

राष्ट्रीय मस्तिष्क अनुसंधान केंद्र

(समविश्वविद्यालय)

(जैव एवं प्रौद्योगिक विभाग का स्वायत्त संस्था,

विज्ञान एवं तकनीकी मंत्रालय, भारत सरकार)

एन० एच०-८, नैनवाल मोड़, मानेसर-122 050 (हरियाणा)



National Brain Research Centre

(Deemed University)

(An Autonomous Institute of Deptt. of Biotechnology,

Ministry of Science & Technology, Govt. of India)

NH-8, Nainwal Mode, Manesar-122 050 (Haryana)

NBRC/Engg/STP/08 / 1064

14.06.2011

To,

Mr. V.K. Choudhary
Superintending Engineer (C)-I
Civil Construction Wing: All India Radio,
3rd Floor, Soochna Bhavan, CGO Complex,
New Delhi - 110 003.

Subject: Approval regarding acceptance of tender.

Name of work: Supply and installation of Sewage Treatment Plant of capacity 350 KL per day including operation and maintenance at NBRC, Manesar.

Dear Mr. Choudhary,

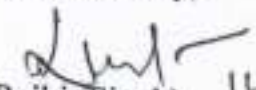
This is with reference to your letter No. 2(3)14-E/2010-11/334 dt. 06.06.2011 regarding acceptance of tender for above said work.

The proposal for acceptance of tender is hereby accepted and approved as per your recommendations for further process at your end.

You are requested to initiate the necessary action in this regard.

Thanking you,

Yours sincerely,


(Rajbir Singh)
Senior Engineer

14/6/11

Copy to:

1. PS to Director, NBRC for info
2. Offg. F&AO, NBRC

**PRASAR BHARATI
(BROADCASTING CORPORATION OF INDIA)
OFFICE OF THE EXECUTIVE ENGINEER (CIVIL)
CIVIL CONSTRUCTION WING: ALL INDIA RADIO.
MANDI HOUSE PROJECT DIVISION**

11th Floor Soochna Bhawan
Lodhi Road Scope Complex
New Delhi
Dated: 15.06.2011

NO: EE(C)/MHP/AC/1(18)/2010-11/ 1614

M/s. JM Enviro Technologies Pvt. Ltd.
520, Osian Building, 12 Nehru Place,
New Delhi-110019

Subject: - Supply and installation of Sewage Treatment Plant of capacity 350 KL (175 KL X 2 Nos.) Per day i/c operation and maintenance at National Brain Research Centre, Manesar, Gurgaon.

Dear Sir,

Your tender for the work mentioned above has been accepted for and on behalf of the President of India at your tendered amount of Rs.83,99,599/- (Rs. Eighty Three lac ninety nine thousand five hundred ninety nine) only which works out to 12.50% (Twelve decimal five zero) percent below the estimated cost of Rs.96,00,000/-- (Rs. Ninety six lac) only.

You are requested to submit the Performance Guarantee of Rs.4, 19,980/- (Rs. Four lac nineteen thousand nine hundred eighty) only within 15 (fifteen) days from the date of issue of this letter.

The performance guarantee shall be in any of the prescribed form as provided in para 7, page 7 of the tender documents.

On receipt of prescribed performance guarantee, necessary letter to commence the work shall be issued, and the site of work shall be handed over to you thereafter.

Please note that time allowed for carrying out the work as entered in the tender document is 3 (Three) months and shall be reckoned from the 22nd day after the date of issue of this letter..

Yours faithfully

Sd/-
(R.B.SINHA)

Executive Engineer(C)
For and on behalf of president of India
CCW, AIR, MHPD, New Delhi

Copy to.

1. The Superintending Engineer(C) - I, CCW, AIR, 3rd floor Soochna Bhawan, New Delhi with reference to this letter No.2 (3) /4-C/2011-12/421 dt. 15.06.2011.
2. The Director (Kind atten: Sh. Rajbir Singh, Senior. Engineer) National Brain Research Centre NH-8, Nainwal Mode, Manesar-122050 (Haryana)
3. Assistant Engineer (C), CCW, AIR, National Brain Research Centre, NH- 8, Nainwal Mode, Manesar, Haryana - 122050.
4. Agreement copy.

Executive Engineer (C)

CCW, AIR, MHPD
Soochna Bhawan N, Delhi

(209)

**PRASAR BHARATI
(BROADCASTING CORPORATION OF INDIA)
OFFICE OF THE EXECUTIVE ENGINEER (CIVIL)
C.C.W.:A.I.R. M.H.P.DIVISION**

11th Floor Soochna Bhawan
Lodhi Road Scope Complex
New Delhi
dated 27.06.2011

No: EE(C)/ MHPD/AC/1(18)/2010-2011/ 1709

To
M/s. JM Enviro Technologies Pvt. Ltd.
520, Osian Building, 12 Nehru Place,
New Delhi-110019

- Subject: - Supply and installation of Sewage Treatment Plant of capacity 350 KL (175 KL X 2 Nos.) Per day i/c operation and maintenance at National Brain Research Centre, Manesar, Gurgaon.
- Reference: - 1. Performance Guarantee submitted by you vide Bank Guarantee No.003GT02111740025 dated 23.06.2011 for Rs. 4, 19,980/- issued by HDFC Bank CC-31, Nehru Enclave Kalkaji New Delhi-19.
2 This office letter intent No.: EE(C)/ MHPD/AC/1(18)/2010-2011/1612 dated 16.6.2011.

Dear Sir,

In continuation to the letter referred above, you are requested to contact the Assistant Engineer(C), CCW, AIR, National Brain Research Centre, NH-8, Nainwal Mode, Manesar-122050, (Haryana) for taking possession of site and starting the work.

In continuation to the letter referred above, you are requested to attend this office to complete the formal agreement within seven days from the date of issue of this letter.

Yours faithfully



(R.B. Sinha)

Executive Engineer(C)

For and on behalf of President of India
CCW, AIR, MHPD, New Delhi.

Copy to:-

1. The Superintending Engineer(C)-I, CCW, AIR, 3rd floor, Soochna Bhawan, New Delhi.
- ✓ 2. The Director (Kind atten: Sh. Rajvir Singh, Senior, Engineer) National Brain Research Centre, NH-8, Nainwal Mode, Manesar-122050(Haryana).
3. The Assistant Engineer (C) CCW, AIR, National Brain Research Centre, NH-8, Nainwal Mode, Manesar-122050, (Haryana) The Extra/Substitute item shall not be executed and no deviation in the quantities allowed without prior approval of the competent authority.
4. Original agreement along with copy of letter No. EE(C)/ MHP/AC/1(18)/2010-11/ 1612 dated 16.06.2011
5. ASW(C), CCW, AIR, MHPD, Soochna Bhawan, New Delhi along with copy of letter No. EE(C)/ MHP/AC/1(18)/2010-2011/ 1612 dated 16.06.2011.
6. Income Tax Officer, ITO, New Delhi along with copy of letter No. EE(C)/ MHP/AC/1(18)/2010-2011/ 1612 dated 16.06.2011
7. The Deputy Labour Commissioner room No. 339, 3rd floor Vidyut Bhawan Connaught Place New Delhi along with copy of letter No. EE(C)/ MHP/AC/1(18)/2010-2011/1612 dated 16.06.2011.


Executive Engineer(C)



PRASAR BHARATI

(BROADCASTING CORPORATION OF INDIA)

Office of the Executive Engineer(Civil)
Civil Construction Wing, All India Radio,
MHPD, Soochna Bhawan, New Delhi,

No. EE(C)/MHP/2011-2012/

Dated: 23/11/2012

Sh. Rajbir Singh
Senior Engineer
National Brain Research Centre
NH-8, Nainwal Mode
Manesar-122050 (Haryana)

Subject : Submission of First RA Bill of Supply & installation of sewage
Treatment plan 350 KL (175 KL x 2) at National Brain Research
Centre, Manesar(Haryana).

Sir,

Enclosed please find herewith a copy of 1st R.A. Bill along with photocopies of
Measurement Books pertaining to this bill for the work mentioned above duly passed and
approved by the undersigned for Rs.6,94,960/- (Rs. Six lakh ninty four thousand nine
hundred and sixty only). The necessary recoveries shall be made by this department, while
making payment to the contractor.

It is requested that demand draft amounting to Rs.6,94,960/- may please be issued in
favour of PB, BCI, EE(C), CCW:AIR, MHPD, Soochna Bhawan, New Delhi at the earliest.

Encl. : As above.

Yours faithfully,

(R.B. SINHA)
EXECUTIVE ENGINEER (CIVIL)

Copy to : Assistant Engineer (C), CCW:AIR, NBRC work sub-division, Soochna
Bhawan, New Delhi.

EXECUTIVE ENGINEER (CIVIL)

694960/-
[Signature]

[Signature]



PRASAR BHARATI

(BROADCASTING CORPORATION OF INDIA)

Office of the Executive Engineer(Civil)
Civil Construction Wing, All India Radio,
MHPD, Soochna Bhawan, New Delhi,

No. EE(C)/MHP/2012-2013/

Dated: 15/5/2012

✓ Sh. Rajbir Singh
Superintending Engineer
National Brain Research Centre
NH-8, Nainwal Mode
Manesar-122050 (Haryana)

Subject : Submission of IInd RA Bill of Supply & installation of sewage
Treatment plan 350 KL (175 KL x 2) at at National Brain Research
Centre, Manesar(Haryana).

Sir,

Enclosed please find herewith a copy of IInd R.A. Bill along with photocopies of
Measurement Books pertaining to this bill for the work mentioned above duly passed and
approved by the undersigned for Rs.17,37,400/- (Rs. Seventeen lakh thirty Seven thousand four
hundred only). The necessary recoveries shall be made by this department, while making
payment to the contractor.

It is requested that demand draft amounting to Rs.17,37,400/- may please be issued in
favour of PB, BCI, EE(C), CCW:AIR, MHPD, Soochna Bhawan, New Delhi at the earliest.

Encl. : As above.

Yours faithfully

*2nd Rd Bill Verified
as 35% of Total Cost
21/5/12*

[Signature]
Executive Engineer (C)
(R.B. SINHA)
EXECUTIVE ENGINEER (CIVIL)
NEW DELHI

Copy to : Assistant Engineer (C), CCW:AIR, NBRC work sub-division, Soochna
Bhawan, New Delhi.

EXECUTIVE ENGINEER (CIVIL)

*Checked & Passed for Payment of
Rs. 17,37,400/- only
[Signature]*

N. B. R. C.
RECEIPTS
037
Diary No. 16/5/12
[Signature]

(179)

**SEWAGE TREATMENT PLANT FOR NBRC CAMPUS AT
MANESAR, GURGAON**

Rate (Lumpsum)

Amount

Time
Period

Design, Construction/Fabrication, Supply, Erection, Testing & Commissioning and getting approval from Pollution Control Board, for 350 Cu.m/day (175 cum x 2 nos) Effluent Treatment Plant including Operation & Maintenance for Defects Liability Period of 24 Months, complete in all respect as per detailed required specification and conditions mentioned in the documents for NBRC campus, MANESAR complete in all respect.

90% of 69,49,599/-
on completion of
2nd stage.

62,54,639/- 38,22,279/-

62,54,639

less paid upto 2nd R/A

(→) 24,32,360

Total 38,22,279/- 38,22,279/-

DLI
JBLW

CH
AE (C)

Speed-Post
(103)

PRASAR BHARATI
(INDIA'S PUBLIC SERVICE BROADCASTER)
OFFICE OF THE EXECUTIVE ENGINEER (CIVIL)
CIVIL CONSTRUCTION WING: ALL INDIA RADIO.
MANDI HOUSE PROJECT DIVISION

11th Floor Sookna Bhawan
Lodhi Road Scope Complex
New Delhi

NO: EE(C)/ MHP/AC/2013 -14/17/2015

Dated: 28/1/13

To
✓ The Director
(Kind attnn. Sh. Rajbir Singh, S.E),
National Brain Research Centre
NH-8, Nainwal Mode,
Manesar-122050 (Haryana)

Subject: - Submission of 4th & final bill of Supply & Installation of sewage treatment plant at
NBRC, Manesar (Haryana).

Sir,

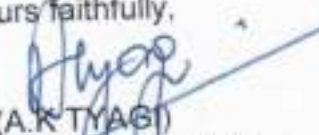
Enclosed please find herewith a copy of 4th & final bill along with photo copies of Measurement Books pertaining to this bill for the above mentioned work duly passed and approved by the undersigned of Rs. 7,72,719.00 (Rs.8,60,915.00 – Rs.88,196.00) after deducting an amount of Rs. 88,196 for levy of compensation for E.O.T. Other necessary recoveries shall be made by this office while making payment to the contractor. The work has been completed on 31.12.2012.

In this regard, it is intimated that the requisite bank guarantee has been submitted by the agency in this office and copy of the same is herewith enclosed for information and necessary action at your end.

It is requested that demand draft amounting to Rs.7,72,719/- (Rupees Seven Lakh Seventy Two Thousand Seven Hundred & Nineteen Only) may please be issued in favour of PB EE(C), CCW, AIR, MHPD, New Delhi at the earliest.

Encl: as above

Yours faithfully,


(A.K. TYAGI)
Executive Engineer(C)

Copy to:

1. Asstt. Engineer (C), CCW, AIR, NBRC, Sub Division, New Delhi.

— sd —
Executive Engineer(C)

2443

31/10/13

C.P.W.A. - 26 (Revised)

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Final payment must invariably be made on forms printed on Yellow Paper which should not be used for intermediate payment)
 (विशेषद्वारा के लिए : यह कार्य (१) पेशगी अदायगियों तथा (२) माने हुए निर्माण कार्यों की अदायगियों के लिए है। उचित पेशगियों के लेखों के फार्म जो अलग से मुद्रित हुए हैं, जहाँ आवश्यक हो, संलग्न कर देना चाहिए।
 [For contractor : This form provides for (1) advance payments (2) Payment for Measured Works. The form of Account Secured advance which has been printed separately should be attached, where necessary]

NBRCSD

• **उप-शेड्यूल/Sub-Division**

... तारीख/dated.

निर्माण कार्य का नाम/Name of work Supply & installation of sewage treatment plant of capacity 350x6 [175x2] body i/c of old structure of NBR, Mansarovar, Jaipur

वह निर्माण कार्य के पिछले बिल की संख्या और तारीख/No. of date of the previous bill of this work..... 2nd RA Bill (10/5/2012)

करार संख्या का निर्देश /Reference to Agreement No. 06 EED/1711/Agst/2011-12

निर्माण कार्य आरम्भ करने के लिए लिखित आदेश की तारीख/Date of written order to commence work..... 7/7/2011

निर्माण कार्य के वास्तविक सम्पन्न की तारीख /Date of actual completion of work..... 9th February

निर्माण कार्य की वर्ग (अनुभाग के "उपशीर्ष" और "उप-निर्माण" के अंतर्गत समूहों में) Item of works (grouped under "sub-head" and "sub-works" of estimate)	यूनिट Unit	दर Rate	माप पुस्तक के अनुसार अद्यतन निष्पन्न निर्माण कार्य की मात्रा Quantity executed up-to date as per measurement book	वास्तविक मापों के आधार पर अदायगियां Payment on the basis of actual measurements				अनुश्रुति Remarks
				अद्यतन Up-to-date		पिछले बिल के बाद Since previous bill		
1	2	3	4	5		6		7
				₹ Rs.	₹ P.	₹ Rs.	₹ P.	
As per Schedule attached. Certified that: ① The work has been carried out as per the Bill Specifications. ② No labor complaint received so far. ③ No T & P issued by the department. ④ No date received receiving by him with from this bill. ⑤ Engine has been engaged by the side supervised by the agency. ⑥ Work has been done in NBRE Survey & later received as per meeting. J. B. Singh A. K. Singh								
अग्रणीत Carried Over								

अयोनीत
Carried Over

1	2	3		4	5		6	
		₹ Rs.	₹ P.		₹ Rs.	₹ P.	₹ Rs.	₹ P.
आज तक किये गये कार्य का कुल मूल्य (क) Total value of work done to date (a)								
घटाए-पिछले बिल में दिखाए गए कार्य का मूल्य Deduct-Value of work shown on previous bill								
पिछले बिल के बाद हुए कार्य का निवल मूल्य (ग) Net value of work since previous bill (F)								
अंक (ग) शब्दों में रुपये Figure (F) in words Rupees								

विशेष टिप्पणी-जब छात्र ६ में अनुमान के प्रत्येक उपशीर्ष से सम्बन्धित दो या दो से अधिक प्रविष्टियाँ हों वहाँ ऐसे निर्माण कार्य के विषय में जहाँ लेखे उपशीर्ष बान रखे जाते हों उन्हें जोड़ देना चाहिए तथा निर्माण कार्य के सार में दर्ज करने के लिए जोड़ की छात्र ७ में दर्ज कर देना चाहिए।

N.B. When there are two or more entries in column 6 relating to each Sub-Head of estimate they should, in case of work the accounts of which are kept by sub-heads, be totalled and the total recorded in column 7 for posting the work abstract.

प्रमाण पत्र तथा हस्ताक्षर (II. Certificate & Signature)

१. माप जिस पर लेखा के छात्र १ से ६ तक की प्रविष्टियाँ आधारित हैं _____ के द्वारा _____ के दृष्ट में दर्ज की गई है।
(तारीख) को, की गई तथा माप पुस्तक संख्या _____

1. The measurement on which are based the entries in column 1 to 6 of account were made by Sub-Divisional Officer, J.E. 13 on _____ and are recorded at page 134/4 of measurement Book No. 516

प्रमाणित किया जाता है कि लेखा १ के छात्र ४ में दर्शित वास्तव में निम्न कार्य की मात्रा के अतिरिक्त ओवर अलग अलग अनेक मदों के सम्बन्ध कुछ कार्य वास्तव में कि गया है तथा ऐसे कार्य की वैशम्यिकता का उसमें प्रयुक्त सामग्रियों की मात्राओं के प्रति (रहित पैराग्राफों की बसुली योग्य अनुमानित राशि को घटाकर) मूल्य _____ व्यौरा मार्ग का प्रत्याशी और उसके परिणामों के अन्तिम ठेकेदार की सुविधा के लिए अदायगी के रूप में अनुमानित प्रस्तावित या की जा रही वैशम्यिकता अदायगी किसी भी तरह कम नहीं है, तथापि प्रस्तावित व्यौरा माप यथासंभव सटीकता से दर्ज किए जाएंगे।

2. Certified that in addition to and quite apart from the quantities of work actually executed as shown in column 4 of the account 1, some work has actually been done in connection with several items and the value of such work (after deducting therefrom proportionate amount _____ of secured advance if any ultimately recoverable on account of the quantities of materials used therein) is in no case less than the advance payments as per item 2 of the memorandum if payments made proposed to be made for the convenience of the contractor in anticipation of and subject to the result of detailed measurement which will be made as soon as possible.

बिल बनाने वाले अधिकारी
के तारीख सहित हस्ताक्षर { (पद) _____

Dated Signature of officer
preparing the bill { (Rank) _____

अदायगी अधिकृत करने वाले अधिकारी
के तारीख सहित हस्ताक्षर { (पद) _____

Dated Signature of Officer
Contractor authorising payment { (Rank) _____

ठेकेदार के तारीख सहित हस्ताक्षर
Dated Signature of _____

इस प्रमाण-पत्र पर उप-मंडल या मंडल अधिकारी के हस्ताक्षर होने चाहिए।

This certificate must be signed by Sub-Divisional Officer or Divisional Officer.

इस हस्ताक्षर की सही आवश्यकता है जब बिल बनाने वाला अधिकारी अदायगी को अधिकृत करने वाला अधिकारी न हो। ऐसे मामले में दो हस्ताक्षर आवश्यक हैं।

This signature is necessary only when the officer who prepares the bills is not the officer who authorise the payment in such a case the signature are essential.

III. अदायगियों का ज्ञापन (III. Memorandum of Payment)

लेखा १, खाना ५, प्रविष्टि (क) के अनुसार वास्तविक मापे गए कार्य का कुल मूल्य

Total value of work actually measured, as per Acct. 1, col. 5, entry (A) *302 EA*

निम्नलिखित धीरे के अनुसार अब तक न मापे गए कार्य के लिए कुल अद्यतन पैशगी अदायगियां :-

Total up-to-date, advance payment for work not yet measured, as per details given below :-

रु० Rs.		पै० P.		(ख) (B)
(क) पिछले बिल के अनुसार जोड़				
(a) Total as per previous bill.....				
(ख) माप पुरातक संख्या के पृष्ठ के अनुसार पिछले बिल के बाद अब तक				
(b) Since Previous bill as per page of M.B. No.				
3. अनुबंध (फॉर्म २६-क) खाना ८, प्रविष्टि (ग) के अनुसार सामग्रियों की जमानत पर कुल अद्यतन रकित पैशगियां				
Total up-to-date secured advance on security of materials as per annexure (Form 26A) Col. 8, Entry				
4. जोड़ (पर १+२+३) Total items (1+2+3) .				
5. घटाए-रोकी हुई राशि - Deduct amount withhold				
(क) पिछले चल लेखा बिल के अनुसार पिछले बिल से				
(a) From previous bill as per last Running Account bill				
(ख) इस बिल से				
(b) From this bill				
6. शेष अर्थात् "अद्यतन", अदायगियां (पर सं० ४-६)				
Balance i.e. "up-to-date" payments (item 4-5)				
7. के लेखों के साथ अद्यतित अर्थात् चल लेखा बिल सं० की प्रविष्टि (द) अनुसार पहले से की गई अदायगियों की कुल राशि।				
Account bill No. of forwarded with accounts for 200				
8. निम्नलिखित धीरे के अनुसार अब की जाने वाली अदायगियां :-				
Payments now to be made as detailed below :-				
(क) इस निर्माण कार्य की क्रेडिट की जाने वाली राशियों की वस्तु				
(a) By recovery of amount creditable to this work (a)				
जोड़ ५ (ख) १ (क) (ख)				
Total 5(b) + 8(a) (G)				
(ख) अन्य निर्माण कार्य या लेखा धीरे की क्रेडिट की जाने वाली राशि				
वस्तु द्वारा -				
(b) By recovery amounts creditable to other work or heads of accounts -				
i) Income Tax Recovery				
ii)				
iii)				
iv)				
v)				
vi)				
(ग) बैंक द्वारा (c) by cheque				
जोड़ ८ (क) + (ग) Total 8(b) + (c)(H)				

बैंक द्वारा रु० (.....)

Pay Rs. b (.....)

जमा करें।

..... (by cheque)

संवितरण अधिकारी के तारीख सहित आक्षेप
Dated Initials of Disbursing officer

ऊपर लिखित ज्ञापन के अनुसार, इस निर्माण कार्य के लिए रु० (.....)

Received Rs. - (.....)

as per above memorandum on account of this work.

प्राप्त हुए।

तारीख/Dated 200

गवाह/Witness

केबदार के हस्ताक्षर/Signature of Contractor

प्रति कर ली गई
Checked

लेखा लिपिक
Account Clerk

मंडल लेखाकार
Divisional Accountant

चैक संख्या _____ तारीख _____ १९ _____ के अनुसार मेरे द्वारा भुगतान
Paid by me vide cheque No. _____ Dated _____ 19 _____

वास्तव में अदायगी करने वाले व्यक्ति के तारीख सहित अक्षर
Dated initials of person actually making the payment

*इन आंकड़ों की मद ७ और ८ के जोड़ से मिलान करने के लिए जांच करनी चाहिए। * This figure should be tested to see that it agrees with the total of item 7 & 8.

यदि भुगतान की विवरण राशि १० रुपये से कम हो और उसे चैक में शामिल न किया जा सके तो अदायगी नकदी में की जानी चाहिए तथा इस प्रविष्टि में उचित परिवर्तन कर इस परिवर्तन की तारीख सहित आधिकारी द्वारा सत्यापित करना चाहिए।

If the net amount to be paid is less than Rs. 10 and it cannot be included in cheque the payment should be made in cash this entry being altered suitably and the alteration attested by dated initials.

यहां अदा की जाने वाली विवरण राशि का स्पष्ट संकेत करें, देखें मद ८ (ग)। Here specify the net amount payable vide item 8 (C).

प्राप्तकर्ता की पावती पर ८ अक्षर (क+ख+ग) के अनुसार प्रदत्त समस्त राशि के लिए होनी चाहिए।

== The Payee's acknowledgement should be for the gross amount paid as per item 8 (i.e. a+b+c).

यह प्राप्तकर्ता की पावती किसी चिन्ह, मोहर या अंगूठे के निशान द्वारा की गई हो तो अदायगी को किसी पड़ोसी व्यक्ति से सत्यापित करना लेना चाहिए।

Payment should be attested by some known person when the payee's acknowledgement is given by a mark seal or thumb impression.

IV अंशुक्ति (IV. Remarks)

(यह स्थान ऐसे अंशुक्तियों के लिए सुरक्षित है जिसमें संचालन अधिकारी या बंडल अधिकारी निर्माण कार्य के निष्पादन कार्य को जांच या ठेकेदार की राशि से संबंध यदि कुछ लिखना चाहे तो लिख सकता है।)

[This space is reserved for any remarks which the Disbursing Officer or the Divisional Officer may wish to record in respect of the execution of the work, check of measurements or the state of contractor's amount.]

बंडल कार्यालय के प्रयोगार्थ
FOR USE IN DIVISIONAL OFFICER

प्रति कर ली गई
Checked

लेखा क्लर्क
Account Clerk

बंडल लेखा
Divisional Accounts

वहालेखाकार के कार्यालय के प्रयोगार्थ
FOR USE IN ACCOUNTANT GENERAL'S OFFICER

लेखा परीक्षा की गई
Audited

परीक्षा की
Reviewed

लेखा परीक्षक
Auditor

अधीक्षक
Superintendent

राजपत्रित अधिकारी
Gazetted Officer

①

SPEED POST

**PRASAR BHARATI
INDIA'S PUBLIC SERVICE BROADCASTER
OFFICE OF THE EXECUTIVE ENGINEER (CIVIL)
CIVIL CONSTRUCTION WING : ALL INDIA RADIO
MANDI HOUSE PROJECT DIVISION**

11TH floor, Soochna Bhawan
New Delhi - 110 003

Dated: 05.04.2018

No. EE(C)/MHP/DRG/6(1)/2017-18/29

The Director,
[Kind Attn.: Sh. Rajbir Singh, SE]
National Brain Research Centre,
NH- 8, Nainwall More,
Manesar, Gurgaon.

Sub :- 3rd & final maintenance bill for STP of capacity 350 KL per day installed at NBRC, Gurgaon. (Agmt. No. 06/EE(C)/MHP/AGT/2011-12).

Sir,
The STP plant was to be maintained for five years under above agreement (two years free of cost & three years as per quoted rates, last year being 01.01.2017 to 31.12.2017). The maintenance of plant has been handed over to new agency employed by your office w.e.f. 11.01.2018 vide this office letter of even No. 2391 dt. 10.01.2018 (copy enclosed). The maintenance bill from **01.04.2017 to 10.01.2018** amounting to **Rs. 4,27,589/-** is being enclosed herewith for release of payment to this office. Payment upto 31.03.2017 has been already released by your office in the last RA bill.

Copies of following supporting documents are being enclosed for your kind perusal :-

1. Attendance sheet of staff from 01.04.2017 to 10.01.2018.
2. Log register for running of motors from 01.04.2017 to 10.01.2018.
3. Details of Provident Fund / ESI deposit of operating staff from 04/2017 to 12/2017.
4. Copies of quarterly test report (03 nos.)

The agency had deployed one chain pulley machine for maintenance work beyond scope of above agreement for smooth operations. It is requested that M/s. JM & Enviro Technologies Pvt. Ltd. may please be allowed to take away their chain pulley machine. The maintenance bill may kindly be paid to this office at the earliest.

Encl.: as above

Yours faithfully,

0030 6/4/18

(A. K. Tyagi)
Executive Engineer (Civil)

Copy to :-

1. The Assistant Engineer (C), CCW, AIR, NBRC Sub-Division, Soochna Bhawan, New Delhi for necessary action.
2. M/s. JM Enviro Technologies Pvt. Ltd., C-22, Lajpat Nagar-III, New Delhi-110024 for necessary action w.r.t. their letter No. JMET/NBRC/STP/17-18/26 dated 06.01.2018.

Executive Engineer (Civil)

**PRASAR BHARATI
INDIA'S PUBLIC SERVICE BROADCASTER
OFFICE OF THE EXECUTIVE ENGINEER (CIVIL)
CIVIL CONSTRUCTION WING : ALL INDIA RADIO
MANDI HOUSE PROJECT DIVISION**

11TH floor, Soochna Bhawan
New Delhi - 110 003

Dated: 01.07.2016

No. EE(C)/MHP/DRG/6(1)/2016-17/

The Director,
[Kind Attn.: Sh. Rajbir Singh, SE]
National Brain Research Centre,
NH- 8, Nainwall More,
Manesar, Gurgaon.

Sub :- Supply and installation of STP of capacity 350 KL per day including operation and maintenance at NBRC, Gurgaon. (Agmt. No. 06/EE(C)/MHP/AGT/2011-12).
(Revised 2nd RA Bill for Maintenance of STP upto 30.06.2016)

Ref.: (i) Your office letter No. NBRC/Engg/JMET/2016/02/3917 dt. 29.03.2016.
(ii) T.O. letter of even No. 3088 dt. 01.03.2016.

Sir,

The 2nd RA bill for maintenance period upto 31.12.2015 was submitted for Rs. 2,66,667/- in January 2016 to your office. Thereafter you had intimated that D.O. meter was defective and needed to be replaced in two years guarantee period. The action taken report on your letter dt. 29.03.2016 is submitted as under :-

1. The agency M/s. J.M. & Enviro has installed a new D.O. meter on 15.06.2016 inside panel room and a copy of the test report of new D.O. meter is being enclosed alongwith agency's letter dt. 01.07.2016. Remaining guarantee period of 04 months 23 days may please be counted from date of installation of new D.O. meter i.e. 15.06.2016.
2. The attendance sheet of staff upto 30.06.2016 alongwith EPF & ESI deduction certificates are also being enclosed duly verified by AE(C).

Since further 06 months have passed, the **revised 2nd RA bill** for period upto 30.06.2016 amounting to **Rs. 5,16,667/-** is now being enclosed for release of payment. The agency is maintaining / operating STP plant regularly but facing extreme financial hardship as no payment has been made for last 14 months.

Encl : - As above

Yours faithfully,

(A. K. Tyagi)
Executive Engineer (Civil)

Copy to :-

1. The Assistant Engineer (C), CCW, AIR, NBRC Sub-Division, Soochna Bhawan, New Delhi for necessary action.
2. M/s. JM Enviro Technologies Pvt. Ltd., C-22, Lajpat Nagar-III, New Delhi-110024 for necessary action.

Executive Engineer (Civil)



राष्ट्रीय मस्तिष्क अनुसंधान केंद्र (समविश्वविद्यालय)

(जैव एवं प्रौद्योगिक विभाग का स्वायत्त संस्था,
विज्ञान एवं तकनीकी मंत्रालय, भारत सरकार)
एच 8, नैनवाल मोड़, मानेसर - 122 050 (हरियाणा)



National Brain Research Centre (Deemed University)

(An Autonomous Institute of Deptt. of Biotechnology,
Ministry of Science & Technology, Govt. of India)
NH-8, Nainwal Mode, Manesar - 122 050 (Haryana)

NBRC/AE(C)/ES/2009/18 } 2594

25.09.2009

LETTER OF INTENT

To,

M/s. Sunehari Bagh Builders Pvt. Ltd.,
306, Sunehari Bagh Apartment,
Sector-13, Rohini,
Delhi - 110085
Mob: 9312222952, 9910335122, 9810100226 Fax No. 011-27569725

Subject: Construction and development of external sewer, storm water drainage, water supply system, garden irrigation system and fire suppression works Phase-II of NBRC.

Dear Sir,

Your tender for the work mentioned above has been accepted on behalf of the Director, NBRC at your tendered amount of 1,82,22,385/- (Rupees One crore eighty-two lakh twenty-two thousand three hundred eighty-five only) including taxes, which is 5.02% above estimated cost of Rs. 1,73,51,533/- and 7.19% above TS rate of Rs. 1.70 crore.

2. You are requested to submit the performance security / guarantee of Rs.9,11,120/- (Rupees Nine lakh eleven thousand one hundred twenty only) within 15 days of issue of this letter. The performance guarantee shall be in any of the prescribed form as provided in the Clause-1 of the General Conditions of Contract of tender and shall be valid up to the stipulated date of completion plus 60 days beyond that. The stipulated period for completion of this work is 9 (nine) months (including monsoon period if any) shall be reckoned from the 15 days after the date of issue of work order. Extension of period if any and refund of the guarantee shall be as per relevant terms and conditions of contract.

3. On receipt of the prescribed performance guarantee, necessary letter to commence the work shall be issued, and the site of work handed over to you thereafter.



4. Please note that the time allowed for carrying out the work as entered in the tender (9 months) shall be reckoned from the 15 days after the date of issue of work order.

Thanking you,

Yours faithfully,



(Sanjeev Choudhary)
Assistant Engineer (C)

Copy to:

1. PS to Director for info
2. O/CAO for info
3. F&AO for info
4. Assistant Labour Commissioner cum Conciliation officer (Central), Flat S-1, Main Shopping Centre, NH-4, Faridabad, Ph. No.- 0129 -2429788.
5. Income tax officer (Concerned), HSIDC building, Viniya Nikunj, Udyog Vihar, Ph-VI, Near Shankar Chowk, Gurgaon.



राष्ट्रीय मस्तिष्क अनुसंधान केंद्र
(समविश्वविद्यालय)

(जीव एवं प्रौद्योगिक विभाग का स्वायत्त संस्था,
विज्ञान एवं तकनीकी मंत्रालय, भारत सरकार)
एन० एच०-८, नैनवाल मोड, मानेसर - 122 050 (हरियाणा)



National Brain Research Centre
(Deemed University)

(An Autonomous Institute of Deptt. of Biotechnology,
Ministry of Science & Technology, Govt. of India)
NH-8, Nainwal Mode, Manesar - 122 050 (Haryana)

NBRC/AE(C)/ES/2009/20/2776

To,

M/s. Sunehari Bagh Builders Pvt. Ltd.,
306, Sunehari Bagh Apartment,
Sector-13, Rohini,
Delhi - 110085
Mob: 9312222952, 9910335122, 9810100226 Fax No. 011-27569725

14.10.2009

Subject: Construction and development of external sewer, storm water drainage, water supply system, garden irrigation system and fire suppression works Phase-II of NBRC.

References :

1. Performance guarantee submitted by you vide your letter no. NBRC/2 dated 08.10.2009, amounting to Rs. 9,11,200/- in Form of TDR (No. N 000694 dt. 05.10.2009) for above said work.
2. This office LOI / acceptance of tender No. NBRC/AE(C)/ES/ 2009/18/2594 dt. 25.09.2009

Gentlemen,

Your tender for the work mentioned above has been accepted on behalf of the Director, NBRC at your tendered amount of 1,82,22,385/- (Rupees One crore eighty two lakh twenty two thousand three hundred eighty five only) including taxes, as per the rate indicated in the schedule of quantities attached herewith.

The above acceptance is subject to following terms and conditions:

1. You are requested to start the work within 15 days from date of issue of work order. The work shall be completed within 09 (nine) months (including monsoon period etc. if any) reckoned from 15th day of issue of this work order. The entire work shall be carried by you in accordance with the conditions, specifications and drawing stipulated



in the tender document issued to you. All efforts shall be made by you to complete the work well within the stipulated completion period and detailed programme of work is required to be made accordingly.

2. The undersigned will be the Engineer-In-Charge for this work and you may contact him for further instructions in this matter

3. (i) Performance Guarantee: Receipt of TDR N 000694 date 05.10.2009 for Rs. 9,11,200/- issued by Central Bank of India, Chuna Mandi, Paharganj, New Delhi towards performance guarantee, valid upto 05.01.2011 is noted. The same will be returned on completion of work and recording of the completion certificate.

(ii) Security Deposit: The amount of Security Deposit shall be 5% of the contract value. The Earnest Money Deposit of Rs. 3,40,000/- shall be converted into part of the Security Deposit as stipulated here. The balance of the Security Deposit shall be recovered @ 10% through running account bills till the amount reaches 5% of the contract value.

4. A formal item rate agreement for the above work is being drawn up by this office. You are requested to contact this office to complete the formal agreement within 15 days of issue of this letter.

5. The work shall be carried out strictly in accordance with terms, conditions and specifications as stipulated in the tender documents, in the best workman like manner and as per standard practice. The materials required for satisfactory completion of work shall be of best quality, make, grade as mentioned in the tender and confirming to relevant Indian Standard specifications (latest revision) wherever applicable and approved by Engineer-In-Charge.

6. You shall employ and maintain qualified engineers and supervisors for the above work. You shall also bring to site and deploy such machinery and equipment as necessary for the satisfactory completion of the work. Augmentation of manpower, machinery and equipment beyond the list of deployment furnished in tender shall be arranged by you at no extra cost to the department. You shall inform the Engineer-in-charge the details of all items brought to site, which are to be taken back from the site after its use at site.



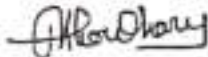
7. The principal employer's certificate for obtaining labour license based on the maximum number of workers you propose to employ for this work shall be issued. You may note that within 10 days from the date of issue to this work order, you will apply to the Assistant Labour Commissioner for labour license for the maximum number of workers you had indicated to engage on the work. A copy of the application will have to be furnished to the Engineer-in-Charge of the work.
8. You shall produce power of attorney in original in favour of your representative who will deal with all the matters related to the contract, if any.
9. During the period of work order, you are requested to furnish the copy of latest Income Tax return, Audited Profit & loss statement by Licensed Chartered Accountant for every financial year as applicable.
10. Recovery of Income Tax: As per the instructions of Ministry of Finance, a recovery of Income Tax @ 2.2% and surcharge thereon (@ as prescribed by the Ministry of Finance from time to time) of gross value of work done, will be made from all the bills in respect of this work and the amount so credited will be issued by the Finance & Accounts Department of NBRC.
11. All statutory deductions will be made from all running accounts bills as per the rates applicable at the time of release of payment.
12. A detailed phased programme of work, including supply of material, keeping in view the completion period shall be immediately prepared in consultation with Engineer-in-Charge and submitted to undersigned for scrutiny / approval, which will form part of agreement. You may also furnish the name of the Engineer and Supervisor deputed for the work.
13. Till such time this formal agreement is signed, this work order, together with the documents / correspondence referred to above shall form a binding contract between us.
14. You shall follow all safety rules and security procedure that are in vogue and applicable during execution of work.



15. Notwithstanding the above, in case of any further query / clarification required at a later stage for execution of the above work order, the decision of the Director, NBRC shall be final and binding on you.
16. All disputes are subjected to the jurisdiction of Gurgaon court only.
17. You are requested to acknowledge the receipt and confirm the acceptance of this work order within 7 days from the receipt of this work order.

Thanking you,

Yours faithfully,


(Sanjeev Choudhary)
Assistant Engineer (C)

Encl:

1. A copy of Schedule of Quantities for the work (Page 1 to 19) and Summary.

Copy to:

1. PS to Director for info
2. O/CAO for info
3. F&AO for info
4. Assistant Labour Commissioner cum Conciliation officer (Central), Flat S-1, Main Shopping Centre, NH-4, Faridabad, Ph. No.- 0129 - 2429788.
5. Income tax officer (Concerned), HSIDC building, Viniya Nikunj, Udyog Vihar, Ph-VI, Near Shankar Chowk, Gurgaon



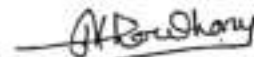
Name of Project : National Brain Research Centre at Manesar.

Name of work: Construction and development of external sewer, storm water drainage, water supply, garden irrigation and fire suppression works Phase-II of NBRC.

ABSTRACT

S.NO.	DESCRIPTION	AMOUNT
I	External Sewerage.	2,116,300.00
II	External Storm Water Drainage.	3,915,010.00
III	External Water Supply.	3,597,025.00
IV	Garden Irrigation System.	931,500.00
V	External Fire Suppresion Works.	7,662,550.00
GRAND TOTAL		18,222,385.00

(In words One crore eighty two lakh twenty two thousand three hundred eighty five only)





SCHEDULE OF QUANTITY					
S.NO.	DESCRIPTION	UNIT	QTY	RATE	Amount
1	External Sewerage				
1	Excavating trenches of required width for pipes, cables etc including excavation for socket and dressing of sides, ramming of bottoms depth upto 1.50 M open/close timbering including, shuttering, centering etc. as required getting out the excavated soil and then returning the soil as required in layers not exceeding 20 cm in depth including consolidating Each deposited layer by ramming, watering etc. and disposal of surplus excavated soil within 50 M load as directed by the Engineer-in-charge. All kind of soil				
a)	Pipes cables etc exceeding 80 mm dia but not exceeding 300 mm dia.	Metre	1,345	100.00	134,500.00
2	Extra for excavating trenches for pipes, cables etc. in all soils for depth exceeding 1.50 M but not exceeding 3.00 Metre. (Rate is extra over corresponding basic item for depth upto 1.5 M)				
a)	Pipes cables etc exceeding 80 mm dia but not exceeding 300 mm dia.	Metre	265	120.00	31,800.00
3	Extra for excavating trenches for pipes, cables etc. in all soils for depth exceeding 3.0 m but not exceeding 4.50 Metre. (Rate is extra over corresponding basic item for depth upto 1.5 M)				
a)	Pipes cables etc exceeding 80 mm dia but not exceeding 300 mm dia.	Metre	275	250.00	68,750.00
4	Earth work in excavation by mechanical means (Hydraulic excavation) / manual means over areas (exceeding 30 cm in depth, 1.5 M in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 2 KM and lift upto 1.5 M, disposed earth to be levelled and neatly dressed.				
a)	All kinds of soil.	Cum	390	110.00	42,900.00
b)	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating Each deposited layer by ramming and watering, lead upto 50 m and lift upto 1.5 M.	Cum	90	50.00	4,500.00
5	Cutting road and making good the same including supply of extra quantities of materials i.e. aggregate, moonum screening, red bajri, bitumin and labour required.				
a)	Bituminous portion	Cum	16	1,000.00	16,000.00
b)	Water bound macadam	Cum	16	500.00	8,000.00
6	Laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete. Also providing perfect make SW pipe				
a)	150 mm dia	Metre	770	50.00	38,500.00
b)	200 mm dia	Metre	200	65.00	13,000.00
c)	250 mm dia	Metre	375	80.00	30,000.00
7	Providing and laying non pressure NP2 class (light duty) R.C.C. Pipes S&S jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete.				
a)	150 mm dia	Metre	20	250.00	5,000.00
b)	250mm dia	Metre	15	400.00	6,000.00



S.NO.	DESCRIPTION	UNIT	QTY	RATE	Amount
c)	300 mm dia	Metre	40	600.00	24,000.00
8	Providing and laying 150 mm thick cement concrete 1:5:10 (1 cement: 5 coarse sand: 10 graded stone aggregate 40 mm nominal size) around S.W./R.C.C.Pipes including bed concrete as per standard design.				
a)	150 mm dia	Metre	300	400.00	120,000.00
b)	200 mm dia	Metre	80	500.00	40,000.00
c)	250 mm dia	Metre	210	550.00	115,500.00
9	Providing and laying cement concrete 1:5:10 (1 cement: 5 coarse sand: 10 graded stone aggregate 40 mm nominal size) upto haunches of SW/RCC pipes including 150 mm thick bed concrete as per standard design.				
a)	150 mm dia	Metre	470	260.00	122,200.00
b)	200 mm dia	Metre	120	300.00	36,000.00
c)	250 mm dia	Metre	165	330.00	54,450.00
10	Constructing brick masonry rectangular type manhole with FPS class designation 75 in cement mortar 1:4 (1 cement: 4 coarse sand) inside cement plastering 12 mm thick with cement mortar 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement, outside plastering 15 mm thick with cement mortar 1:3 (1 cement: 3 coarse sand), 200 mm thick foundation concrete 1:4:8 mix (1 cement: 4 coarse sand: 8 graded stone aggregate 40mm nominal size), R.C.C. top slab 150 mm thick with 1:2:4 mix and making necessary channels in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size), inside finished with a floating coat of neat cement as per standard design.				
a)	Inside size 90x80cm and 60cm deep with ISI marked precast reinforced cement concrete manhole cover and frame 450x600 mm internal dimensions (L.D. Rectangular)	Each	10	6,000.00	60,000.00
11	Extra over 600 mm initial depth for manhole with FPS bricks.				
a)	900 x 800 mm	Metre	5	3,000.00	15,000.00
12	Constructing brick masonry circular type manhole 0.91m internal dia at bottom and 0.56 m dia at top with FPS class designation 75 in cement mortar 1:4 (1 cement: 4 coarse sand), inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement: 3 coarse sand: 6 graded stone aggregate 40 mm nominal size), and making necessary channel in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, external plastering (1:4) all complete as per standard design.				
a)	0.91 m deep with S.F.R.C cover and frame (medium duty, HD-20 grade designation) 560 mm internal dia Metre conforming to I.S.12592, total weight of cover & Frame to be not less 182 kg fixed in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) including centering and shuttering all complete as per standard design	Each	30	5,500.00	165,000.00



S.NO.	DESCRIPTION	UNIT	QTY	RATE	Amount
13	Constructing brick masonry circular type manhole 1.22m internal dia at bottom and 0.56 m dia at top with FPS class designation 75 in cement mortar 1:4 (1 cement: 4 coarse sand), inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement: 3 coarse sand: 6 graded stone aggregate 40 mm nominal size), and making necessary channel in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, external plastering (1:4) all complete as per standard design. 1.68 m deep with S.F.R.C cover and frame (heavy duty, HD-10 grade designation) 560 mm internal diaMetre conforming to I.S.12592, fixed in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) including centering and shuttering all complete as per standard design With FPS bricks class designation 75	Each	12	9,500.00	114,000.00
14	Extra depth for circular type manhole 0.91 m internal dia (at bottom) with FPS bricks. Beyond 0.91 m to 1.67 M	Metre	12	2,500.00	30,000.00
15	Extra depth for circular type manhole 1.22 m internal dia (at bottom) with FPS bricks. Beyond 1.68 M to 2.29 M	Metre	6	3,000.00	18,000.00
16	Constructing brick masonry circular type manhole 1.52M internal dia at bottom and 0.56 m dia at top with FPS class designation 75 in cement mortar 1:4 (1cement:4 coarse sand), inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1cement: 3 coarse sand: 6 graded stone aggregate 40 mm nominal size), and making necessary channel in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, external plastering (1:4) all complete as per standard design.				
a)	2.3 m deep with S.F.R.C cover and frame (medium duty, MD-10 grade designation) 560 mm internal diaMetre conforming to I.S.12592, fixed in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) including centering and shuttering all complete as per standard design	Each	12	20,000.00	240,000.00
b)	4.18 M deep with S.F.R.C cover and frame (medium duty, MD-10 grade designation) 560 mm internal diaMetre conforming to I.S.12592, fixed in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) including centering and shuttering all complete as per standard design	Each	8	33,000.00	264,000.00
17	Extra depth for circular type manhole 1.52 M internal dia (at bottom) beyond 2.30 M with F.P.S Bricks	Metre	13	7,000.00	91,000.00
18	Extra depth for circular type manhole 1.52 M internal dia with FPS Bricks Beyond 4.18 m	Metre	10	10,000.00	100,000.00
19	Extra for providing S.F.R.C cover and frame Heavy duty grade HD-20, 560 mm circular instead of medium duty, MD-10 grade 560 mm circular, conforming to I.S.12592, fixed in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) including centering shuttering all complete.	Each	24	100.00	2,400.00



S.NO.	DESCRIPTION	UNIT	QTY	RATE	Amount
20	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS:10910 on 12 mm dia steel bar conforming to IS 1786 having minimum cross section as 23 mm x 25 mm and overall minimum length 263 mm and width as 165 mm with space between protruded legs having 2 mm tread on top surface by ribbing on chequering besides necessary and adequate anchoring projections on full length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacturer's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:2:4 (1 cement:2 coarse sand: 4 graded stone aggregate 20 mm nominal size) complete as per design.	Each	325	100.00	32,500.00
21	Providing drop connections with cast iron pipes (class LA) externally for 60 cms drop from branch sewer line to main sewer manholes including inspection and cleaning eye with chain & lid, cast iron drop pipe and bend encased around with cement concrete 1:5:10 (1 cement: 5 coarse sand:10 graded stone aggregate 40 mm nominal size) with all centering and shuttering required, cutting holes in walls and making good brick work with cement mortar 1:5 (1 cement: 5 coarse sand) on inside of the manhole wall, lead caulked joints between cast iron tee & S.W. pipes, making required channels as per standard drawings and specifications.				
a)	200 mm dia	Each	6	10,000.00	60,000.00
22	Making connection of sewer line with existing manhole including breaking into and making good the walls/floors with cement concrete 1:2:4 mix (1 cement:2 coarse sand: 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement and making necessary channels for sewer etc. complete:				
a)	For pipes 100 to 230 mm diameter	Each	10	250.00	2,500.00
b)	For pipes 250 to 300 mm diameter	Each	2	400.00	800.00
23	Constructing brick masonry Grease Trap of internal size 1800x900x600 mm effective depth (as per drawing) with one brick thick FPS class designation 75 in cement mortar 1:4 (1 cement : 4 fine sand), inlet and outlet drain connections, inside cement plastering 12 mm thick with cement mortar 1 :4 (1cement : 4 coarse sand) finished with a floating coat of neat cement, outside plastering 15 mm thick with cement mortar 1:4 (1cement : 4 coarse sand), finished with a floating coat of neat cement, having two stone/conc. baffled wall 45 cm deep and one wall 30 cm deep each minimum 40 cm thick 900 mm long or as required, embedded in brick masonry on either side, 200 mm thick foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size). Precast R.C.C. removable top slab 100 mm thick with 1:2:4 mix. and making necessary flooring in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size), including G.I.perforated tray with mesh and handles, necessary excavation, refilling and disposal of surplus earth upto 50 M. Complete as per drawing and directed by EIC.	Each	1	10,000.00	10,000.00
TOTAL C/F TO SUMMARY					2,116,300.00
Carried over to abstract					
Rupees Twenty one lakh sixteen thousand three hundred sixty only					

S.NO.	DESCRIPTION	UNIT	QTY	RATE	Amount
II	External Storm Water Drainage				
1	Excavating trenches of required width for pipes, cables etc including excavation for socket and dressing of sides, ramming of bottoms depth upto 1.50 M open/close timbering including shuttering, centering etc as required getting out the excavated soil and then returning the soil as required in layers not exceeding 20 cm in depth including consolidating each deposited layer by ramming, watering etc. and disposal of surplus excavated soil as directed by the project incharge within a lead of 50 M.				
	All kind of soil				
a)	Pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia.	Metre	1,500	100.00	150,000.00
b)	Pipes cables etc. exceeding 300 mm dia but not exceeding 600 mm dia.	Metre	205	150.00	30,750.00
2	Extra for excavating trenches for pipes, cables etc. in all soils for depth exceeding 1.5 M but not exceeding 3.00 Metre. (Rate is over corresponding basis item for depth upto 1.5 M)				
a)	Pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia.	Metre	150	100.00	15,000.00
b)	Pipes cables etc. exceeding 300 mm dia but not exceeding 600 mm dia.	Metre	75	150.00	11,250.00
3	Earth work in excavation by mechanical means (Hydraulic excavation) / manual means over areas (exceeding 30 cm in depth, 1.5 M in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50 M and lift upto 1.5 M, disposed earth to be levelled and neatly dressed. All kinds of soil.				
a)	Depth upto 1.5 M	Cum	145	100.00	14,500.00
b)	Depth exceeding 1.5 M but not exceeding 3.0 M	Cum	145	150.00	21,750.00
c)	Depth exceeding 3.0 M but not exceeding 4.5 M	Cum	145	300.00	43,500.00
4	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. layers not exceeding 20 cm in depth consolidating each deposited layer by ramming and watering, lead upto 50 M.	Cum	50	50.00	2,500.00
5	Providing and laying non pressure NP2 class (light duty) R.C.C. Pipes S&S jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete:				
a)	250 mm dia.	Metre	300	375.00	112,500.00
b)	300 mm dia.	Metre	1,200	500.00	600,000.00
c)	450 mm dia	Metre	180	950.00	171,000.00
d)	600 mm dia	Metre	25	1,200.00	30,000.00
6	Providing and laying cement concrete 1:5:10 (1 cement: 5 coarse sand: 10 graded stone aggregate 40 mm nominal size) around RCC pipes including bed concrete as per standard design.				
a)	250 mm dia.	Metre	300	550.00	165,000.00
b)	300 mm dia.	Metre	1,200	660.00	792,000.00
c)	450 mm dia	Metre	180	800.00	144,000.00
d)	600 mm dia	Metre	25	1,200.00	30,000.00



S.NO.	DESCRIPTION	UNIT	QTY	RATE	Amount
7	Constructing brick masonry rectangular type manhole with FPS class designation 75 in cement mortar 1:4 (1 cement : 4 coarse sand) inside cement plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, outside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size). R.C.C. top slab with 1:2:4 mix and making necessary channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size), inside finished with a floating coat of neat cement including as directed by Engineer-in-charge complete as per standard design.	Each	12	5,000.00	60,000.00
a)	A) Inside size 90x60cm and 60cm deep with ISI marked precast reinforced cement concrete manhole cover and frame 450x600 mm internal dimensions (L.D. Rectangular)				
8	Extra over 600 mm initial depth for manhole with FPS bricks.	Metre	10	2,800.00	28,000.00
a)	900 x 600 mm in brick masonry				
9	Constructing brick masonry rectangular type manhole with FPS class designation in cement mortar 1:4 (1 cement : 4 coarse sand) inside cement plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, outside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size). R.C.C. top slab with 1:2:4 mix and making necessary channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size), inside finished with a floating coat of neat cement including excavation, refilling and disposal of surplus earth as directed by Engineer-in-charge complete as per standard design.				
a)	Inside size 90x120cm and 90cm deep with S.F.R.C cover and frame (medium duty, MD-10 grade designation with/without holes) 600x600 mm square conforming to I.S.12592.	Each	26	9,000.00	234,000.00
b)	Extra over 900 mm initial depth for manhole with FPS bricks. 900 x 1200 mm	Metre	11	3,500.00	38,500.00
c)	Inside size 120x150cm and 167cm deep with S.F.R.C cover and frame (medium duty, MD-10 grade designation with/without holes) 600x600 mm square conforming to I.S.12592.	Each	15	22,000.00	330,000.00
d)	Extra over 1670 mm initial depth for manhole with FPS bricks. 1200x1500 mm	Metre	20	8,000.00	160,000.00
10	Constructing brick masonry circular type manhole 1.22m internal dia at bottom and 0.56 m dia at top with FPS class designation 75 in cement mortar 1:4 (1 cement : 4 coarse sand), inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size), and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, external plastering 1:4 all complete as per standard design.				
	1.68 m deep with S.F.R.C cover and frame (heavy duty, HD-10 grade designation) 560 mm internal diameter conforming to I.S.12592, fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including excavation, refilling centering shuttering and disposal of surplus earth.				
a)	With FPS bricks class designation 75	Each		9,000.00	27,000.00



S.NO.	DESCRIPTION	UNIT	QTY	RATE	Amount
b)	Extra depth for circular type manhole 1.22 M internal dia (at bottom) beyond 1.68 M to 2.29 M: With FPS bricks class designation 75.	Metre	3	3,000.00	9,000.00
11	Constructing brick masonry road gully chamber 600x600x600 mm with bricks of class designation 75 in cement mortar 1:5 (1 cement : 5 coarse sand), inside cement plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, outside plaster 12 mm thick in cement mortar 1:3 (1 cement : 3 coarse sand) 10 cm thick foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 80 graded stone aggregate 40mm nominal size) including S.F.R.C perforated cover and frame (medium duty, MD-10 grade designation) 600x600 mm square conforming to I.S.12592, fixed in 15cm thick cement concrete 1:2:4 (1 cement:2 coarse sand : 4 grade stone aggregate 20 mm nominal size) including excavation, refilling and disposal of surplus earth as directed by Project Manager complete as per standard design.	Each	35	2,400.00	84,000.00
12	Extra depth for road gully chambers 600x600 mm.	Metre	15	1,000.00	15,000.00
13	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS:10910 on 12 mm dia steel bar conforming to IS 1786 having minimum cross section as 23 mm x 25 mm and overall minimum length 263 mm and width as 165 mm with space between protruded legs having 2 mm tread on top surface by ribbing on chequering besides necessary and adequate anchoring projections on full length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacturer's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement:3 coarse sand: 6 graded stone aggregate 20 mm nominal size) complete as per design.	Each	108	120.00	12,960.00
14	Extra for providing S.F.R.C cover and frame Heavy duty grade HD-20, 600x600 instead of medium duty, MD-10 grade, conforming to I.S.12592, fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering shuttering all complete.	Each	45	500.00	22,500.00
15	Making connection of drain or line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement:2 coarse sand: 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement and making necessary channels for drain etc. complete:				
a)	For pipes 250 to 300 mm diaMetre	Each	12	400.00	4,800.00
b)	For pipes 350 to 450 mm diaMetre	Each	15	700.00	10,500.00
16	Cutting road and making good the same including supply of extra quantites of materials i.e. aggregate, moorum screening, red bajri and labour required.				
a)	Bituminous portion	Cum	20	1,500.00	30,000.00
b)	Water bound macadam	Cum	20	750.00	15,000.00



S.NO.	DESCRIPTION	UNIT	QTY	RATE	Amount
17	Constructing recharge pit size 4m dia x 3 m deep (effective depth below inlet) in brick masonry in cement mortar 1:6 (1 cement : 6 coarse sand), including necessary earth work in excavation in all kinds of soil, disposal of surplus excavated earth, malba within a lead of 2 km m, returning the earth in layers surrounding brick work/ pipes ramming and watering etc., laying 200 mm thick plain cement concrete 1:4:8 (1 cement: 4 coarse sand: 8 graded stone aggregate 40 mm nominal size) in base, 150 mm thick RCC top slab, RCC columns and beams in cement concrete 1:2:4 (1 cement 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) if required as per structural requirements, including steel work welded in built-up sections/framed work, cutting hoisting and fixing in position required for gratings, frames, guard bars, ladders, brackets etc. and applying a priming coat of approved steel primer with two or more coats of synthetic enamel paint. Boring 300 mm dia-1No. bore with calax machine or as required, including the cost of transportation of boring machine to site and taking back after completion of work, providing and fixing a) 160 O.D. uPVC pipe (Supreme/Finolex class 6 kg/sqcm) with fittings in bore well, b) 160 O.D. uPVC slotted (Supreme/Finolex class 6 kg/sqcm) with fittings in bore well, as per site conditions. Providing and fixing bail plug and well cap for 160 OD pipe, supplying and filling 500 mm thick round Boulders (50-200 mm size) in first layer, 500 mm thick Gravels (5-10 mm size) in second layer, 500 mm thick Sand/fine gravel (3 to 5 mm size), Pea gravel packing surrounding bore 3-6 mm size, 560 mm dia M.S. MH cover heavy duty fixing in top slab. Complete in all respects as per drawings enclosed.	No	5	100000	500,000.00
TOTAL C/F TO SUMMARY					3,915,010.00
Rupees <u>Thirty nine lakh fifteen thousand ten only</u>					Carried over to abstract



S.NO.	DESCRIPTION	UNIT	QTY	RATE	Amount
III	External Water Supply.				
1	Excavating trenches of required width for pipes, cables etc including excavation for socket and dressing of sides, ramming of bottoms depth upto 1.5 M open/close timbering including shuttering, centering etc. as required getting out the excavated soil and then returning the soil as required in layers not exceeding 20 cm in depth including consolidating each deposited layer by ramming, watering etc. and disposal of surplus excavated soil as directed within a lead of 50 M (all kinds of soil)				
a)	Pipes cables etc not exceeding 80 mm dia.	Metre	330	100.00	33,000.00
b)	Pipes cables etc for pipes 80 mm dia and above but not exceeding 300 mm dia.	Metre	1,309	100.00	130,900.00
2	Providing and laying S&S cast spun iron pipes conforming to IS: 1536 class LA including making tyton flexible joints fixing ruberr insertion as per manufacturer's recommendations including fixing all fittings e.g. bends, tees, reducers, blank flanges making tyton / 45 mm deep lead caulked joints and testing complete in all respects.				
a)	80 mm dia	Metre	253	1,400.00	354,200.00
b)	100 mm dia	Metre	600	1,550.00	930,000.00
c)	150 mm dia	Metre	456	2,800.00	1,276,800.00
3	Constructing masonry chamber 60x60x75 cms inside with 75 class designation brick work in cement mortar 1:5 (1 cement : 5 fine sand) for sluice valve with C.I. surface box 100 mm top dia 160 mm bottom dia and 180 mm deep (inside) with chained lid and R.C.C. top slab 1:2:4 mix (1 cement:2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 mix (1 cement : 5 fine sand and 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement :3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design. with FPS bricks	Each	24	5,000.00	120,000.00
4	Constructing masonry chamber 90x90x100 cms inside with 75 class designation brick work in cement mortar 1:5 (1 cement : 5 fine sand) for sluice valve with c.i. surface box 100 mm top dia 160 mm bottom dia and 180 mm deep (inside) with chained lid and R.C.C. top slab 1:2:4 mix (1 cement:2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 mix (1 cement : 5 fine sand and 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement and outside plaster finished rough complete as per standard design. With fps bricks.	Each	13	7,500.00	97,500.00
5	Providing and laying in position cement concrete for thrust block for pipe in trenches of 1:2:4 (1 cement : 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) excluding the cost of centring and shuttering.	Cum	5	4,000.00	20,000.00
6	Centering and shuttering including stutting, propping etc. and removal of form work for above item	Sqm	30	150.00	4,500.00
7	Providing and laying non pressure NP2 class (light duty) S&S R.C.C. pipes conforming to IS: 458-1971 jointed with stiff mixture of cement mortar in the proportion of 1:2(1 cement : 2 fine sand) including testing of joints etc. complete for enclosing water supply pipes under road crossings.		70	600.00	42,000.00



S.NO.	DESCRIPTION	UNIT	QTY	RATE	Amount
8	Making connection of G.I. distribution branch with G.I. Main of following size by providing and fixing tee, including cutting and threading the pipe etc. complete,				
a)	50 to 80 mm nominal bore	Each	10	700.00	7,000.00
b)	100 to 150 mm nominal bore	Each	10	2,500.00	25,000.00
9	Providing and fixing C.I. Sluice Valves (with cap) complete with bolts,nuts,rubber insertions etc.				
a)	80 mm dia	Each	3	13,000.00	39,000.00
b)	100 mm dia	Each	5	15,000.00	75,000.00
c)	150 mm dia	Each	5	20,000.00	100,000.00
10	Providing and fixing GI pipes heavy class complete with GI fittings viz. tees, elbow, bends, flanges, reducers etc. including cutting, screwing, trenching and refilling etc.				
a)	50 mm dia nominal bore	Metre	30	300.00	9,000.00
b)	65 mm dia nominal bore	Metre	155	400.00	62,000.00
c)	100 mm dia nominal bore	Metre	235	720.00	169,200.00
11	Painting GI pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality including warping two layer of polythene tape and holded with GI 16 SWG gauge wire				
a)	50 mm dia pipe	Metre	30	10.00	300.00
b)	65 mm dia pipe	Metre	105	10.00	1,050.00
c)	100 mm dia pipe	Metre	235	15.00	3,525.00
12	Providing and filling sand of grading zone V or coarser grade all round the GI pipes in external works				
a)	50 mm dia pipe	Metre	30	40.00	1,200.00
b)	65 mm dia pipe	Metre	105	50.00	5,250.00
c)	100 mm dia pipe	Metre	235	60.00	14,100.00
13	Providing and fixing gun metal gate valve with CI wheel of approved quality (screwed end):				
a)	50 mm nominal bore	Each	2	750.00	1,500.00
b)	65 mm nominal bore	Each	15	1,000.00	15,000.00
c)	100 mm nominal bore	Each	6	2,000.00	12,000.00
14	Providing and fixing gun metal non-return valve of approved quality (screwed end)				
a)	100 nominal bore	Each	1	3,000.00	3,000.00
15	Cutting road and making good the same including supply of extra quantites of materials i.e. aggregate,moorum screening,red bajri and labour required.				
a)	Bituminous portion	Cum	20	1,500.00	30,000.00
b)	Water bound macadam	Cum	20	750.00	15,000.00
TOTAL C/F TO SUMMARY					3,597,025.00
Rupees <u>Thirty five lakh ninety seven thousand twenty five only</u>					Carried over to Abstract



S.NO.	DESCRIPTION	UNIT	QTY	RATE	Amount
IV	Garden Irrigation System.				
1	Excavating trenches of required width for pipes, cables etc including excavation for socket and dressing of sides, ramming of bottoms depth upto 1.5 M open/close timbering including, shuttering, centering etc. as required getting out the excavated soil and then returning the soil as required in layers not exceeding 20 cm in depth including consolidating each deposited layer by ramming, watering etc. and disposal of surplus excavated soil as directed by the project incharge within a lead of 50 M. (all kinds of soil)				
a)	Pipes, cables etc. not exceeding 80 mm dia	Metre	2,200	100.00	220,000.00
b)	Pipes, cables etc. not exceeding 80 mm dia but not exceeding 300 mm dia	Metre	250	100.00	25,000.00
2	Providing, laying & jointing in position uPVC pipe conforming to IS:4985:1998 and suitable for the respective working pressures with all fittings and accessories e.g. couplings, tees, bends, reducers, screwed adapters, flanged tail pieces etc. jointing as per manufacturers' instruction.				
a)	PVC pipe 110mm-10 kg/cm ²	Metre	240	450.00	108,000.00
b)	PVC pipe 90mm-10 kg/cm ²	Metre	16	300.00	4,800.00
c)	PVC pipe 75mm-10 kg/cm ²	Metre	1,350	200.00	270,000.00
d)	PVC pipe 50mm-10 kg/cm ²	Metre	100	100.00	10,000.00
e)	PVC pipe 40mm-10 kg/cm ²	meter	300	60.00	18,000.00
f)	PVC pipe 32mm-10 kg/cm ²	Metre	420	40.00	16,800.00
3	Providing & fixing of self closing spring loaded quick coupling 25 mm hydrant made of brass & having self closing thermoplastic hinged lid. Make: Harvel.	Each	40	900.00	36,000.00
4	Providing & fixing of 25mm key for quick coupling hydrant made up of brass. Make: Harvel.	Each	8	750.00	6,000.00
5	Providing & fixing of brass Swivel Hose ELL 25x25 mm Make: Rain Bird, USA.	Each	8	750.00	6,000.00
6	Providing and fixing cast brass ball valves chrome plated ball inside and hard chrome plated ball PTFE (Teflon) seal and ring and chrome plated steel centre handle with female BSP threads. Make : Zoloto				
a)	32 mm dia nominal bore	Each	4	1,100.00	4,400.00
b)	40 mm dia nominal bore	Each	7	1,600.00	11,200.00
7	Slim seal (cast iron) Butterfly valves B 190 Class (PN1.6) complete with matching flanges rubber insertion, nuts, bolts and washer etc. of following sizes				
a)	50 mm dia nominal bore	Each	2	3,000.00	6,000.00
b)	75 mm dia nominal bore	Each	14	3,500.00	49,000.00
c)	90 mm dia nominal bore	Each	3	4,000.00	12,000.00
d)	110 mm dia nominal bore	Each	1	5,000.00	5,000.00
8	Providing & fixing of valve box with cover on all valves. The valve boxes shall be heavy duty plastic with poly vinyl chloride reinforce green top. Make: Rainbird, USA.				



S.NO.	DESCRIPTION	UNIT	QTY	RATE	Amount
a)	10" Round Valve Box	Each	11	1,200.00	13,200.00
b)	12" Round Valve Box	Each	20	2,000.00	40,000.00
9	Providing and laying in position cement concrete 1:2:4 (1 cement : 2 coarse sand; 4 graded stone aggregate 20 mm nominal size) in thrust block for pipes in trenches.	Cum	5	4,000.00	20,000.00
10	Centering and shuttering including strutting, propping etc. and removal of form work for				
a)	Foundations, Footings, bases for columns	Sqm	30	150.00	4,500.00
11	Cutting road and making good the same including supply of extra quantities of materials i.e. aggregate, moorum screening, red bajri and labour required.				
a)	Bituminous portion	Cum	20	1,500.00	30,000.00
b)	Water bound macadam	Cum	20	750.00	15,000.00
TOTAL C/F TO SUMMARY					931,500.00
Rupees <u>Nine lakh thirty one thousand five hundred only</u>					Carried over to Abstract



S.NO.	DESCRIPTION	UNIT	QTY	RATE	Amount
V	External Fire Suppression Work.				
1	Supply, Installation, Testing & Commissioning of: Single headed, Gun-metal ISI marked oblique pattern hydrant landing valve with 80 mm dia flanged inlet and 63 mm dia instantaneous type female outlet complete with gunmetal cap and G.I. chain, twist release type plug and all accessories as per IS:5290-1983 (Type 'A')	Each	23	9,000.00	207,000.00
2	Providing and placing in proper position Controlled Percolating (CP) Hose ISI marked (IS:8423) 63 mm dia x 15 m long complete with instantaneous type gunmetal 63 mm dia, ISI marked Male & Female couplings (IS:903) bound and riveted to hose pipe with copper rivets and 1.5 mm copper wire.	Each	46	8,800.00	404,800.00
3	Providing and placing in proper position Gun-metal 63mm dia short size branch pipes with 20 mm dia nozzles with 63mm instantaneous coupling ISI marked (IS: 903).	Each	23	2,000.00	46,000.00
4	Providing and fixing Gun-Metal Fire Brigade connection consisting of 63 mm dia instantaneous type male coupling with built-in check valves and 150 mm dia, flanged outlet complete with bolts, nuts and rubber insertions as required as per IS:904-1983.				
	Four Way	Each	1	20,000.00	20,000.00
5	Weather proof hose cabinets for yard hydrant fabricated from 16 g M.S. Sheet with full glass door and locking arrangement, suitable to accommodate one Hydrant valve, 2 nos.15 M long hose, 1 No branch pipe and one fireman's axe. The cabinet shall be painted with one coat of primer and finished stove enamelled "Fire Red", "Fire Hose" written on front including suitably mounted on a raised masonry/C.C. platform/ 50 X 50 X 6mm MS angle as required. (Approx 0.75mx0.6 mx 0.25 m). Complete in all respect as per drawing and instruction of EIC	Each	23	4,500.00	103,500.00
6	Gun-metal Fire Brigade Suction Hose coupling (Draw-out Connection) with nut for female coupling as per IS:902-1974 complete with 100 mm dia. G.I. Suction pipe and 100 mm dia. 1No. C.I. Foot valve flanged (to be connected to static water tank).	Each	1	18,000.00	18,000.00
7	M.S. cabinet (to enclose above. Draw-out/Fire brigade inlet connections) fabricated from 16 g sheet with full front glass door and locking arrangement duly painted with one coat of primer and two or more coats of synthetic enamel paint of approved make and shade and suitably mounted on a raised masonry/C.C platform as required (Approx.0.6 m x 0.6 M x 0.45 M).	Each	1	7,500.00	7,500.00
8	Supply, Installation, Testing & Commissioning of Mild Steel pipe (IS:1239 Part-I) heavy class including cutting, threading, welding etc. bends, elbows reducers, clamps, hangers etc. including cutting holes in brick or RCC walls/slabs and making good the same complete including the cost of structural work for supports fabricated from standard sections of required sizes and thickness e.g. galvanised M.S. rods, angles channels, slotted angle, etc., cutting to sizes, drilling welding fixing to insert plates, including painting with one coat of primer and two or more coats of synthetic enamel paint of approved make and shade including all steel work. Note : Pipes upto and 50 mm dia shall be threaded joints, above 50mm shall be welded joints.				
a)	250 mm dia	RM		3,500.00	35,000.00



S.NO.	DESCRIPTION	UNIT	QTY	RATE	Amount
b)	200 mm dia	RM	15	3,000.00	45,000.00
c)	150 mm dia	RM	25	2,400.00	60,000.00
d)	100 mm dia	RM	20	2,000.00	40,000.00
e)	80 mm dia	RM	23	1,200.00	27,600.00
f)	50 mm dia	RM	15	1,000.00	15,000.00
g)	25 mm dia	RM	5	350.00	1,750.00
9	Providing, laying, jointing and testing of Mild Steel black pipe (IS: 1239/IS: 3895) heavy class including cutting, screwing, welding etc. complete with fitting viz. tee, elbow, bends, flanges, reducers, etc including providing anti-corrosive treatment (coating and wrapping) with 4 mm thick tape and holiday test check as per IS: 10221 complete as required. Note : Pipes upto and 50 mm dia shall be threaded joints, above 50mm shall be welded joints.				
a)	150 mm dia	RM	1,330	2,200.00	2,926,000.00
b)	100 mm dia	RM	25	1,700.00	42,500.00
c)	80 mm dia	RM	261	1,200.00	313,200.00
10	Slim seal wafer type non-return valves (PN 1.6) complete with matching flanges, rubber insertion, nuts, bolts and washer etc. of following sizes.				
a)	150 mm dia	Each	3	10,000.00	30,000.00
b)	100 mm dia	Each	2	8,000.00	16,000.00
c)	80 mm dia	Each	1	5,000.00	5,000.00
11	Slim seal Butterfly valves B 160 Class (PN1.6) complete with matching flanges rubber insertion, nuts, bolts and washer etc. of following sizes				
a)	50 mm dia	Each	3	5,500.00	16,500.00
b)	80 mm dia	Each	24	6,700.00	160,800.00
c)	100 mm dia	Each	2	8,000.00	16,000.00
d)	150 mm dia	Each	10	8,500.00	85,000.00
e)	200 mm dia (gear operated)	Each	2	10,000.00	20,000.00
f)	250 mm dia (gear operated)	Each	2	14,000.00	28,000.00



S.NO.	DESCRIPTION	UNIT	QTY	RATE	Amount
12	Constructing masonry chamber 90x90x100 cms inside with 75 class designation brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve with C.I. surface box 100 mm top dia 160 mm bottom dia and 180 mm deep (inside) with chained lid and R.C.C. top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 mix (1 cement : 5 coarse sand and 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design with FPS bricks	Each	4	10,000.00	40,000.00
13	Excavating trenches of required width for pipes, cables etc. including excavation for sockets and dressing of sides, ramming of bottom depth upto 1.5 M including getting out the excavated soil rubble soling, sand filling upto 3" above the pipe and then returning the soil as required in layers not exceeding 20 cms in depth including filling jamuna sand around, consolidating each deposited layer by ramming, watering etc. and disposing of surplus excavated soil as directed, in All kinds of Soils				
a)	Pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia	Metre	1,616	100.00	161,600.00
14	Providing and laying cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of nominal size 40 mm in thrust blocks at bends, tees etc and also as support to vertical pipes of yard hydrants including excavation and refilling of earth work centering and shuttering for concrete complete in all respects.	Cum	5	4,000.00	20,000.00
15	Centering and shuttering including sturting, propping etc. and removal of form work for				
a)	Foundations, footings, bases for columns	Sqm	30	150.00	4,500.00
16	SUPPLY, INSTALLATION, TESTING. & COMMISSIONING OF: Electrical Motor Driven Fire Pumping set suitable for automatic operation consisting of the following as per the specifications. a) Horizontally mounted, centrifugal type single stage fire pump having cast iron body, bronze impeller, stainless steel shaft & capable of delivering 2850 LPM against a total head of 90 M complete with necessary 'Y' strainer on the suction side and pressure gauge with GM cocks on the delivery side including bypass arrangement (with 50 mm dia gunmetal valve and upto 5M G.I. Medium pipes) for periodical testing of the working of the pumping set. b) Squirrel cage induction motor totally enclosed fan cooled type suitable for 415 Volts + 10% - 15% , 3 phase, 50 HZ A.C. supply of suitable capacity (approximate 75 KW) for the above pump coupled with flexible coupling including earthing wire size 8 SWG, GI or as per relevant Indian Standard & specifications. c) Common bed plate for mounting Pump and Motor fabricated of Motor fabricated of suitable M.S. Channel as per manufacturer's recommendations. d) Suitable R.C.C. Pump-Foundations as per manufacturer's design and 4 nos. Dunlop (cushy foot) heavy duty Antivibration mounting pads.	Set	1	500,000.00	500,000.00
17	Diesel Engine Driven Fire Pumping set suitable for automatic operation consisting of the following as per specifications				



S.NO.	DESCRIPTION	UNIT	QTY	RATE	Amount
	a) Horizontally mounted, centrifugal type single stage/ multi-stage fire pump having cast iron body, bronze impeller, stainless steel shaft & capable of delivering 2850 lpm against a total head of 90 m complete with necessary 'Y' strainer on the suction side and pressure gauge with stop cocks etc. on the delivery side including bypass arrangement (with 50 mm dia G.M. stop valve and upto 5M G.I. stop valve and upto 5M G.I. Medium pipes) for periodical testing of the pumping set of the pumping set. b) Water cooled Diesel Engine suitable for developing at least 100 BHP at 1800 RPM) for above pump complete with automatic starting mechanism, batteries, automatic battery charger unit, flexible coupling with the pump, coupling with the pump, fuel tank, silencer, exhaust pipe & all standard accessories as required including earthing, mandatory spares and tool kit. c) Common bed plate for mounting Pump and Engine fabricated of suitable M.S.Channel as per manufacturer's recommendations. d) Suitable RCC Pump foundations as per manufacturer's design 8 Nos Dunlop Anti-vibration (cushy foot) heavy duty mounting pads.	Set	1	650,000.00	650,000.00
18	SUPPLY, INSTALLATION TESTING & COMMISSIONING OF:				
	a) Electrical Motor Driven Automatic pressurisation (Jockey) pumping set consisting of the following as per specifications. Horizontally mounted centrifugal type single/multi-stage fire pump for building pressure loss due to any leakage in the system and capable to deliver approx 180 or 280 LPM as per report against a total head of 90 M having cast iron body, bronze impeller, stainless steel shaft and complete with Pressure Gauge with stop G.M. Stop Valve etc. on the delivery side the delivery side including bypass arrangement (with 25 mm dia G.M. Stop Valve and upto 5 M G.I. Medium pipes) for periodical testing of the working of the pumping set. b) Squirrel cage induction motor totally enclosed fan cooled type suitable for 415 Volts + 10% - 15% 3 phase, 50 HZ A.C. supply of suitable capacity (approx.15 KW) for the above pump with synchronous speed of 1500/3000 RPM conforming to IS:325 & duly coupled with above pump coupled with flexible coupling including earthing wire size 8 SWG, GI or as per relevant Indian Standard and specifications. c) Common bed plate for mounting Pump and Motor fabricated of suitable M.S.Channel as per manufacturer's recommendations. d) Suitable RCC Pump foundations as per manufacturer's design 4 Nos Dunlop Anti-vibration (cushy foot) heavy duty mounting pads.	Set	1	140,000.00	140,000.00
19	Providing and fixing double flanged vertical air vessel fabricated shell from 8 mm thick & dished ends 10 mm thick M.S.plate, 450 mm dia and 2.0 M high, duly primed and painted with two coat of synthetic enamel paint, common for fire and jockey pumps complete with four pressure switches to operate jockey and main pumps at drop of pressure as given in the specifications.	Each	1	22,000.00	22,000.00
20	Providing and fixing dust and vermin proof cubicle type motor control centre fabricated from 14 g M.S. sheet with powder coat finish and comprising of:- For fire pumps a) One incoming main MCCB unit of 400 amps rating.				



S.NO.	DESCRIPTION	UNIT	QTY	RATE	Amount
	b) One fully insulated aluminium bus bar of 400 amp. Capacity in separate bus bar chamber.				
	c) Two MCCBs of 250 amps fuses for main electrical Fire pumps				
	d) one TP MCCB units fuses of 32 amps rating for 20 H.P jockey pump (fire).				
	e) One fully automatic star delta starters with push buttons and on/off indicating lights for fire pumps				
	f) One fully automatic star delta starters with push buttons and on/off indicating lights for jockey pumps				
	g) Two rotary type auto/ manual/off selector switches.				
	h) Two single phasing preventors of suitable rating one for each motor.				
	i) One 150 mm square panel type voltMetre reading 0-500 V with rotary selector switch for reading voltage between phases.				
	j) One 100 mm square panel type ampere Metre (size 96 sq mm) reading 0-400 amps for fire pumps				
	k) One 100 mm square panel type ampere Metre (size 96 sq mm) reading 0-100 amps for jockey/Diesel pumps.				
	l) Appropriate etched plastic identification plate for each starter/switch.				
	m) Current transformer for electric fire pump 400/5				
	n) Current transformer for jockey pump 100/5				
	o) Colour coded internal wiring from incoming main to bus bar, switchgear, starters, Metres indicating lamps complete in all respect.				
	(Note: The rating of all switchgear & fuses must match the HP of all pump motors offered).				
21	Alarm system for fire pumps comprising of audible hooter and red blinking lamp wired to pressure switch including cost of pressure switch mounted on air vessel complete in all respects.	Lot	1	600,000.00	600,000.00
		Each	1	8,000.00	8,000.00
22	Providing and fixing heavy duty XLPE insulated, aluminium conductor armoured cables 1100 V grade including necessary support clamps and connection and other accessories complete in all respects.				
a)	Power cable 3.5 core 240 sq mm aluminium conductor armoured cable	Metre	65	2,500.00	162,500.00
b)	Power cable 3 core 10 sq mm aluminium conductor armoured cable.	Metre	45	300.00	13,500.00
c)	Power cable 3 core 50 sq mm aluminium conductor armoured cable.	Metre	25	700.00	17,500.00
23	Providing and making cable end jointing of the following XLPE cables 1100 Volt grade including cost of crimping tinned copper heavy duty lugs, double compression glands, insulation tape and all requisite material for completion of joints etc. as required and as per instructions of EIC				
		Each	2	800.00	1,600.00
a)	3.5 X 240 sqmm	Each	4	100.00	400.00
b)	3 X 10 sqmm	Each	4	200.00	800.00
c)	3 X 50 sqmm				



S.NO.	DESCRIPTION	UNIT	QTY	RATE	Amount
24	Providing and fixing earthing 25mm x 6 mm tinned copper strip from earthing station to panel to be connected in an approved manner to the general earthing system (clamped to wall on spacer with suitable clamps saddles and fixing bolts/ in ground including the cost of digging and back filling with sand and brick protection as required and complete as per direction of EIC)	Metre	50	1,300.00	65,000.00
a)	Providing and fixing earthing 25mm x 3 mm tinned copper strip from earthing station to panel to be connected in an approved manner to the general earthing system (clamped to wall on spacer with suitable clamps saddles and fixing bolts/ in ground including the cost of digging and back filling with sand and brick protection as required and complete as per direction of EIC)	Metre	50	750.00	37,500.00
b)	Providing and fixing earthing 8 swg GI wire from earthing station to panel to be connected in an approved manner to the general earthing system (clamped to wall on spacer with suitable clamps saddles and fixing bolts/ in ground including the cost of digging and back filling with sand and brick protection as required and complete as per direction of EIC)	Metre	50	30.00	1,500.00
25	Providing and making earthing station for pumps and M.C.C. panel including the cost of 600 mm X 600 mm X 3.15 thick tinned copper plate electrodes, 50 mm dia MS/GI pipe, CI funnel with wiremesh charcoal, salt, all earth work, masonry enclosure with 10 mm thick MS chequered plate cover having locking arrangement and watering pipe etc. complete as per direction of EIC.	Each	3	12,000.00	36,000.00
26	Providing and fixing 250 mm dia M.S. plate 8 mm thick rolled and welded pipe suction header with three inlets of two Nos. 250 mm dia and one No. 150 mm dia, 8 mm thick rolled and welded pipe and three outlets of 150 mm dia, and one outlet of 100 mm dia (air vessel), all outlets and ends with flanged connections blank flanges, painting with one coat of zinc chromate primer and two or more coats of synthetic enamel paint to give an even shade, All outlets and inlets to be provided with M.S. flanges, the cost of which shall be included in the rate of header. as required common for fire hydrant systems.	Job	6	34,000.00	204,000.00
27	Providing and fixing 200 mm dia delivery header fabricated from 8 mm thick M.S. plate rolled and welded, with two inlets of 150 mm dia, one inlet of 80 mm dia, one outlets of 150 mm dia including painting with one coat of zinc chromate primer and two or more coats of synthetic enamel paint to give an even shade, All outlets and inlets to be provided with M.S. flanges, the cost of which shall be included in the rate of delivery header.	Job	1	28,000.00	28,000.00
28	Providing and fixing resilient rubber neoprene lined single arch vibration eliminators suitable for raw water upto 45 deg C. temperature working pressure 7 kg and test pressure 14 kg per square centimetre				
a)	80 mm dia	Each	1	500.00	500.00
b)	100 mm dia	Each	1	1,000.00	1,000.00
c)	150 mm dia	Each	5	2,000.00	10,000.00
d)	200 mm dia	Each	2	3,000.00	6,000.00

S.NO.	DESCRIPTION	UNIT	QTY	RATE	Amount
29	Fabricating & installing following size of perforated M.S. cable tray on ceiling /wall including horizontal and vertical bends, reducers, tees, cross members and other accessories as required and duly suspended from the ceiling with M.S. suspenders and including painting with powder coating etc. as required.				
a)	300 mm width x 50 mm depth x 1.6 mm thickness	Metre	35	1,000.00	35,000.00
c)	150 mm width x 50 mm depth x 1.6 mm thickness	Metre	30	700.00	21,000.00
30	Providing and fixing cast brass ball valves chrome plated ball inside and hard chrome plated ball PTFE (Teflon) seal and ring and chrome plated steel centre handle with female BSP threads.				
a)	20 mm dia	Each	5	900.00	4,500.00
b)	25 mm dia	Each	5	1,000.00	5,000.00
31	Providing and fixing C.I. Y type suction strainer with gunmetal or brass internal parts installed outside water tanks with flanged connection and insertion gasket etc.				
	250 mm dia	Each	2	12,500.00	25,000.00
32	Dismantling of existing connection between M.S. branch lines and existing water lines and jointing to proposed 150/100 mm dia M.S. fire ring main and making good the same, including the cost of excavation and refilling etc. complete in all respects				
a)	150 mm dia	Each	8	10,000.00	80,000.00
b)	100 mm dia	Each	2	8,000.00	16,000.00
33	Cutting hole upto 15X15 cm in RCC floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing complete so as to make it leak proof.	Each	2	500.00	1,000.00
34	Supply and laying of the following RCC hume pipe including excavation, refilling as required for cable entry complete as per instructions of EIC				
a)	200 mm dia	Metre	20	400.00	8,000.00
35	Cutting road and making good the same including supply of extra quantities of materials i.e. aggregate, moorum screening, red bajri and labour required.				
a)	Bituminous portion	Cum	20	1,500.00	30,000.00
b)	Water bound macadam	Cum	20	750.00	15,000.00
Total C/F to summary					7,662,550.00
Carried over to Abstract					
Rupees Seventy six lakh sixty two thousand five hundred fifty only					

