.	1007283	60	774.97	46,498.38	
31.8	Supply & Installation of CS Piping (Seamless A 106 Gr-B, Sch-40)- 150 #						
31.8a	4"	MR	1009386	12	3,487.38	41,848.54	
31.8b	3"	MR	1007287	12	3,245.20	38,942.39	
31.8c	2"	MR	1007182	12	3,099.89	37,198.70	
31.8d	1-1/2"	MR	1012130	12	2,644.60	31,735.14	
31.8e	1"	MR	1007283	12	1,830.87	21,970.48	
	Modifications/ replacements (meter or regulator or both) in existing MRS/Skids/DRS using threaded fittings/ flanged end (same size or bigger) shall be payable through SOR Item No. 31.1 to 31.6.						
	Modifications/ replacements (meter or regulator or both) in existing MRS/Skids/DRS using welding (same size or bigger upto 3.00 mtrs) shall be payable through SOR Item No31.7						
	Modifications/ replacements (meter or regulator or both) in existing MRS/Skids/DRS using welding (in case, erected length after modification is more than 3.00 mtrs) shall be payable through SOR Item No. 31.8						
	The payments of flange end ball valve shall be paid as per SOR Item No. 30.8.						
32	Restoration of old MRS (after 1 year/Complete defect liability)						
	Cleaning, Repair,Testing, painting, tightening of bolts of old Metering and Regulating skids	Nos.	1015934	60	4,831.35	2,89,880.83	
33	Conversion of Commercial Appliances:						
	Conversions of all types of appliances to NG based appliances. Supply & changing of the nozzles /jets and associated controls for Non-domestic appliances (imported appliances included) with proper tools and tackles. Cleaning and performing minor maintenance, greasing etc. of the appliance. Testing and showing the performance to the customer, signing of joint meter records (JMR) and instructing the customer on use & safety norms, complete as per specifications & to satisfaction of owner / Engineer in Charge and includes supply of reinforced rubber hose with requisite pressure rating.						
33.1	NG conversion for domestic appliances (G 1.6)	Nos.	1015935	12	1,601.97	19,223.68	
33.2	NG conversion for all commercial appliances	Nos.	1007175	90	1,932.54	1,73,928.50	
	Note: The payments of conversion shall be as per burners.						
34	Supply of lock & Keys for MRS Cages						
	Padlock with Lever mechanism shall be durable solid body to resist corrosion. Shackle shall be hardened electroplated to resists hacksaw cutting and rusting under normal atmospheric conditions.	Nos.	1015936	90	1,114.02	1,00,262.13	
	Civil Works						
35	Demolition of PCC work below plinth level						
	Demolishing plain cement concrete (PCC) work (taking all necessary safety precautions) for all depths below plinth level including supply of all tools & tackles, necessary scaffolding, propping, underpinning, etc. , disposal of unserviceable material outside the IGL boundary limits kipping the IGL indemnified of any liabilities from statutory/ local bodies, all complete work as specified and directed	Cu. M	1009367	132	2,135.96	2,81,947.25	
36	Excavation for foundation works						

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TENDER NO. : IGL/ET2/CP/CP18519							
SEGMENT - 6 : AJMER, PALI & RAJASMAND							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	Excavation as per plan, upto 3 meters and upto any lead in all conditions, backfilling using serviceable earth and disposal of surplus and unserviceable earth. Soil to be levelled and neatly dressed complete in all respect as per scope of work, technical specification and directions of EIC.						
	Upto 3.0 Mtrs	Cu. M	1007176	132	584.85	77,199.84	
37	Foundation works						
37.1	Providing and Laying Plain Cement Concrete (1:2:4)						
	Providing & laying, Fixing, Centering and Shuttering of plain cement concrete with nominal mix 1:2:4 by mass (1 cement: 2 coarse sand: 4 coarse aggregates) with 20 mm down size graded aggregates/ gravels as specified in specifications and satisfaction to the EIC.	Cu. M	1007177	20	11,392.10	2,32,398.90	
37.2	Providing and Laying Plain Cement Concrete (1:4:8)						
	Providing & laying, Fixing, Centering and Shuttering of plain cement concrete with nominal mix 1:4:8 by mass (1 cement: 4 coarse sand: 8 coarse stone/ aggregates/ gravels) with 20 mm down size graded etc as specified in specifications and satisfaction to the EIC.	Cu. M	1017159	20	7,749.73	1,58,094.49	
37.2	Supply and Fixing of Deformed Steel Bars Reinforcement						
	Supply and placing in position high strength deformed steel bars reinforcement (conforming to IS: 1786, Grade Fe 415) for RCC work including transporting, straightening, cleaning, de-coiling, cutting & binding to required shapes and length as per details, binding with contractor's own 16 SWG black soft annealed binding wire at every intersection, supplying and placing with proper cover blocks, supports, chairs, overlaps, welding, spacers, fan hooks etc. for all heights and depths etc. complete the work as directed.	KG	1009380	600	96.87	58,122.97	
37.4	Providing and Laying Reinforced Cement Concrete (M-25)						
	Providing and laying REINFORCED CEMENT CONCRETE OF M-25 Grade (Concrete shall be design / nominal mix) with 20mm & down size graded aggregates in NON SUSPENDED slabs / pavement slabs including pedestals, ramps etc. filling pockets with grouting, laying in alternate panels to required slopes, all necessary form work and finishing the top surface rough or smooth as required and directed, providing pockets/openings, recesses, chamfering etc. wherever required, vibrating, tamping, curing, and rendering smooth if required in any position, shape, level and thickness etc. all complete as specified, shown and directed. Rates to include all materials (other than steel), labour, shuttering and necessary works required to make work complete.	Cu. M	1007179	24	11,382.42	2,73,177.98	
37.5	Dismantling of RCC & cutting of reinforcement (Thickness above 3")	Cu. M	1012161	24	5,339.91	1,28,157.84	
	Internal Piping Work						
38	Internal Piping - Supply, Erection & welding of CS pipes & fittings (all types) except Ball Valves for commercial connections.						
	Assessment of material requirement for installation at site, Order placement for purchasing of CS Pipes & fittings from anyone of approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, Dispatch clearance, handling, loading, transportation and unloading of these at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of contractor supplied material as defined in specification from Contractor's designated stock yards to IGL's work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches, schedules & execution procedures and all others necessary documentation. Finalising Piping location with optimum route in consent of customer from Meter Outlet till Customer's Appliance. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices.						

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SEGMENT - 6 : AJMER, PALI & RAJASMAND							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
38.1	Supply, Erection, Welding, Radiography & Testing of CS Seamless A 106 Gr-B Pipeline. It includes supply of all type of fittings (except ball valves), Supply Of Consumables Like Spiral Wound Gaskets (Winding ANSI 304 Graphite Centering Ring Cs), Stud Bolts (ASTM A 193 B 7, Hexagonal Nuts, ASTM A194 Gr 2H) and is inclusive in rates.						
38.1a	4" NB, Sch-40	MR	1007159	120	3,356.60	4,02,792.21	
38.1b	3" NB, Sch-40	MR	1007160	120	2,809.28	3,37,113.25	
38.1c	2" NB, Sch-80	MR	1007161	203	2,567.10	5,20,607.48	
38.1d	1-1/2" NB, Sch-80	MR	1007162	1013	2,276.48	23,05,622.13	
38.1e	1" NB, Sch-80	MR	1007163	136	1,840.56	2,49,580.05	
38.2	Supply, Erection, Welding, Radiography & Testing of CS Seamless / HFW API 5L GR-B Pipeline. It includes supply of all type of fittings (except ball valves), Supply Of Consumables Like Spiral Wound Gaskets (Winding ANSI 304 Graphite Centering Ring CS), Stud Bolts (ASTM A 193 B 7, Hexagonal Nuts, ASTM A194 Gr 2H) and is inclusive in rates.						
38.2a	4" NB	MR	1007164	120	3,356.60	4,02,792.21	
38.2b	3" NB	MR	1007165	120	2,237.73	2,68,528.14	
38.3	Supply & Installation of Safety Devices as per PNGRB gudelines						
38.3a	1" Solenoid Valves	Nos.	1012145	2	15,257.28	36,617.47	
38.3b	1.5" Solenoid Valves	Nos.	1012146	20	17,800.16	3,63,123.28	
38.3c	2" Solenoid Valves	Nos.	1012147	4	24,411.65	87,881.94	
38.3d	2.5" Solenoid Valves	Nos.	1012148	1	24,920.23	29,904.27	
38.3e	ATEX/PESO/CMRI approved Gas detectors	Nos.	1012144	28	17,800.16	4,91,284.44	
38.3f	1" Shutoff valve	Nos.	1012149	6	11,697.25	70,183.49	
38.3g	1.5" Shutoff valve	Nos.	1012150	6	13,731.55	82,389.32	
38.3h	2" Shutoff valve	Nos.	1012151	6	17,291.58	1,03,749.51	
38.3f	2.5" Shutoff valve	Nos.	1012152	6	18,308.74	1,09,852.42	
39	Internal Piping - Supply & Installation of Powder Coated GI pipes & fittings (all types) except Ball Valves for commercial connections.						
	Assessment of material requirement for installation at site, Order placement and Purchasing of Powder coated GI Pipes & GI fittings from approved vendors of IGL, Scheduling, Planning of material & Forwarding inspection call, getting dispatch clearance, handling, loading, transportation and unloading of these items at respective contractor's store. Receiving, taking over, handling, loading, transportation and unloading of owner supplied above ground fittings such as Isolation Valves and other free issue items as defined in specification from Owner's designated stock yards to Contractor's own stores / work sites, proper storing, stacking, identification, providing security and insurance cover. Preparation and approval of sketches, schedules & execution procedures and all others necessary documentation. Finalising Piping location with optimum route in consent of customer from Meter Outlet till Customer's Appliance. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices.						
39.1	Supply installation & Testing of Powder coated GI Pipes. It includes supply of all type of fittings (except Isolation valves), Supply & fixing of approved clamps & nylon rawl plugs with SS 304 2" screws, grout material, suitable thread sealant i.e. Teflon Tape, etc. and is inclusive in rates.						
39.1a	1/2" GI Pipe	Mtr	1015937	600	488.23	2,92,939.79	
39.1b	3/4" GI Pipe	Mtr	1015938	600	549.26	3,29,557.26	
39.1c	1" GI Pipe	Mtr	1015939	600	681.49	4,08,895.12	
40	Supply & Fabrication/Erection of Wired cages for MRS						

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SEGMENT - 6 : AJMER, PALI & RAJASMAND							
S.NO.	Description	Unit	Service code	Qty.	Unit Rate (All inclusive prices except GST) (in INR)	Total Amount (All inclusive prices except GST) (in INR)	
	Assessment of material requirement for installation at site, Order placement for purchasing of MS Angle, Flat, wire mesh & fittings from anyone of approved vendors of IGL, Scheduling, Planning of material & handling, loading, transportation and unloading of these at respective contractor’s store. Receiving, taking over, handling, loading, transportation and unloading of contractor supplied material as defined in specification from Contractor’s designated stock yards to IGL’s work sites, proper storing, stacking, identification, providing security and insurance cover. Finalising Cage location with in consent of customer & IGL. Making temporary but stable platforms/ scaffolding/ rope ladders and supply of all other safety devices. Supplying & Fixing 4 mm thick MS welded wire mesh (30 mm x 75 mm) by welding/bolting with structural steel elements (Angle & Flat) for making covers for MRS and various other equipments for protection of equipments. Rates to include one coat of primer and two coats of synthetic enamel paint (both side of wired cages), labour, material, transportation, loading/ unloading of material, welding charges etc complete in all respects. For fabrication of cage structure, all the essential jobs viz. cutting, welding, grinding, finishing, painting including all materials like Angle, channel, wire net, support sheet, hardware, electrode, grinding wheel, gas cylinder, paint, primer, grouting, equipment, tools, generator for power, welding machine etc. is under contractor’s scope						
40.1	Supply (Angle 65 mm x 65 mm x 6 mm, Flat 50 mm x 6 mm & Wire Mesh 75 mm X 30 mm X 4 mm), fabrication, painting, transportation and installation of MRS cages for SKID by welding/bolting with structural steel elements for making covers for industrial/ commercial PNG meter-regulator systems as per detailed scope of work & Drawing.	MT	1015282	1	1,37,315.53	1,97,734.36	
40.2	Supply (Angle 40 mm x 40 mm x 5 mm, Flat 25 mm x 4 mm & Wire Mesh 75 mm X 30 mm X 4 mm), fabrication, painting, transportation and installation of MRS cages for WALL MOUNTED MRS by welding/bolting with structural steel elements for making covers for industrial/ commercial PNG meter-regulator systems as per detailed scope of work & Drawing.	MT	1015293	12	1,27,144.01	14,76,904.76	
41	Supply & Installation Crash Guard for Cage Protection					-	
	Supply, fabrication, painting, transportation and installation of Crash Guard for protection of Wall Mounted cages for industrial/ commercial PNG meter-regulator systems as per detailed scope of work & Drawing.	MT	1014813	61	96,629.44	59,13,721.97	
Total Cost (INR)						1,21,35,93,596.02	
GST @ 18%						21,84,46,847.28	
Total Cost incl. GST (INR)						1,43,20,40,443.31	
Total Cost inc. GST (in Cr.)						143.20	