

भवन एवं निर्माण कार्य समिति
की उन्नीसवीं बैठक का कार्यवृत्त

**MINUTES OF THE
19TH MEETING OF THE
BUILDING & WORKS COMMITTEE**

13TH JULY 2007



भारतीय प्रौद्योगिकी संस्थान रुड़की
रुड़की – 247 667 (भारत)
**INDIAN INSTITUTE OF TECHNOLOGY ROORKEE
ROORKEE - 247 667 (INDIA)**

T

T

T

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

ROORKEE 247 667



INDEX

Item No.	Particulars	Page(s)
19.1.0	To confirm the minutes of the 16 th meeting held on 25 th January 2007 and 17 th & 18 th meetings (all urgent meetings) held on 1 st March 2007 and 12 th April 2007, respectively.	1
19.2.0	To receive a report on the actions taken to implement the decisions taken by the Building and Works Committee in its 16 th meeting held on 25 th January 2007 and 17 th & 18 th meetings (all urgent meetings) held on 1 st March 2007 and 12 th April 2007, respectively.	2
19.3.0	ITEMS FOR CONSIDERATION	
19.3.1	To consider the Master Plan of the Saharanpur Campus of the Institute.	2
19.3.2	To consider the Preliminary estimates for the under-mentioned works: (a) Extension of Malviya Bhawan Mess at DPT Saharanpur Campus. (b) Renovation of Auditorium at DPT Saharanpur Campus (Providing powder coated Galvalume sheets on roof and perforated Galvanised Steel False Ceiling).	2
19.3.3	To consider the Preliminary estimates for the under-mentioned works: (a) Extension of M.R. Chopra Bhawan, IIT Roorkee (b) Extension of Building of Institute Instrumentation Centre (IIC).	3
19.3.4	To consider the Estimates for the proposed construction works to be carried out in the Institute Campus due to expected increase in intake of the students and normal plan activities.	4

App. 'A'	Master Plan of Saharanpur Campus	5
App 'B'	Prelinianry estimate of UPRNN for extension of Mess Work at DPT Saharanpur.	7
App. 'C'	Preliminary estimate of Lloyd Insulations (India) Ltd. for renovation of Auditorium of DPT Saharanpur Campus	11
App. 'D'	Prelininary estimate of UPRNN for construction of 12 Nos suites in MR Chopra Bhawan	15
App. 'E'	Preliminary estimate of UPRNN for extension of Institue Instrumentation Centre.	16
App'. 'F'	Prelinary estimate of NBCC for constsruction of various works at IIT Roorkee.	20
App. 'G'	Prelinary estimate of UPRNN for construction of varios works at IIT Roorkee.	43

MEETING SECTION
INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE
ROORKEE - 247 667

Minutes of the 19th Meeting of the Building & Works Committee held on 13th July 2007 at 3.00 P.M. in the Board Room of the Institute.

The following were present:

- | | |
|---|---------------------|
| 1. Prof. S.C. Saxena, Director | - Chairman |
| 2. Prof. H.K. Verma, Dy. Director | - Member |
| 3. Prof. V.K. Gupta, Chairman, E&W | - Member |
| 4. Er. Naresh Kumar, Dy. G.M., UPCL, Roorkee | - Member |
| 5. Prof. P.K. Jain, Mechanical & Indl. Engineering Deptt. | - Member |
| 6. Prof. H.O. Gupta, Electrical Engineering Department | - Member |
| 7. Er. Salek Chand, Institute Engineer | - Member |
| 8. Prof. Surendra Kumar, Dean, Finance & Planning | - Permanent Invitee |
| 9. Prof. S.Y. Kulkarni, Arch. & Planning Department | - Special Invitee |
| 10. Lt. Col. (Retd) A.K.Srivastava, Registrar | - Member Secretary |

A communication was received from Er. O.P. Bhatia, Chief Engineer, CPWD, Lucknow for not attending the meeting:

The Chairman, Building & Works Committee (B&WC), welcomed the members to the 19th Meeting of the Committee.

Deliberations:

All the items of the Agenda were discussed and the deliberations/ recommendations are summarized as under:

Item No. 19.1.0: To confirm the minutes of the 16th meeting held on 25th January 2007 and 17th & 18th meetings (all urgent meetings) held on 1st March 2007 and 12th April 2007, respectively.

Having received no comments, the minutes of the above meetings as recorded and circulated, were confirmed.

Item No.19.2.0: To receive a report on the actions taken to implement the decisions taken by the Building and Works Committee in its 16th meeting held on 25th January 2007 and 17th & 18th meetings (all urgent meetings) held on 1st March 2007 and 12th April 2007, respectively.

Actions taken on the minutes of the above meetings, as given on pages 2-8 of the agenda were noted.

Item No.19.3.1: To consider the Master Plan of the Saharanpur Campus of the Institute.

At the outset, Prof. S.Y. Kulkarni, Head, Department of Architecture & Planning and member of the committee constituted to prepare the Master Plan of the Saharanpur Campus made a detailed presentation before the Building & Works Committee of the Master Plan of the Saharanpur Campus. After discussion, the Committee decided that the Master Plan of the Saharanpur Campus as given at **Appendix 'A'** be accepted, and the same be placed before the Board of Governors for approval.

Item No.19.3.2: To consider the Preliminary estimates for the under-mentioned works:

- (a) Extension of Malviya Bhawan Mess at DPT Saharanpur Campus.**
- (b) Renovation of Auditorium at DPT Saharanpur Campus (Providing powder coated Galvalume sheets on roof and perforated Galvanised Steel False Ceiling).**

After discussion, the Committee decided that the Preliminary estimates for the under-mentioned construction works be accepted. The same be placed before the FC/BOG for according administrative approval and expenditure sanction. The detailed preliminary estimates are given at **Appendices 'B' & 'C'** respectively.

Sl. No.	Works	Name of the agencies	Estimated Cost (Rs. in Lacs)
1.	Extension of Malviya Bhawan Mess at DPT Saharanpur Campus.	U.P. Rajkiya Nirman Nigam	46.00
2.	Renovation of Auditorium at DPT Saharanpur Campus (Providing powder coated Galvalume sheets on roof and perforated Galvanised Steel False Ceiling, as per the rates quoted by M/S Lloyed Insulations (India) Limited, for the renovation of the SWP Hangar at the Roorkee Campus.	Lloyd Insulations (India) Limited	17.11

Item No.19.3.3: To consider the Preliminary estimates for the under-mentioned works:

- (a) Extension of M.R. Chopra Bhawan, IIT Roorkee**
- (b) Extension of Building of Institute Instrumentation Centre (IIC).**

After discussion, the Committee decided that the Preliminary estimates for the under-mentioned construction works be accepted. The same be placed before the FC/BOG for according administrative approval and expenditure sanction. The detailed preliminary estimates are given at **Appendices 'D' & 'E'** respectively.

Sl. No.	Works	Name of the agencies	Estimated Cost (Rs. in Lacs)
1.	Extension of M.R. Chopra Bhawan, IIT Roorkee	U.P. Rajkiya Nirman Nigam	10.14
2.	Extension of Building of Institute Instrumentation Centre (IIC)	U.P. Rajkiya Nirman Nigam	29.89

Item No.19.3.4: To consider the Estimates for the proposed construction works to be carried out in the Institute Campus due to expected increase in intake of the students and normal plan activities.

After discussion, the Committee decided that the Preliminary estimates for the under-mentioned construction works be accepted. The same be placed before the FC/BOG for according administrative approval and expenditure sanction. The detailed preliminary estimates as submitted by National Building Construction Corporation Ltd., and U.P.Rajkiya Nirman Nigam are given at **Appendices 'F' & 'G'** respectively.

Sl. No.	Works	Name of the agencies	Estimated Cost (Rs. in Lacs)
1.	New Multistoried Boys Hostel (Seats 650) Near AHEC	National Building Construction Corporation Ltd.	2576.00
2.	Multistoried 'A' category residences in Civil Lines (56 Nos.)	National Building Construction Corporation Ltd.	1466.00
3.	Multistoried Building for Biotechnology Department/Other Centres, etc.	National Building Construction Corporation Ltd.	1872.00
4.	Lecture Hall Complex behind Department of Management Studies & New Library Building	National Building Construction Corporation Ltd.	1341.00
5.	Extension of Cautley Bhawan Hostel (Double Seated 72 Rooms).	U.P. Rajkiya Nirman Nigam	217.05
6.	Extension of Jawahar Bhawan Hostel (Single Seated 94 Rooms)	U.P. Rajkiya Nirman Nigam	182.33
7.	Extension of M.R.Chopra Bhawan and Azad Wing (Suites 48).	U.P. Rajkiya Nirman Nigam	232.88
8.	Extension of Ghananand Pandey Hostel (Suites 80).	U.P. Rajkiya Nirman Nigam	397.87
9.	'C' Category Residences (64 Nos.)	U.P. Rajkiya Nirman Nigam	498.60
10.	'D' Category Residences (80 Nos.)	U.P. Rajkiya Nirman Nigam	297.08
11.	Extension of Continuing Education Guest House	U.P. Rajkiya Nirman Nigam	147.75
12.	Extension of Continuing Education Office.	U.P. Rajkiya Nirman Nigam	28.87
13.	Construction of Covering of open drains.	U.P. Rajkiya Nirman Nigam	95.39
14.	Extension of AHEC Building	U.P. Rajkiya Nirman Nigam	56.18

The meeting ended with a vote of thanks to the Chair.

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

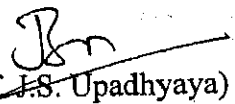
ROORKEE – 247 667

A Committee for preparing the Master Plan of Saharanpur Campus was constituted vide Notification No. 179/SC/IITR/Dean/ dated 13.10.2006. The Committee consisted of the following:

- | | |
|------------------------|----------|
| 1. Prof. J.S.Saini | Chairman |
| 2. Prof. I.M.Mishra | Convener |
| 3. Prof. S.Y.Kuklarni | Member |
| 4. Institute Architech | Member |
| 5. Prof. V.K.Gupta, | Member |
| 6. Institute Engineer | Member |

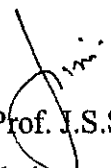
The Committee met several times, visited the Saharanpur Campus, discussed the matter with faculty members and prepared the Maser Plan. Thereafter, the Master Plan was discussed with the Director who made some suggestions for consideration of the Committee. The Committee considered these suggestions and incorporated in the Master Plan. The Master Plan has been prepared by incorporating the requirements of the Campus for the next 10 years and yet keeping enough green space in the Campus. The Committee thanks the staff of Saharanpur Campus for their cooperation and useful suggestions. The Committee notes that Prof. S.Y.Kulkarni and Dr. P.S.Chani, the Institute Architect made special efforts in visiting the Campus several times and worked very hard in finalizing the plan


(Institute Engineer)


(Prof. J.S. Upadhyaya)


(Prof. V.K. Gupta)


(Prof. I.M. Mishra)


(Prof. J.S. Saini)
Chairman.

SAHARANPUR CAMPUS IIT ROORKEE

OVERVIEW OF UPGRADED FACILITIES ACCORDING TO THE REVISED MASTER PLAN

- Teaching and Administration expanded with the proposed addition of another Block (G+5)
- An additional Technology Block provided (G+5)
- Existing library be converted in to an Academic Block - for Workshops, seminars and exams, etc.
- New library is proposed
- New Girls' Hostel for about 250 students is proposed (G+7)
- New Boys' Hostel for about 750 students is proposed (G+7)
- Sports Complex including swimming pool is proposed
- Open Air Theatre provided
- Development of a Faculty Home Complex (Guest House Facilities)
- Provision of an Engineering Complex (for infrastructural maintenance, etc.,)
- Existing students' hostel to be used for 'Married Students' Accommodation
- Provision of a Faculty Club
- Expansion of existing Academic block (Labs + Work shop) [G+1 to be expanded to G+2 subject to suitability of foundation]
- Expansion of Faculty Apartments & Staff quarters [G+1 to be expanded to G+2 subject to suitability of foundation]
- New Multistoried Faculty Apartments Complex (G+7)
- Provision of a Shopping Complex
- Expansion of the existing Dispensary (G+2)



Appendix - B
Item No. B&WC/19.3.2

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

U.P.R.N.N LTD MUZAFFAR NAGAR UNIT MUZAFFAR NAGAR (U.P)

NAME OF WORK:-Construction of Extension of Mess work at I.P.T
Saharanpur in Distt Saharanpur (U.P)

COST OF ESTIMATE :- Rs 46.00 Lacs only

CAMP OFFICE:-

U. P. R. N. N. Ltd
I.I.T ROORKEE ,
GANGA BHAWAN HOSTEL CAMPUS
ROORKEE (HARIDWAR)
Mobile Phone : + 91 9412231966

G.M Office:-

U.P Rajkiya Nirman Nigam Ltd
1st Floor E-34 Neheru Colony
Deharudun (U.A)

Head office :-

U.P Rajkiya Nirman Nigam Ltd
Vishwarya Bhawan Vibhuti Khand
Gomati Nagar Lucknow (U.P)

U.P Rajkiya Nirman Nigam Ltd Muzaffar nagar unit Muzaffar nagar (U.P)

Name of work :--- Construction of extension of Mess at I.P.T (D.P.D) Saharanpur

Plinth area rate

.(A) Ground Floor Plinth area 8519.70. Per squaremetre

(B) First floor Plinth area 8519.70 Per square metre

A.R.E
U.P.R.N.N.Ltd

Unit In charge
U.P.R.N.N.Ltd

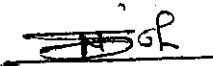
U.P Rajkiya Nirman Nigam Ltd Muzaffar nagar unit Muzaffar nagar (U.P)

Name of work :--- Construction of extension of Mess at I.P.T (D.P.D) Saharanpur

Plinth area Measurement

(A) Ground Floor Plinth area 252.00 M²

(B) First floor Plinth area 288.00 M²


A.R.E
U.P.R.N.N.Ltd


Unit In charge
U.P.R.N.N.Ltd

U.P Rajkiya Nirman Nigam Ltd Muzaffar nagar unit Muzaffar nagar (U.P)

Name of work :--- Construction of extension of Mess at I.P.T (D.P.D) Saharanpur

ABSTRACT OF COST

S.No.	Particular of item	Plinth area	Rate	Amount
(A)	Ground Floor Plinth area	252.00.M ²	Rs 8519.70	Rs 21,46,964.40
(B)	First floor Plinth area	288.00 M ²	Rs 8519.70	Rs 24,53,673.60

Rs 46,00,638.00

Say Rs 46.00 Lacs only

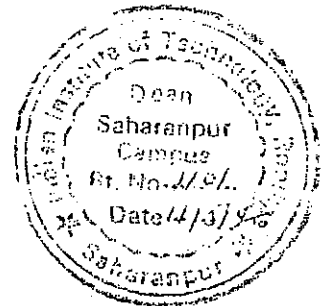

A.R.E
U.P.R.N.N.Ltd


Unit In charge
U.P.R.N.N.Ltd

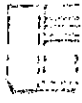
PALKAJI INDUSTRIAL PVT. LIMITED
1007 BUA LANE PHOENIX - CHENNAI, INDIA
CHENNAI - 600 089
TEL : 88662221, 88662222
C.A. R. Srinivasan, Director, ID, Palakaji Industrial

May 11, 2007

Dear Sir,



Page No.



TERMS OF PAYMENT:

- 20% advance along with the order.
- 70% against proforma invoice before dispatch of material.
- Balance 10% against progressive R.A. Bills.

FORCE MAJEURE:

Delivery/completion is subject to standard force majeure clause as applicable in the country.

PRICE ESCALATION:

Our offer is based on the present day of rates of raw-materials, labour, taxes, transportation and duties etc. Any increase in any of these items affecting our prices shall be to your account.

FACILITIES:

As discussed, you shall provide us the following facilities free of cost at site:

1. Covered storage space for storing our materials / equipment to be provided by you near the main hall.
2. Water, Electricity and other normal facilities for executing the job.
3. Lodging and boarding facilities for our Engineers and Workers.
4. Moveable crane facilities and erected scaffolding / temporary mounted platform as required at site.
5. Erected scaffolding material will be provided by you free of cost at site.
6. Any balance material including scrap, empty drums etc. shall be our property and you will issue gate pass of the same so that after completion of the work it can be taken out.
7. Necessary work permit, traveling / local transportation facility for our Engineers, Supervisors & labours from place of stay to site and back.

We trust, you will find the above in line with your requirement and now look forward to the pleasure of receiving your valued order. However, if you require any further information/clarifications, please feel free to get in touch with us.

Please note for any type of discussions/finalization of work order, please contact undersigned directly.

Thanking you,

Yours faithfully,

for HLOYD INSULATIONS (INDIA) LTD.

(SINHA KENHOTRI)

SR. MANAGER (CS)

MOBILE : 09313952173

011-30062823/30062827 (O)

email - vk.arya@hloydinsulation.com

BID OF QUANTITY

Subject : Renovation of existing Auditorium at IIT-Saharanpur.

S.No.	Item Description	Approx. Qty.	Unit	Rate (Rs./sqm)	Amount (Rs.)
1	Removal of existing CGI sheets from the top and false ceiling, wooden rafter and vertical suspenders etc. from inside with nuts, bolts complete including all V.B.P etc. required for proper completion of work and also stacking of CGI sheets in central store IIT @ including its cartage etc. (only CGI sheets area before dismantling will be measured)	700	Sqm	150.00 106.00	14000.00 74200.00
2	Supply and erection of 0.5mm TCT (total coated thickness) Lloyddeck profile crimp curved colour coated, Galvalume steel sheets for roofing. The Lloyddeck hi-rib crimp curved profile sheet will have a cover width of 950 - 1000mm profile depth 28-30mm at 195-200 mm pitch and additional 2 small ribs between 2 profile depth. The Lloyddeck profile Galvalume crimp curved sheets will be provided in required colour coating over backed painted system. The Lloyddeck profile Galvalume crimp curved sheet shall be factory cut and supplied in required length to suit of site requirement and fixed to the existing roof purlins with polymer coating Galvanized hex-head self drilling screws with integral washer and EPDM-seal. All tools & tackles required for execution of work will be engaged by the Contractor including the cost of any welding, drilling, riveting etc. required in existing terms of the etc. will be done by the contractor.	700	Sqm	1060.00 885.00	742000.00 619500.00
3	Manufacturing, supply and installation of 0.6mm TCT Lloyddeck-crimp curved perforated colour coated Galvalumised steel false ceiling sheets with light V-grooves provided at 70-75mm available in a covered width of 1200 mm and in required length as per site requirement. The Lloyd crimp curved false ceiling sheets will have a colour coated over backed painted system. The false ceiling	700	Sqm	1325.00 1325.00	1027500.00 927500.00

	Roofs shall be done in the above profile form and the roof shall be done to be covered extra as no water leakage is provided below the existing roof from inside the building with bearing ceiling galvanised box beam with drilling screws with integral washer and EPDM seals complete including supply and installation of 100mm thick rockwool density Rocklooy Rockwool Slabs wrapped in polythin sheet placed over false ceiling sheet and kept in position with the help of GI wire right crossway.			
4	Mild steel or iron work in heavy sizes such as trusses built up gates, door frames, record racks, roof work, gate grill etc. wrought to be required from 1/2" drilling holes, 1/2" drilling holes, 1/2" drilling holes necessary and also 1/2" supply of steel bolts, nuts, washers etc. and their fixing required for proper completion of work.	10	Qils	11,200.00
		As Per Tender Rates of S.W.P Haryana		8900.00
				89,000.00
5	Supply & installation of electrical light fitting with conducting, fan, 1 no. panel complete		(Lumpsum)	1500000.00
6	Supply & installation of audio - speaker amplifier system complete.		(Lumpsum)	2000000.00
7	Supply & installation of bore fire fighting cylinder system complete.		(Lumpsum)	1500000.00
			TOTAL	7067000.00

For **ROTE INSULATIONS (INDIA) LTD.,**

The estimates cost for item no. 1, 2, 3 and 4

Total Rs. 17,10,200 = 00

Say Rs. 17.11 Lacs

[Signature]

Instant

Withhold in cash

PA 10-00100 / 2007 / 11 / 100

PA 10-00100 / 2007 / 11 / 100

PA 10-00100 / 2007 / 11 / 100

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

(राज्य सरकार का उपक्रम)
(ISO 9001:2000 CERTIFIED)



मुख्यालय,
आर आई ओ टी परिसर,
गंगा भवन होस्टल,
रूड़की, (हरिद्वार)

कार्यालय इकाई प्रभारी
87/26 उत्तरी सिविल लाइन
रोडवेज बस स्टैंड के सामने,
मुजफ्फरनगर

त्र. क्र. 145 (P.N.N.) 07

दिनांक 11.7.07

NAME OF WORK: CONSTRUCTION 12 NOS SUITES & CONNECTING
CORRIDOR IN M.R. CHOPRA BHAWAN, I. I. T.
ROORKEE.

1) Cost of 12 (9 Nos) Suites already sanctioned Rs:	3041829.00
Cost of one Suit.	Rs: 337981.00
Cost of 12 Nos Suites.	Rs: 4055772.00
Less: (-) Cost of 9 Nos Suites.	Rs: 3041829.00
Extra Cost of 3 Suites payable of Rs:	Rs: 1013943.00
	LACS.

Say Rs 10.14 lacs

Amr
UNIT INCHARGE
U.P.R.N.N. LTD.
ROORKEE.

14



Appendix -E
Item No. B&WC/19.3.3

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED
Muzaffar- Nagar Unit Muzaffar- Nagar (U.P)

NAME OF WORK:- EX TENTION OF USIC- DEPTT.

COST OF ESTIMATE:- Rs. 29.89 Lacs

NAME OF UNIT:-----

U.P.R.N.N. Ltd
CAMP OFFICE GANGA BHAWAN HOSTEL BLOCK
I.I.T ROORKEE DISTT HARIDWAR (U.A)
Mobile Phone : + 919412231966

अंचल कार्यालय
उत्तराखण्ड
उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड
प्रथम तल ई 34ए नेहरू कालोनी
देहरादून 218001
First Floor 2668139 कार्यालय
E- 34 NEHRU COLONY 2628139(O)
DEHRADUN/ 218001

मुख्यालय:
उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड
विश्वेश्वरय्या भवन
विभूती खण्ड
गोमती नगर, लखनऊ
फैक्स: 0522,239258

ANALYSIS OF RATES.

(1)	Basic plinth area rates for framed structure Buildings up to 6storeys.	Rs.	5376.00 (A)
(2)	Add. For Earth quake resistance.	Rs.	325.00
(3)	Add. For Internal water supply & Sanitary Work @ 15% of (A).	Rs.	806.40
(4)	Add. For External water supply and Sanitary Work @ 5% of (A).	Rs.	268.80
(5)	Add. For Power wiring @4% of (A).	Rs.	215.00
(6)	Add. For Extra ceiling height above 2,90Mtr.	Rs.	252.00
(7)	Add. For brick coba treatment @0.5% of (A)	Rs.	266.90
(8)	Add. For contingency @ 2%	Rs.	107.50
(9)	Add. For Internal Electrification @12. 5% of (A)	Rs.	672.00

Total Rs:-

8043.50

LESS: 5% Due to RNN working.

(-)

Rs. 402.50

Rs. 7641.00

ADD. CENTAGE CHARGES OF UP RNN: 11.5%

Rs. 878.70

Total Rs. 8519.70 p. m²

(w)
ARE

Unit PM
UP R. N. N.
Ganga Bhawan
I.I.T., Roorkee

NAME OF WORK- EXTENTION OF USIC DEPTT

DETAIL OF MEASUREMENTS

Second Floor	=	12.62 X 27.33	=	344.90 m ²
Stair Projection	=	3.35 X 1.80	=	6.03 m ²
		Total	=	350.93 m²
				<u>351</u> ARE

NAME OF WORK- EXTENTION OF USIC DEPTT

Abstract of cost

Cost of Building = 350.93 m² X 8519/ m² = Rs. 2989572.60
Say Rs. 29.89 Lacs


ARE


U.P. R. N. N.
Ganga Bhawan
I.I.T., Roorkee

Appendix - F
Item No. B&WC/19.3.4

ADDITIONAL BUILDING WORKS AT IIT ROORKEE

Preliminary Cost Estimate Based on CPWD PAR 1992

GENERAL ABSTRACT OF COST

	DESCRIPTION	AMOUNT IN RUPEES
1	BOYS' HOSTEL	234,180,416.30
2	STAFF ACCOMMODATION	133,301,592.86
3	BIO - TECHNOLOGY DEPARTMENT	170,251,861.12
4	LECTURE THEATRE COMPLEX	121,860,299.36
	TOTAL	659,594,169.65
	GRAND TOTAL	659,594,169.65

SAY Rs. 66.00 Cr.
(Rupees Sixty Six Crores only)

10% NBCC's Agency charges shall be added
on the above Estimates as per NBCC Letter NO. NBCC: BD: AP:
C2:LTR: 2007/1293 Dated 4th July 2007



ग्राहक की खुशी के लिए प्रतिबद्ध
Committed to Customers' Delight

नेशनल बिल्डिंग्स कन्स्ट्रक्शन कॉर्पोरेशन लिमिटेड
(भारत सरकार का उद्यम)
NATIONAL BUILDINGS CONSTRUCTION CORPORATION LIMITED
(A Government of India Enterprise)



An IS/ISO 9001
Company
(For Consultancy &
Project Management Group)

No. NBCC:BD:AP:C2:LTR:2007/1293

4th July, 2007

The Institute Engineer
Estate & Works
IIT, Roorkee

Sub: Construction of:

1. Multi-storied Boys Hostel (650 seats)
2. Multi-storied 'A' Category Residences (56 Nos.)
3. Multi-storied Building for Biotechnology Department
4. Lecture Hall Complex near New Library Building

Ref: 1. Our letter No. NBCC:BD:AP:C2:LTR:2007/1145 dated 30.05.07
2. Our letter No. NBCC:BD:AP:C2:LTR:2007/1231 dated 14.06.07

Dear Sir,

With reference to above and the subsequent telephonic discussions you had with the undersigned regarding revision in the estimates, we are enclosing the revised preliminary estimates in line with your requirements.

The followings changes have been done in the preliminary estimates enclosed herewith:

1. The provision of "External Service Connection" has been excluded from the estimates as the same are to be arranged by IIT, Roorkee separately.
2. The provision of VAT taken in the estimates @ 4% has been deleted from the estimates considering the same are not applicable on IIT works as intimated to us during telephonic discussion referred above.

The above provisions shall, however, be added to the estimates if required to be implemented during execution of the works.

The revised preliminary cost estimates (i.e. without provisions for External Service Connection and VAT) for various buildings including contingency provisions @3% are as under:

- | | |
|--|-------------------|
| 1. Multi-storied Boys Hostel (650 seats) | - Rs.23.42 Crores |
| 2. Multi-storied 'A' Category Residences (56 Nos.) | - Rs.13.30 Crores |
| 3. Multi-storied Building for Biotechnology Department | - Rs.17.00 Crores |
| 4. Lecture Hall Complex near New Library Building | - Rs.12.20 Crores |

BUSINESS DEVELOPMENT DIVISION

दूरभाष / Tel.: 91-11-24367573

E-mail: bd.nbcc@nic.in

nbcc_chandan@rediffmail.com

CORPORATE OFFICE

एनबीसीसी भवन, लोधी रोड, नई दिल्ली-110003

NBCC Bhawan, Lodhi Road, New Delhi-110003

दूरभाष ईपीएबीएक्स / Tel.: EPABX: 24367314-15; फैक्स / Fax: 91-11-24366995

E-mail: info.nbcc@nic.in; Website: www.nbccindia.gov.in

NBCC's agency charges @10% shall be added on the above estimates. However, the service tax or any other taxes applicable on NBCC shall be reimbursable to NBCC over & above the agency charges.

Hope you will find the above in order and issue the Letter of Intent for awarding to NBCC the above said works.

Should you require any clarification/discussion required on the above, kindly let us know. We shall be glad to attend to the same promptly.

Thanking you,

Yours faithfully,


AJAY PAL
Addl. General Manager (BD)

Copy to:

1. The Director, IIT, Roorkee
- for kind information.
- ✓ 2. The Chairman, Estate & Works, IIT Roorkee
- for kind information.

BOYS' HOSTEL AT I.I.T. ROORKEE

SUMMARY OF COSTS

Sl. No.	Item	% Escalation	Amount (in Rs.)
1	CIVIL		71,991,813.20
	ADD COST INDEX ESCALATION	130.00%	93,589,357.16
	EXTRA COST FOR SUPERIOR SPECIFICATIONS NOT INCLUDED IN PAR		5,291,783.34
	TOTAL		170,872,953.70
2	FIRE FIGHTING WORKS		4,300,000.00
	TOTAL		4,300,000.00
3	PLUMBING WORKS		6,336,416.75
	ADD COST INDEX ESCALATION	130.00%	8,237,341.78
	TOTAL		14,573,758.53
4	ELECTRICAL WORKS		10,854,343.13
	ADD COST INDEX ESCALATION	130.00%	14,110,646.07
	EXTRA COST FOR WORKS NOT INCLUDED IN PAR		1,250,000.00
	TOTAL		26,214,989.21
5	LIFTS		7,200,000.00
	TOTAL		7,200,000.00
6	MISCELLANEOUS WORKS		800,000.00
	TOTAL		800,000.00
7	SITE DEVELOPMENT		1,477,359.15
	ADD COST INDEX ESCALATION	130.00%	1,920,566.90
	TOTAL		3,397,926.05
	TOTAL		227,359,627.48
	CONTINGENCIES	3.00%	6,820,788.82
	VAT		
	GRAND TOTAL		234,180,416.30
	SAY		Rs. 23.42 Cr.

BOYS' HOSTEL AT IIT ROORKEE

Sl. No.	Item	Area in Sqm.	Rate (in Rs.)	Amount (in Rs.)	Refer
1.0 CIVIL WORKS					
1.1 R.C.C.FRAMED STRUCTURE					
	R.C.C.Framed structure upto six storeys height				
1.1.2	Floor height 2.9m				
	For Boys' Hostel (for all floors)				
	Ground Floor	3,476.00			
	First Floor	2,473.00			
	Second Floor	2,338.00			
	Third Floor	2,338.00			
	Fourth Floor	2,338.00			
	Fifth Floor	2,338.00			
	Sixth Floor	2,338.00			
	Seventh Floor	2,338.00			
	Total(I)	19,977.00	2,740.00	54,736,980.00	PAR 92/1
(A) Total				54,736,980.00	
1.2 EXTRA FOR:					
1.2.1	Every additional storey over six storeys upto nine storey (additional for 2 storeys)	19,977.00	100.00	1,997,700.00	PAR 92/1
1.2.2	Extra for additional height of 0.1 M over 2.9 M $0.1/0.3 \times 125 = 41.66$	19,977.00	41.60	831,043.20	PAR 92/1
1.2.3	Resisting Earthquake forces	19,977.00	250.00	4,994,250.00	PAR 92/1
1.2.4	R.C.C Raft Foundation	19,977.00	440.00	8,789,880.00	PAR 92/1
1.2.5	Deeper foundation over normal depth of 1.20mtr	3,476.00	125.00	434,500.00	PAR 92/1
1.2.5	Larger modules over 35 Sq.m	943.00	220.00	207,460.00	PAR 92/1
B Total				17,254,833.20	
TOTAL COST OF CIVIL WORKS AS PER PAR (A+B)				71,991,813.20	
2.0 FIRE FIGHTING					
2.1	SITC Elect. Pumps at Terrace	4.00	150,000.00	600,000.00	Mkt Ra
2.2	Power/ Control cables	LS		400,000.00	Mkt Rat
2.3	S/L MS pipes	LS		800,000.00	Mkt Ra
2.4	Valves, hydrants, hose reels etc.	LS		1,500,000.00	Mkt Rat
2.5	Manual Fire alarm system	LS		1,000,000.00	Mkt Ra
C	Total			4,300,000.00	

BOYS' HOSTEL AT IIT ROORKEE

Sl. No.	Item	Area in Sqm.	Rate (in Rs.)	Amount (in Rs.)	Reference
3 SERVICES					
3.1 PLUMBING					
3.1.1	Internal Water Supply and Sanitary Installations	10% of (A)	10.00%	5,473,698.00	PAR 92/3.1
D	Total			5,473,698.00	
3.2 Water Tanks					
3.2.1	Over Head tank with out staging	93,875.00	4.75	445,906.25	PAR 92/4.1
3.2.2	Under ground Sump (in Ltrs)	87,750.00	4.75	416,812.50	PAR 92/4.5
E	Total			862,718.75	
TOTAL COST OF PLUMBING WORKS AS PER PAR				6,336,416.75	
3.4 ELECTRICAL					
3.4.1	External Service Connection			-	PAR 92/3.2
3.4.2	Internal Electrical Installation Extra for:	12.5% of (A)	12.50%	6,842,122.50	PAR 92/3.3
3.4.3	Power wiring and plugs	4% of (A)	4.00%	2,189,479.20	PAR 92/3.6.1
3.4.4	Lightening conductor 5 to 8 storeyed Building	0.33% of (A)	0.33%	180,632.03	PAR 92/3.6.3
3.4.5	Extra for FRLS copper wiring	2.50% of (A)	2.50%	1,368,424.50	
3.4.6	Extra for telephone conduits	0.50% of (A)	0.50%	273,684.90	PAR 92/3.6.4
F	Total			10,854,343.13	
3.5 EXTRA FOR WORKS NOT INCLUDED IN PAR					
i)	DG Set of 125 KVA for lifts & common lights			1,250,000.00	Mkt Rate
G	Total			1,250,000.00	
4.0 LIFTS					
4.1	Passenger lifts 13 passengers, 4 nos (Gr+4) Speed 1m/sec	4.00	1,800,000.00	7,200,000.00	Mkt Rate
H	Total			7,200,000.00	

BOYS' HOSTEL AT IIT ROORKEE

Sl. No.	Item	Area in Sqm.	Rate (in Rs.)	Amount (in Rs.)	Rel
5.0 MISCELLANEOUS WORKS					
I)	Rainwater Harvesting	4.00	200,000.00	800,000.00	Mh
I	TOTAL			800,000.00	
6.0 SITE DEVELOPMENT & LANDSCAPING					
	Total Plot Area considered	9,389.00			
i)	Levelling	9,389.00	10.95	102,809.55	PAF
ii)	Sewer	9,389.00	24.45	229,561.05	PAF
iii)	Filter Water Supply-Distribution Lines 100mm dia & below	9,389.00	17.90	168,063.10	PAR
iv)	Roads and Paths	9,389.00	33.95	318,756.55	PAF
v)	Storm Water Drains	9,389.00	29.20	274,158.80	PAF
vi)	Horticulture operations	9,389.00	18.25	171,349.25	PAR
vii)	Street lighting with HPSV Lamps	9,389.00	22.65	212,660.85	PAR
J	Total			1,477,359.15	

Extra Cost for Superior Specifications (Civil Works)

Sl No.	Item	Unit	Quantity	Rate (in Rs.)	Amount (in Rs.)
1.0	Ceramic Tile Dado in place of terrazzo finish on wall	Sqm.	3795	205.82	781071.81
2.0	Ceramic Tile Floor in place of terrazzo floor	Sqm.	1990	395.35	786751.33
3.0	Kota Stone Floor in place of Terrazzo flooring	Sqm.	6914	525.66	3634404.25
4.0	Kota Stone Skirting/Riser in place of cement plaster skirting	Sqm.	162	552.81	89555.95
				TOTAL	5291783.34

Note: For derivation of rates, refer Annexure -1

CALCULATION OF RATES for SUPERIOR SPECIFICATION ITEMS of CIVIL WORKS

Sl No.	Item Proposed	DSR Ref	DSR Rate (Rs.)	Escalation @	Rate (Rs.)	NS Item Rate	In Place of Item	DSR Ref	DSR Rate (Rs.)	Escalation @	Rate (Rs.)	Extra Rate (Rs.)
1.0	Ceramic Tile Dado	11.73	373.30	38.55%	517.21		Terrazzo Finish on Wall	13.41	224.75	86.64	311.39	205.82
2.0	Ceramic Tile Floor	11.75	501.70	193.41	695.11		Terrazzo Floor	11.16.3	216.35	83.40	299.75	395.35
3.0	Kota Stone Floor	11.48.1	493.10	190.09	683.19		Cement Concrete Floor	11.4.2	113.70	43.83	157.53	525.66
4.0	Kota Stone Skirting/Riser	11.49	503.00	193.91	696.91		Cement Plaster Skirting	11.10.1	104.00	40.09	144.09	552.81

** The escalation calculated considering the Cost Index as 230 = $(230-166)/166 \times 100 = 38.55\%$

STAFF ACCOMMODATION AT IIT ROORKEE

SUMMARY OF COSTS

Sl. No.	Item	% Escalation	Amount (in Rs.)
1	CIVIL		42,214,351.28
	ADD COST INDEX ESCALATION	130.00%	54,878,656.67
	TOTAL		97,093,007.95
2	FIRE FIGHTING WORKS		3,200,000.00
	TOTAL		3,200,000.00
3	PLUMBING WORKS		3,381,900.00
	ADD COST INDEX ESCALATION	130.00%	4,396,470.00
	TOTAL		7,778,370.00
4	ELECTRICAL WORKS		3,547,594.09
	ADD COST INDEX ESCALATION	130.00%	4,611,872.32
	EXTRA COST FOR WORKS NOT INCLUDED IN PAR		1,250,000.00
	TOTAL		9,409,466.41
5	LIFTS		7,200,000.00
	TOTAL		7,200,000.00
6	MISCELLANEOUS WORKS		800,000.00
	TOTAL		800,000.00
7	SITE DEVELOPMENT		1,712,251.23
	ADD COST INDEX ESCALATION	130.00%	2,225,926.60
	TOTAL		3,938,177.83
	TOTAL		129,419,022.19
	CONTINGENCIES	3.00%	3,882,570.67
	VAT		
	GRAND TOTAL		133,301,592.86
	SAY		Rs. 13.30 Cr.

STAFF ACCOMMODATION AT IIT ROORKEE

Sl. No.	Item	Area in Sqm.	Rate (in Rs.)	Amount (in Rs.)	Refere.
1.0	CIVIL WORKS				
	CATEGORY V FLATS (STILT +7) Floor to Floor Ht.3m				
1.1	R.C.C.FRAMED STRUCTURE				
	R.C.C.Framed structure upto six storeys height				
1.1.2	Floor height 2.9m				
	(i) Stilt	683.60			
	ii) First Floor	689.51			
	iii) Second Floor	689.51			
	iv) Third Floor	689.51			
	v) Fourth Floor	689.51			
	vi) Fifth Floor	689.51			
	vii) Sixth Floor	689.51			
	viii) Seventh Floor	689.51			
	<i>Total of (i)</i>	5510.17			
	<i>Area for 2 blocks</i>	11,020.34	2,810.00	30,967,155.40	PAR 92/1 (A1)
	SUB-STATION BUILDING				
	I) Sub- Station Building (Height 3.35m)	114.00	2,920.00	332,880.00	PAR 92/1.
A	<i>Total (I)</i>			31,300,035.40	
1.2	EXTRA FOR:				
1.2.1	Every additional storey over six storeys upto nine storey	11,020.34	100.00	1,102,034.00	PAR 92/1
1.2.2	Extra for additional height of 0.1 M over 2.9 M $0.1/0.3 \times 125 = 41.66$	11,020.34	41.60	458,446.14	PAR 92/1
	Extra for additional height of 0.85 M over 3.35 M $0.85/0.3 \times 125 = 354.16$	114.00	354.16	40,374.24	PAR 92/1
1.2.3	Resisting Earthquake forces	11,134.34	250.00	2,783,585.00	PAR 92/1
1.2.4	R.C.C Raft Foundation	11,709.85	440.00	5,152,334.00	PAR 92/1
1.2.5	Deeper foundation over normal depth of 1.20mtr	11,020.34	125.00	1,377,542.50	PAR 92/1
B	Total			10,914,315.88	
	TOTAL COST OF CIVIL WORKS			42,214,351.28	
	AS PER PAR (A+B)				

STAFF ACCOMMODATION AT IIT ROORKEE

Sl. No.	Item	Area in Sqm.	Rate (in Rs.)	Amount (in Rs.)	Reference
2.0 SERVICES					
2.1 FIRE FIGHTING					
2.1	SITC Elect. Pumps at Terrace	2.00	150,000.00	300,000.00	Mkt Rate
2.2	Power/ Control cables	LS		400,000.00	Mkt Rate
2.3	S/L MS pipes	LS		500,000.00	Mkt Rate
2.4	Valves, hydrants, hose reels etc.	LS		1,000,000.00	Mkt Rate
2.5	Manual Fire alarm system	LS		1,000,000.00	Mkt Rate
C	Total			3,200,000.00	
3 PLUMBING					
3.1	Internal Water Supply and Sanitary Installations	56	43,800.00	2,452,800.00	PAR 92/3.1
3.2 Water Tanks					
3.2.1	Over Head tank with out staging	122800	4.75	583,300.00	PAR 92/4.1
3.2.2	Under ground sump (in Ltrs)	72800	4.75	345,800.00	PAR 92/4.5
D	Total			3,381,900.00	
TOTAL COST OF PLUMBING WORKS AS PER PAR				3,381,900.00	
3.4 ELECTRICAL					
3.4.1	External Service Connection				PAR 92/3.2
3.4.2	Internal Electrical Installation	56.00	22400	1,254,400.00	PAR 92/3.3
	Extra for:				
3.4.3	Power wiring and plugs	4% of (A)	4.00%	1,252,001.42	PAR 92/3.6.1
3.4.4	Lightening conductor				
	5 to 8 storeyed Building	0.33% of (A1)	0.33%	102,191.61	PAR 92/3.6.3
3.4.5	Extra for FRLS copper wiring	2.50% of (A)	2.50%	782,500.89	
3.4.6	Extra for telephone conduits	0.50% of (A)	0.50%	156,500.18	PAR 92/3.6.4
E	Total			3,547,594.09	
3.5 EXTRA FOR WORKS NOT INCLUDED IN PAR					
i)	DG Set of 125 KVA for lifts & common lights			1,250,000.00	Mkt Rate
F	Total			1,250,000.00	

STAFF ACCOMMODATION AT IIT ROORKEE

Sl. No.	Item	Area in Sqm.	Rate (in Rs.)	Amount (in Rs.)
4.0 LIFTS				
4.1	Passenger lifts 13 passengers, 4 nos (Gr+4) Speed 1m/sec	4	1,800,000.00	7,200,000.00
G	Total			7,200,000.00
5.0 MISCELLANEOUS WORKS				
I)	Rainwater Harvesting	4	200,000.00	800,000.00
H	Total			800,000.00
6.0 SITE DEVELOPMENT & LANDSCAPING				
	Total Plot Area considered	10881.80		
i)	Levelling	10,881.80	10.95	119,155.71
ii)	Sewer	10,881.80	24.45	266,060.01
iii)	Filter Water Supply-Distribution Lines 100mm dia & below	10,881.80	17.90	194,784.22
iv)	Roads and Paths	10,881.80	33.95	369,437.11
v)	Storm Water Drains	10,881.80	29.20	317,748.56
vi)	Horticulture operations	10,881.80	18.25	198,592.85
vii)	Street lighting with HPSV Lamps	10,881.80	22.65	246,472.77
J	Total			1,712,251.23

BIO-TECHNOLOGY DEPARTMENT AT IIT ROORKEE

SUMMARY OF COSTS

Sl. No.	Item	% Escalation	Amount (in Rs.)
1	CIVIL WORKS		40,220,312.40
	ADD COST INDEX ESCALATION	130.00%	52,286,406.12
	EXTRA COST FOR SUPERIOR SPECIFICATIONS NOT INCLUDED IN PAR		8,951,315.53
	TOTAL (A)		101,458,034.05
2	FIRE FIGHTING WORKS		2,500,000.00
	TOTAL (B)		2,500,000.00
3	PLUMBING		1,722,417.00
	ADD COST INDEX ESCALATION	130.00%	2,239,142.10
	TOTAL (C)		3,961,559.10
4	ELECTRICAL WORKS		5,936,277.07
	ADD COST INDEX ESCALATION	130.00%	7,717,160.19
	TOTAL (D)		13,653,437.27
5	LIFTS		5,100,000.00
	TOTAL (E)		5,100,000.00
6	DEVELOPMENT OF SITE		360,016.80
	ADD COST INDEX ESCALATION	130.00%	468,021.84
	TOTAL (F)		828,038.64
7	MISCALLENEOUS WORKS		37,792,000.00
	TOTAL (G)		37,792,000.00
	TOTAL		165,293,069.05
	CONTINGENCIES	3.00%	4,958,792.07
	VAT		
	GRAND TOTAL		170,251,861.12
	SAY		Rs. 17.00 Cr.

BIO-TECHNOLOGY DEPARTMENT AT I.I.T. ROORKEE

Cost Estimate Based on CPWD PAR 1992

Sl. No.	Item	Area in Sqm.	Rate (in Rs.)	Amount (in Rs.)	Reference
1.0 CIVIL WORKS					
1.1 R.C.C.FRAMED STRUCTURE					
1.1.1	Area (Height 3.35M)				
	(i) Ground Floor	1940.00			
	ii) First Floor	1496.00			
	iii) Second Floor	1496.00			
	iv) Third Floor	1064.00			
	v) Fourth Floor	1064.00			
	vi) Fifth Floor	1064.00			
	vii) Sixth Floor	1064.00			
	viii) Seventh Floor	1064.00			
		10252.00	2,920.00	29,935,840.00	PAR 92/1.1.1
A	Total			29,935,840.00	
1.2 EXTRA FOR:					
1.2.1	Every additional storey over six storeys upto nine storey	10,252.00	100.00	1,025,200.00	PAR 92/1.2.1
1.2.2	Extra for additional height of 1.75 M over 3.35 in Ground Floor & above 1.75/0.3x125 = 729.16	190.00	729.16	138,540.40	PAR 92/1.2.3
1.2.3	Extra for Resisting Earthquake forces	10,252.00	250.00	2,563,000.00	PAR 92/1.2.8
1.2.4	R.C.C Raft Foundation	10,252.00	440.00	4,510,880.00	PAR 92/1.2.9
1.2.5	Deeper foundation over normal depth of 1.20mtr	1,940.00	125.00	242,500.00	PAR 92/1.2.9
1.2.5	Larger modules over 35sq.m (80%)	8,201.60	220.00	1,804,352.00	PAR 92/1.2.12
B	Total			10,284,472.40	
TOTAL COST OF CIVIL WORKS AS PER PAR (A+B)				40,220,312.40	
2.0 FIRE FIGHTING					
2.1	SITC Elect. Pumps at Terrace	2.00	150,000.00	300,000.00	Mkt Rate
2.2	Power/ Control cables	LS		200,000.00	Mkt Rate
2.3	S/L MS pipes	LS		500,000.00	Mkt Rate
2.4	Valves, hydrants, hose reels etc.	LS		500,000.00	Mkt Rate
2.5	Manual Fire alarm system	LS		1,000,000.00	Mkt Rate
C	Total			2,500,000.00	
3.0 SERVICES					
3.1 PLUMBING					
3.1.1	Internal Water Supply and Sanitary Installations	5% of A	5%	1,496,792.00	PAR 92/3.1
D	Total			1,496,792.00	
3.1.2	Over Head tank with out staging (capacity in Ltr)	32500	4.75	154,375.00	PAR 92/4.1
3.1.3	Underground Sump (capacity in Ltr)	15000	4.75	71,250.00	PAR 92/4.5

BIO-TECHNOLOGY DEPARTMENT AT I.I.T. ROORKEE

Cost Estimate Based on CPWD PAR 1992

Sl. No.	Item	Area in Sqm.	Rate (in Rs.)	Amount (in Rs.)	Reference
E		Total		225,625.00	
TOTAL COST OF PLUMBING WORKS AS PER PAR (D+E)				1,722,417.00	
3.2 ELECTRICAL WORKS					
EXTRA FOR					
3.2.1	External Service Connection				PAR 92/3.2
3.2.2	Internal Electrical Installation	12.5% of (A)	12.50%	3,741,980.00	PAR 92/3.3
3.2.3	Power wiring and plugs	4% of (A)	4.00%	1,197,433.60	PAR 92/3.6.1
3.2.4	Lightening conductor 5 to 8 storeyed Building	0.33% of (A)	0.33%	98,788.27	PAR 92/3.6.3
3.2.5	Extra for FRLS copper wiring	2.50% of (A)	2.50%	748,396.00	
3.2.6	Extra for telephone conduits	0.50% of (A)	0.50%	149,679.20	PAR 92/3.6.4
F	Total			5,936,277.07	
4.0 LIFTS					
i)	13 passengers, 1M/sec - 4Nos.	2	1,800,000.00	3,600,000.00	Mkt Rate
ii)	Goods Lift (1 Ton), 0.5 m/sec	1	1,500,000.00	1,500,000.00	Mkt Rate
G	Total			5,100,000.00	
5.0 DEVELOPMENT OF SITE					
	Total Plot Area considered	2288.00			
i)	Levelling	2288.00	10.95	25,053.60	PAR 92/5.1
ii)	Internal Roads and Paths	2288.00	33.95	77,677.60	PAR 92/5.2
iii)	Sewer	2288.00	24.45	55,941.60	PAR 92/5.3
iv)	Filter Water Supply - Distribution Lines 100mm dia & below	2288.00	17.90	40,955.20	PAR 92/5.4.1
v)	Storm Water Drains	2288.00	29.20	66,809.60	PAR 92/5.5
vi)	Horticulture Operations	2288.00	18.25	41,756.00	PAR 92/5.6
vii)	Street Lighting with HPSV Lamps	2288.00	22.65	51,823.20	PAR 92/5.7.3
H	Total			360,016.80	
6.0 MISCELLANEOUS WORKS					
i)	Rainwater Harvesting	2.00	200,000.00	400,000.00	Mkt Rate
ii)	Acoustical panelling	210.00	1,700.00	357,000.00	Mkt Rate
iii)	False ceiling with Advantage A tiles	190.00	1,500.00	285,000.00	Mkt Rate
iv)	Airconditioning System (TR)	735.00	50,000.00	36,750,000.00	Mkt Rate
I	Total			37,792,000.00	

Extra Cost for Superior Specifications (Civil Works)

Sl No.	Item	Unit	Quantity	Rate (in Rs.)	Amount (in Rs.)
1.0	Ceramic Tile Dado in place of terrazzo finish on wall	Sqm.	813	205.82	167266.68
2.0	Ceramic Tile Floor in place of terrazzo floor	Sqm.	644	395.35	254606.96
3.0	Kota Stone Floor in place of Terrazzo flooring	Sqm.	2488	525.66	1307838.85
4.0	Kota Stone Riser/Skirting in place of cement plaster	Sqm.	252	552.81	139309.25
5.0	Jaisalmer Stone Riser in place of cement plaster riser/skirting	Sqm.	132	1456.91	192748.93
6.0	Matte Finished Vitrified Tile Floor instead of Terrazzo Floor	Sqm.	150	655.25	98287.06
7.0	Structural glazing	Sqm.	428	5967.99	2551317.84
8.0	BrickTile finish instead of cement based paint	Sqm.	3970	1067.99	4239939.95
				TOTAL	8951315.53

Note: For derivation of rates, refer Annexure -1

CALCULATION OF RATES for SUPERIOR SPECIFICATION ITEMS of CIVIL WORKS

Sl No.	Item Proposed	DSR Ref	DSR Rate (Rs.)	Escalation @	Rate (Rs.)	NS Item Rate	In Place of Item	DSR Ref	DSR Rate (Rs.)	Escalation @	Rate (Rs.)	Extra Rate (Rs.)
1.0	Ceramic Tile Dado	11.73	373.30	38.55%	517.21		Terrazzo Finish on Wall	13.41	224.75	86.64	311.39	205.82
2.0	Ceramic Tile Floor	11.75	501.70	193.41	695.11		Terrazzo Floor	11.16.3	216.35	83.40	299.75	395.35
3.0	Kota Stone Floor	11.48.1	493.10	190.09	683.19		Cement Concrete Floor	11.4.2	113.70	43.83	157.53	525.66
4.0	Kota Stone Skirting/Riser	11.49	503.00	193.91	696.91		Cement Plaster Skirting	11.10.1	104.00	40.09	144.09	552.81
5.0	Jaisalmer Riser					1601.00	Cement Plaster Skirting	11.10.1	104.00	40.09	144.09	1456.91
6.0	Matte finished Vitrified Tile Floor					955.00	Terrazzo Floor	11.16.3	216.35	83.40	299.75	655.25
7.0	Structural glazing					6000.00	Cement Based Paint	13.79.1	23.10	8.91	32.01	5967.99
8.0	Brick tiles					1100.00	Cement Based Paint	13.79.1	23.10	8.91	32.01	1067.99

** The escalation calculated considering the Cost Index as 230 = $(230 - 166) / 166 \times 100 = 38.55\%$

LECTURE THEATRE COMPLEX AT IIT ROORKEE

SUMMARY OF COSTS

Sl. No.	Item	% Escalation	Amount (in Rs.)
1	CIVIL WORKS		25,315,810.96
	ADD COST INDEX ESCALATION	130.00%	32,910,554.25
	EXTRA COST FOR SUPERIOR SPECIFICATIONS NOT INCLUDED IN PAR		4,233,364.11
	TOTAL (A)		62,459,729.32
2	FIRE FIGHTING WORKS		3,200,000.00
	TOTAL (B)		3,200,000.00
3	PLUMBING WORKS		1,293,476.00
	ADD COST INDEX ESCALATION	130.00%	1,681,518.80
	TOTAL (B)		2,974,994.80
4	ELECTRICAL WORKS		3,246,075.82
	ADD COST INDEX ESCALATION	130.00%	4,219,898.56
	EXTRA COST FOR WORKS NOT INCLUDED IN PAR		1,250,000.00
	TOTAL (C)		8,715,974.38
5	LIFTS		3,600,000.00
	TOTAL (D)		3,600,000.00
6	DEVELOPMENT OF SITE		219,031.20
	ADD COST INDEX ESCALATION	130.00%	284,740.56
	TOTAL (E)		503,771.76
7	MISCELLANEOUS WORKS		36,856,500.00
	TOTAL (F)		36,856,500.00
	TOTAL		118,310,970.25
	CONTINGENCIES	3.00%	3,549,329.11
	VAT		
	GRAND TOTAL		121,860,299.36
	SAY		Rs. 12.20 Cr.

LECTURE THEATRE COMPLEX AT I.I.T. ROORKEE

Cost Estimate Based on CPWD PAR 1992

Sl. No.	Item	Area in Sqm.	Rate (in Rs.)	Amount (in Rs.)	Reference
1.0 CIVIL WORKS					
1.1 R.C.C.FRAMED STRUCTURE					
1.1.1	Area (Height 3.35M)				
	(i) Ground Floor	1968.00			
	ii) First Floor	1819.00			
	iii) Second Floor	1819.00			
	Total	5,606.00	2,920.00	16,369,520.00	PAR 92/1.1.1
A	Total			16,369,520.00	
1.2 EXTRA FOR:					
1.2.1 (i)	Extra for additional height of 1.75 M over 3.35 in Ground Floor & above 1.75/0.3x125 = 729.16	5,606.00	729.16	4,087,670.96	PAR 92/1.2.3
1.2.2	Extra for Resisting Earthquake forces	5,606.00	250.00	1,401,500.00	PAR 92/1.2.8
1.2.3	Deeper foundation over normal depth of 1.20mtr	1,968.00	125.00	246,000.00	PAR 92/1.2.5
1.2.4	R.C.C Raft Foundation	5,606.00	440.00	2,466,640.00	PAR 92/1.2.9
1.2.5	Larger modules over 35sq.m	3,384.00	220.00	744,480.00	PAR 92/1.2.12
B	Total			8,946,290.96	
TOTAL COST OF CIVIL WORKS AS PER PAR (A+B)				25,315,810.96	
2.0 FIRE FIGHTING					
2.1	SITC Elect. Pumps at Terrace	2.00	150,000.00	300,000.00	Mkt Rate
2.2	Power/ Control cables	LS		400,000.00	Mkt Rate
2.3	S/L MS pipes	LS		500,000.00	Mkt Rate
2.4	Valves, hydrants, hose reels etc.	LS		1,000,000.00	Mkt Rate
2.5	Manual Fire alarm system	LS		1,000,000.00	Mkt Rate
C Total				3,200,000.00	
3.0 SERVICES					
3.1 PLUMBING					
3.1.1	Internal Water Supply and Sanitary Installations	5% of A	5.00%	818,476.00	PAR 92/3.1
D	Total			818,476.00	
3.1.2	Water Tanks				
3.1.2.1	Over Head tank with out staging	50000	4.75	237,500.00	PAR 92/4.1
3.1.2.2	Underground Sump (capacity in Ltr)	50000	4.75	237,500.00	PAR 92/4.5
E	Total			475,000.00	
TOTAL COST OF PLUMBING WORKS (D+E) AS PER PAR				1,293,476.00	

LECTURE THEATRE COMPLEX AT I.I.T. ROORKEE

Cost Estimate Based on CPWD PAR 1992

Sl. No.	Item	Area in Sqm.	Rate (in Rs.)	Amount (in Rs.)	Reference
3.2 ELECTRICAL WORKS					
3.2.1	External Service Connection				PAR 92/3.2
3.2.2	Internal Electrical Installation	12.5% of (A)	12.50%	2,046,190.00	PAR 92/3.3
3.2.3	Power wiring and plugs	4% of (A)	4.00%	654,780.80	PAR 92/3.6.1
3.2.4	Lightening conductor 5 to 8 storeyed Building	0.33% of (A)	0.33%	54,019.42	PAR 92/3.6.3
3.2.5	Extra for FRLS copper wiring	2.50% of (A)	2.50%	409,238.00	
3.2.6	Extra for telephone conduits	0.50% of (A)	0.50%	81,847.60	PAR 92/3.6.4
G	Total			3,246,075.82	
3.2.7 EXTRA FOR					
	i) DG Set of 125 KVA for lifts & common lights			1,250,000.00	Mkt Rate
H	Total			1,250,000.00	
LIFTS					
	13 passengers, 1M/sec - 2Nos.	2.00	1,800,000.00	3,600,000.00	PAR 92/3.7.
I	Total			3,600,000.00	
4.0 DEVELOPMENT OF SITE					
	Total Plot Area considered	1,392.00			
i)	Levelling	1,392.00	10.95	15,242.40	PAR 92/5.1
ii)	Internal Roads and Paths	1,392.00	33.95	47,258.40	PAR 92/5.2
iii)	Sewer	1,392.00	24.45	34,034.40	PAR 92/5.3
iv)	Filter Water Supply - Distribution Lines 100mm dia & below	1,392.00	17.90	24,916.80	PAR 92/5.4.1
v)	Storm Water Drains	1,392.00	29.20	40,646.40	PAR 92/5.5
vi)	Horticulture Operations	1,392.00	18.25	25,404.00	PAR 92/5.6
vii)	Street Lighting with HPSV Lamps	1,392.00	22.65	31,528.80	PAR 92/5.7.3
J	Total			219,031.20	
5.0 MISCELLANEOUS WORKS					
i)	Rainwater Harvesting	1.00	200,000.00	200,000.00	Mkt Rate
ii)	Accoustic panelling	8,492.00	1,550.00	13,162,600.00	Mkt Rate
iii)	False ceiling with Advantage A tiles	3,382.00	1,450.00	4,903,900.00	Mkt Rate
iv)	Airconditioning System(338TR)	338.00	55,000.00	18,590,000.00	Mkt Rate
K	Total			36,856,500.00	

LECTURE THEATRE COMPLEX AT IIT ROORKEE

Extra Cost for Superior Specifications (Civil Works)

Sl No.	Item	Unit	Quantity	Rate (in Rs.)	Amount (in Rs.)
1.0	Ceramic Tile Dado in place of terrazzo finish on wall	Sqm.	330	205.93	67956.37
2.0	Ceramic Tile Floor in place of terrazzo floor	Sqm.	215	395.46	85024.03
3.0	Kota Stone Floor in place of Terrazzo flooring	Sqm.	1152	525.72	605624.31
4.0	Kota Stone Riser/Skirting in place of cement plaster	Sqm	168	552.87	92881.57
5.0	Jaisalmer Stone Riser in place of cement plaster riser/skirting	Sqm.	57	1456.96	83046.72
6.0	Matte Finished Vitrified Tile Floor instead of Terrazzo Floor	Sqm	150	655.36	98303.29
7.0	Structural glazing	Sqm	285	5968.01	1700881.85
8.0	Stone Texture finish in place of cement based paint	Sqm.	3225	465.01	1499645.96
				TOTAL	4233364.11

Note: For derivation of rates, refer Annexure -1

CALCULATION OF RATES for SUPERIOR SPECIFICATION ITEMS of CIVIL WORKS

Sl No.	Item Proposed	DSR Ref	DSR Rate (Rs.)	Escalation @ 38.55%	Rate (Rs.)	NS Item Rate	In Place of Item	DSR Ref	DSR Rate (Rs.)	Escalation @ 38.55%	Rate (Rs.)	Extra Rate (Rs.)
1.0	Ceramic Tile Dado	11.73	373.30	143.91	517.21		Terrazzo Finish on Wall	13.41	224.75	86.53	311.28	205.93
2.0	Ceramic Tile Floor	11.75	501.70	193.41	695.11		Terrazzo Floor	11.16.3	216.35	83.29	299.64	395.46
3.0	Kota Stone Floor	11.48.1	493.10	190.09	683.19		Cement Concrete Floor	11.4.2	113.70	43.77	157.47	525.72
4.0	Kota Stone Skirting/Riser	11.49	503.00	193.91	696.91		Cement Plaster Skirting	11.10.1	104.00	40.04	144.04	552.87
5.0	Jaisalmer Riser					1601.00	Cement Plaster Skirting	11.10.1	104.00	40.04	144.04	1456.96
6.0	Matte finished Vitrified Tile Floor					955.00	Terrazzo Floor	11.16.3	216.35	83.29	299.64	655.36
7.0	Structural glazing					6000.00	Cement Based Paint	13.79.1	23.10	8.89	31.99	5968.01
8.0	Stone Texture					497.00	Cement Based Paint	13.79.1	23.10	8.89	31.99	465.01

** The escalation calculated considering the Cost Index as 230 = $(230-166)/166 \times 100 = 38.55\%$

APPENDIX - G
Item No.B&WC/19.3.4

**SUMMARY OF ESTIMATES SUBMITTED BY UTTAR PRADESH
RAJKIYA NIRMAN NIGAM LIMITED FOR VARIOUS CONSTRUCTION
WORKS AT IIT ROORKEE CAMPUS**

Sl. No.	Works	Estimated Cost (Rs. in Lacs)
1.	Extension of Cautley Bhawan Hostel (Double Seated 72 Rooms).	217.05
2.	Extension of Jawahar Bhawan Hostel (Single Seated 94 Rooms)	182.33
3.	Extension of M.R.Chopra Bhawan and Azad Wing (Suites 48).	232.88
4.	Extension of Ghananand Pandey Hostel (Suites 80).	397.87
5.	'C' Category Residences (64 Nos.)	498.60
6.	'D' Category Residences (80 Nos.)	297.08
7.	Extension of Continuing Education Guest House	147.75
8.	Extension of Continuing Education Office.	28.87
9.	Construction of Covering of open drains.	95.39
10.	Extension of AHEC Building	56.18



उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED
Muzaffar - Nagar Unit Muzaffar-Nagar (U.P)

NAME OF WORK:- Extension of Cautley Bhawan 72 Room Double seated in
Campus of I.I.T Roorkee in Distt Haridwar (U.A)

COST OF ESTIMATE :--- Rs 217. 05 Lacs only

NAME OF UNIT:-----

U. P. R. N. N. Ltd
CAMP OFFICE GANGA BHAWAN HOSTEL BLOCK
I.I.T ROORKEE DISTT HARIDWAR (U.A)
Mobile Phone : + 91 9412231966

ऑफिस कार्यालय:

अनूपम,

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

प्रथम मंजूर 34ए नंदरु काठाना

देहरादून 248001

TELEPHONE: 2628139 कार्यालय

1-M. NEHRU COLONY 2628139 (निवास)

DEHRADUN 2428139

मुख्यालय:

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

विश्वेश्वरगंगा भवन

विभूती खण्ड,

गोमती नगर, लखनऊ,

पोस्टकोड नं 226002 2392578 2392581

फैक्स: 0522,239258

ANALYSIS OF RATES.

(1)	Basic plinth area rates for framed structure Buildings up to 6storeys.	Rs.	5376.00 (A)
(2)	Add. For Earth quake resistance.	Rs.	325.00
(3)	Add. For Internal water supply & Sanitary Work @ 15% of (A).	Rs.	806.40
(4)	Add. For External water supply and Sanitary Work @ 5% of (A).	Rs.	268.80
(5)	Add. For Power wiring @4% of (A).	Rs.	215.00
(6)	Add. For Extra ceiling height above 2,90Mtr.	Rs.	252.00
(7)	Add. For brick coba treatment @0.5% of (A)	Rs.	266.90
(8)	Add. For contingency @ 2%	Rs.	107.50
(9)	Add. For Internal Electrification @12. 5% of (A)	Rs.	672.00

Total Rs:-

8043.50

LESS: 5% Due to RNN working.

(-)

Rs. 402.50

Rs. 7641.00

ADD. CENTAGE CHARGES OF UP RNN: 11.5%

Rs. 878.70

Total Rs. 8519.70 p. m²

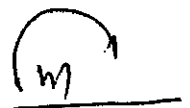
(w)
ARE

Unit Incharge
U.P. E. N. Ltd
Ganga Bhawan Hos.
I.I.T., Roorkee

Name of work :- Extension of Cautlay Bhawan (72 Rooms)

Details of Measurements

A. Ground Floor Plinth Area	=	62.73 X 9.58	=	600.95 m ²
Stair	=	2.38 X 6.52	=	15.52 m ²
Projection	=	1/2 X 9 X 2.71 X 1.68	=	20.49 m ²
Total			=	636.96 m ²
B. First Floor Same as Ground Floor			=	636.96 m ²
C. Second Floor Same as Ground Floor			=	636.96 m ²
D. Third Floor Same as Ground Floor			=	636.96 m ²
Total			=	2547.84 m ²

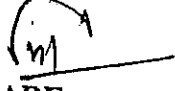

ARE

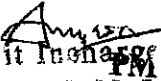
Name of work :- Extension of Cautlay Bhawan (72 Room

Abstract of cost

Cost of Building = 2547.84 X 8519.00 = Rs. 2,17,05,048.90

Say Rs. 2,17,05, Lacs


ARE


Unit Incharge
U.P. R. N. N. L.
Ganga Bhawan H.
IIT, Roorkee



उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED
Muzaffar - Nagar Unit Muzaffar-Nagar (U.P)

NAME OF WORK:- Extension of Jawahar Bhawan 94 Room Single seated in
Campus of I.I.T Roorkee in Distt Haridwar (U.A)

COST OF ESTIMATE :--- Rs 182.33 Lacs only

NAME OF UNIT:-----

U. P. R. N. N. Ltd
CAMP OFFICE GANGA BHAWAN HOSTEL BLOCK
I.I.T ROORKEE DISTT HARIDWAR (U.A)
Mobile Phone : + 91 9412231966

ऑफिस कार्यालय:

उत्तर प्रदेश,

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

प्रथम मंजरी ई 340, नेहरू कॉलोनी

देहरादून-248001

TELEPHONE

2628139 कार्यालय

1-34, NEHRU COLONY 2628139 (निगम)

DEHRADUN-2428139

मुख्यालय:

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

विश्वेश्वरपुरा क्षेत्र

विभूती रोड,

गोमती नगर, देहरादून,

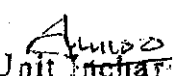
फोन नं. 0522 2392572, 2392581

फैक्स: 0522 239258

ANALYSIS OF RATES.

(1)	Basic plinth area rates for framed structure Buildings up to 6storeys.	Rs.	5376.00 (A)
(2)	Add. For Earth quake resistance.	Rs.	325.00
(3)	Add. For Internal water supply & Sanitary Work @ 15% of (A).	Rs.	806.40
(4)	Add. For External water supply and Sanitary Work @ 5% of (A).	Rs.	268.80
(5)	Add. For Power wiring @4% of (A).	Rs.	215.00
(6)	Add. For Extra ceiling height above 2,90Mtr.	Rs.	252.00
(7)	Add. For brick coba treatment @0.5% of (A)	Rs.	266.90
(8)	Add. For contingency @ 2%	Rs.	107.50
(9)	Add. For Internal Electrification @12. 5% of (A)	Rs.	672.00
Total Rs:-			8043.50
LESS: 5% Due to RNN working. (-)			Rs. 402.50
			Rs. 7641.00
ADD. CENTAGE CHARGES OF UP RNN: 11.5%			Rs. 878.70
Total Rs.			8519.70 p. m²


ARE


 Unit Incharge
 U. P. P. M.
 Ganga Shivan
 U. T. Roorkee

Name of work :- Extension of Jawahar Bhawan (94 Rooms)

Details of measurement

A. Ground Floor Plinth Area.	$= 2 \times 28.89 \times 4.73$	$= 273.30 \text{ m}^2$
Passage	$= 2 \times 1/2 \times 28.89 \times 1.14$	$= 32.93 \text{ m}^2$
	$= 2 \times 1/2 \times 28.89 \times 1.68$	$= 48.53 \text{ m}^2$
	$= 2 \times 34.62 \times 4.73$	$= 327.50 \text{ m}^2$
Passage	$= 2 \times 1/2 \times 34.62 \times 1.14$	$= 39.47 \text{ m}^2$
	$= 2 \times 1/2 \times 28.89 \times 1.68$	$= 58.16 \text{ m}^2$
Total		$= 779.89 \text{ m}^2$
Deduction	$= 2 \times 3.16 \times 4.27$	$= 26.98 \text{ m}^2$
	$= 2 \times 2.19 \times 4.27$	$= 18.70 \text{ m}^2$
	$= 1 \times 2.92 \times 4.27$	$= 12.47 \text{ m}^2$
	$= 1 \times 1.95 \times 4.27$	$= 8.33 \text{ m}^2$
Total		$= 66.48 \text{ m}^2$
Net Area		$= 713.41 \text{ m}^2$
B. First Floor Same as Ground Floor		$= 713.41 \text{ m}^2$
C. Second Floor Same as Ground Floor		$= 713.41 \text{ m}^2$
Total Area		$= 2140.23 \text{ m}^2$


ARE

Name of work :- Extension of Jawahar Bhawan (94 Rooms

Abstract of Cost

Cost of Building = 2140.23 X 8519.00 = Rs. 1,82,32.615

Say Rs. 182.33 Lacs


ARE


Unit Incharge
U P R N N Ltd
Ganga Bhawan Hostel
IIT, Roorkee



उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED
Muzaffar- Nagar Unit Muzaffar- Nagar (U.P)

NAME OF WORK:- Extension of M.R. CHOPRA AND AZAD WING
48 NO.SUITES in Campus of I.I.T Roorkee Distt
Haridwar (U.A)

COST OF ESTIMATE:- Rs. 232.88 Lacs

NAME OF UNIT:-----

U.P.R.N.N. Ltd
CAMP OFFICE GANGA BHAWAN HOSTEL BLOCK
I.I.T ROORKEE DISTT HARIDWAR (U.A)
Mobile Phone : + 919412231966

अंचल कार्यालय
उत्तराखण्ड
उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड
प्रथम तल ई 34ए नेहरू कालोनी
देहरादून 218001
First Floor 2668139 कार्यालय
E- 34 NEHRU COLONY 2628139(O)
DEHRADUN/ 218001

मुख्यालय:
उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड
विश्वेश्वरय्या भवन
विभूती खण्ड
गोमती नगर, लखनऊ
फैक्स: 0522,239258

ANALYSIS OF RATES.

(1)	Basic plinth area rates for framed structure Buildings up to 6storeys.	Rs.	5376.00 (A)
(2)	Add. For Earth quake resistance.	Rs.	325.00
(3)	Add. For Internal water supply & Sanitary Work @ 15% of (A).	Rs.	806.40
(4)	Add. For External water supply and Sanitary Work @ 5% of (A).	Rs.	268.80
(5)	Add. For Power wiring @4% of (A).	Rs.	215.00
(6)	Add. For Extra ceiling height above 2,90Mtr.	Rs.	252.00
(7)	Add. For brick coba treatment @0.5% of (A)	Rs.	266.90
(8)	Add. For contingency @ 2%	Rs.	107.50
(9)	Add. For Internal Electrification @12. 5% of (A)	Rs.	672.00
Total Rs:-			8043.50
LESS: 5% Due to RNN working. (-)			Rs. 402.50
ADD. CENTAGE CHARGES OF UP RNN: 11.5%			Rs. 7641.00
			Rs. 878.70
Total Rs.			8519.70 p. m²

ARE

Unit Engineer
U.P. R. N. Co. PM
Ganga Bhawan Ho
IIT, Roorkee

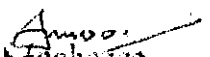
NAME OF WORK- EXTENSION OF HOSTELS (M.R. CHOPRA & AZAD WING) (48 No Suits)

Abstract of cost

Cost of building 2733.72x8519 = 2,32,88,560.60

Say Rs. 232.88 lacs


ARE


U.P. M. Incharge
U.P. R. N. M. Ltd
Ganga Bhawan Hostel
IIT, Roorkee

NAME OF WORK- EXTENSION OF HOSTELS

(M.R. CHOPRA & AZAD WING) (48 No Suits)

Details of Measurement

A	Ground Floor	25.03x7.04	=	176.21 m ²
	Passage	$\frac{1}{2}$ x 25.03 x 1.20	=	15.02 m ²
	Balcony	$\frac{1}{2}$ x 6.69 x 2.20	=	6.69 m ²
	Stair	4.73 x 6.32	=	29.89 m ²
Total				<u>227.81 m²</u>
B	First Floor	Area same as Ground Floor =		227.81 m ²
C	Second Floor	Area same as Ground Floor =		227.81 m ²
D	Third Floor	Area same as Ground Floor =		227.81 m ²
				<u>911.24 m²</u>

for 3-blocks Area = 2733.72 m²
 (w)
ARE



उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED
Muzaffar- Nagar Unit Muzaffar- Nagar (U.P)

**NAME OF WORK:- Extension of GHANAND PANDEY HOSTEL 80 NO.
SUITES in Campus of I.I.T Roorkee Distt Haridwar (U.A)**

COST OF ESTIMATE:- Rs. 397.87 Lacs only

NAME OF UNIT:-----

U.P.R.N.N. Ltd
CAMP OFFICE GANGA BHAWAN HOSTEL BLOCK
I.I.T ROORKEE DISTT HARIDWAR (U.A)
Mobile Phone : + 919412231966

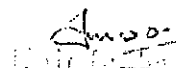
अंचल कार्यालय
उत्तराखण्ड
उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड
प्रथम तल ई 34ए नेहरू कालोनी
देहरादून 218001
First Floor 2668139 कार्यालय
E- 34 NEHRU COLONY 2628139(O)
DEHRADUN/ 218001

मुख्यालय:
उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड
विश्वेश्वरैया भवन
विभूती खण्ड
गोमती नगर, लखनऊ
फैक्स: 0522,239258

ANALYSIS OF RATES.

(1)	Basic plinth area rates for framed structure Buildings up to 6storeys.	Rs.	5376.00 (A)
(2)	Add. For Earth quake resistance.	Rs.	325.00
(3)	Add. For Internal water supply & Sanitary Work @ 15% of (A).	Rs.	806.40
(4)	Add. For External water supply and Sanitary Work @ 5% of (A).	Rs.	268.80
(5)	Add. For Power wiring @4% of (A).	Rs.	215.00
(6)	Add. For Extra ceiling height above 2,90Mtr.	Rs.	252.00
(7)	Add. For brick coba treatment @0.5% of (A)	Rs.	266.90
(8)	Add. For contingency @ 2%	Rs.	107.50
(9)	Add. For Internal Electrification @12.5% of (A)	Rs.	672.00
Total Rs:-			8043.50
LESS: 5% Due to RNN working.		(-)	Rs. 402.50
ADD. CENTAGE CHARGES OF UP RNN: 11.5%			Rs. 7641.00
			Rs. 878.70
		Total Rs.	8519.70 p. m ²


ARE


 PM
 R N N

NAME OF WORK- EXTENSION OF HOSTELS

(GHANAND PANDEY) (80 No Suits)

Details of Measurement

A	Ground Floor(Plinth Area)	4.61x7.05	=	32.50 m ²
	Toilet	1.55x3.89	=	6.03 m ²
	Total			<u>38.53 m²</u>
	Total 10 No Room area	10x38.53	=	385.30m ²
	Corridor	38x2.00	=	60.00 m ²
		4x4.45x1.60	=	28.80 m ²
		$\frac{4x3.50 + 2}{2} \times 2$	=	22.00 m ²
	Entrance	8.5x5.20	=	44.20 m ²
		2.00x2.50	=	5.00 m ²
	Stair	5.00x3.20	=	16.00 m ²
	Sunshed	$\frac{1}{2} \times 10 \times 5 \times 0.60$	=	15.00 m ²
		$\frac{1}{2} \times 10 \times 2.5 \times 0.60$	=	7.50 m ²
	Total		=	<u>583.80 m²</u>
B	First Floor	Area same as Ground Floor	=	583.80 m ²
C	Second Floor	Area same as Ground Floor	=	583.80 m ²
D	Third Floor	Area same as Ground Floor	=	583.80 m ²
	Area of One Block (A+B+C+D)		=	2335.20 m ²
	Area of two Blocks		=	4670.40 m ²



ARE

NAME OF WORK- EXTENSION OF HOSTEL
(GHANAND PANDEY) (80 No Suits)

Abstract of Cost

Cost of two Blocks = 4670.40 X 8519.00 = Rs. 3,97,87,137.60
Say Rs. 397.87 Lacs


ARE


Unit (PMarge)
U.P. R. M. N. Ltd.
Ganga Bhawan Host
I.I.T., Roorkee



उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED
Muzaffar- Nagar Unit Muzaffar- Nagar (U.P)

**NAME OF WORK:- Construction of 64 No Type –“C” Residences in Campus of
I.I.T Roorkee in Distt Haridwar (U.A)**

COST OF ESTIMATE:- Rs. 498.60 Lacs

NAME OF UNIT:-----

U.P.R.N.N. Ltd
CAMP OFFICE GANGA BHAWAN HOSTEL BLOCK
I.I.T ROORKEE DISTT HARIDWAR (U.A)
Mobile Phone : + 919412231966

अंचल कार्यालय
उत्तराखण्ड
उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड
प्रथम तल ई 34ए नेहरू कालोनी
देहरादून 218001
First Floor 2668139 कार्यालय
E- 34 NEHRU COLONY 2628139(O)
DEHRADUN/ 218001

मुख्यालय:
उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड
विश्वेश्वरय्या भवन
विभूती खण्ड
गोमती नगर, लखनऊ
फैक्स: 0522,239258

ANALYSIS OF RATES.

(1)	Basic plinth area rates for framed structure Buildings up to 6storeys.	Rs.	5376.00 (A)
(2)	Add. For Earth quake resistance.	Rs.	325.00
(3)	Add. For Internal water supply & Sanitary Work @ 15% of (A).	Rs.	806.40
(4)	Add. For External water supply and Sanitary Work @ 5% of (A).	Rs.	268.80
(5)	Add. For Power wiring @4% of (A).	Rs.	215.00
(6)	Add. For Extra ceiling height above 2,90Mtr.	Rs.	252.00
(7)	Add. For brick coba treatment @0.5% of (A)	Rs.	266.90
(8)	Add. For contingency @ 2%	Rs.	107.50
(9)	Add. For Internal Electrification @12. 5% of (A)	Rs.	672.00
Total Rs:-			8043.50
LESS: 5% Due to RNN working.			(-) Rs. 402.50
			Rs. 7641.00
ADD. CENTAGE CHARGES OF UP RNN: 11.5%			Rs. 878.70
Total			Rs. 8519.70 p. m²

ARE

~~Charge~~
 100% Charge
 100% of PM Ltd
 100% of PM Ltd
 100% of PM Ltd
 100% of PM Ltd

Name of work :- Construction of (C) Category Residences (64 Nos.)

A. Ground Floor

Plinth Area	2 X 7.09 X 20.53 (Outer to Outer)	=	291.11m ²
Kitchen Part	2 X 2X 0.60X 2.29	=	5.49 m ²
	2 X 1.53 X 11.06	=	33.84 m ²
Stair	2 X 7.02 X 1.03	=	14.46 m ²
			344.90 m ²
Deduction	2 X 1.23 X 1.75	(-)	4.30 m ²
			340.60 m ²
Balcony/Projection	4 X 4.2 X 1.50	=	25.20 m ²
Total		=	365.80m2

B First Floor

Same Area of ground Floor	=	365.80 m ²
C. Second Floor Same as first Floor	=	365.80 m2
D. Third Floor Same as first Floor	=	365.80 m2
Total (A + B + C + D)	=	1463.20 m2

In one block 16 No Residences

Total 4 block will be required for 64 Nos.

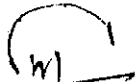
41
ARE

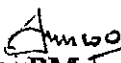
NAME OF WORK- Construction of (C) Categor Residences (64 Nos.)

Abstract of Cost

Cost of Building = 4 X 1463.20 X 8519.00 = Rs. 4,98,60,003.2

Say Rs. 4,98.60 Lacs


ARE


Ud PM Cha
U.P. R. H. N
Ganga Sharda
I.L.T., Roos



उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED
Muzaffar - Nagar Unit Muzaffar-Nagar (U.P)

NAME OF WORK:- Construction of 80 No Type – "D " Residence in Campus of I.I.T Roorkee in Distt Haridwar (U.A)

COST OF ESTIMATE :--- Rs 297. 08Lacs

NAME OF UNIT:-----

U. P. R. N. N. Ltd
CAMP OFFICE GANGA BHAWAN HOSTEL BLOCK
I.I.T ROORKEE DISTT HARIDWAR (U.A)
Mobile Phone : + 91 9412231966

अधिल कार्यालय:

जयपुर,

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

प्रथम मंजरी 349, बेलवा कान्हाजी

मुम्बई - 400 001

पिनकोड - 400 001

1-34, NEHRU COLONY 2628139 (नैनीताल)

DEHRADUN-248139

मुख्यालय:

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

विश्वेश्वरय्या भवन

विभूती मार्ग,

सोमनाथ नगर, लखनऊ,

पिनकोड - 226 002

फैक्स: 0522,239258

ANALYSIS OF RATES. (For C & D RESIDENCES)

(1)	Basic plinth area rates for Residential framed structure Buildings	Rs.	5664.00 (A)
(2)	Add. For Earth quake resistance.	Rs.	504.00
(3)	Add. For Internal water supply & Sanitary	Rs.	308.00
(4)	Add. For External Electrification.	Rs.	283.00
(5)	Add. For brick coba treatment @0.5% of (A)	Rs.	28.30
(6)	Add. For External water supply & sanitary 5% of (A)	Rs.	283.00
(7)	Add. For Addl ceiling height more than 2.90 Meter.	Rs.	144.90
(8)	Add. For contingency @ 2%	Rs.	113.00
(9)	Add. For Internal site Development, @5%	Rs.	283.00

Total Rs:-

7610.00

LESS: 5% Due to RNN working.

(-)

Rs. 380.00

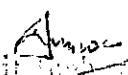
Rs. 7230.00

ADD. CENTAGE CHARGES OF UP RNN: 11.5%

Rs. 831.45

Total Rs. 8061.45 p. m²


ARE


 Unit In-charge
 U.P. N. PM
 Ganga Sagar Hos
 (U.P.), Roorkee

Construction of D Category Residences (80 No.)

Details of Measurement

A. Ground Floor	Plinth Area	2 X 6.44 X 13.92	=	179.29 m ²
(4) No.	Stair	2 X 1.15 X 9.09	=	20.91 m ²
			=	200.20 m²
	Ded, Near Room.	4 X .87 X 2.93	=	(-) 10.19 m ²
	. Ded, Near kitchen	2 X 1.51 X 1.90	=	(-) 5.74
			=	184.27 m²
	Total		=	184.27 m²
B. First Floor	Same Area i.e.		=	184.27 m ²
C. Second Floor	Same Area i.e.		=	184.27 m ²
D. Third Floor	Same Area i.e.		=	184.27 m ²
Total (A + B + C + D)			=	737.08 m²
In one block 16 No Residences				
For 80 no. Residences 5 Block will be required				



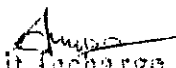
ARE

Construction of D Category Residences (80 No.)

Abstract of cost

1. Cost of 5 Blocks (80 No) = $5 \times 737.08 \times 8061.00$ Rs. 2,97,08,009.00
Total Rs. 2,97,08,009.00
Say Rs. 297.08 Lacs


ARE


Unit Incharge
U.P. R. N. O. Lt.
Ganga Sharan Ho.
IIT, Roorkee



उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED
Muzaffar - Nagar Unit Muzaffar-Nagar (U.P)

NAME OF WORK:- Extension of Continuing Education Guest House Building in
Campus I.I.T Roorkee in Distt Haridwar (U.A)

COST OF ESTIMATE :--- Rs 147.75 Lacs only

NAME OF UNIT:-----

U. P. R. N. N. Ltd
CAMP OFFICE GANGA BHAWAN HOSTEL BLOCK
I.I.T ROORKEE DISTT HARIDWAR (U.A)
Mobile Phone : + 91 9412231966

ऑफिस कार्यालय:

उत्तर प्रदेश,

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

पथक नं. 340, नेहरू कॉलोनी

हरिद्वार - 2428139

HR 111-0021 2628139 (निवास)

1-34, NEHRU COLONY 2628139 (निवास)

DIHRADUN-2428139

मुख्यालय:

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

विश्वेश्वरगंज नगर

विभूती मण्डल

गोमती नगर, लखनऊ,

पिनकोड नं. 201002/2023/2310581

फैक्स: 0522,239238

ANALYSIS OF RATES.

(1)	Basic plinth area rates for Non- residential Buildings (Class-A) buildings framed structure.	Rs.	5880.00 (A)
(2)	Add. For Earth quake resistance.	Rs.	504.00
(3)	Add. For Internal water supply & Sanitary Work @6% of (A).	Rs.	352.80
(4)	Add. For External water supply and Sanitary Work @ 5% of (A).	Rs.	294.00
(5)	Add. For Internal Electrification @12.5% Of (A).	Rs.	735.00
(6)	Add. For Power wiring @ 4% of (A).	Rs.	235.00
(7)	Add. For Extra ceiling height above 2,90Mtr.	Rs.	252.00
(8)	Add. For brick coba treatment @0.5% of (A)	Rs.	29.40
(9)	Add. For contingency @ 5%	Rs.	294.00
(10)	Add. For Internal site development @ 5%	Rs.	428.80

Total Rs:-

9005.20

LESS: 5% Due to RNN working.

(-)

Rs. 450.20

Rs. 8555.00

ADD. CENTAGE CHARGES OF UP RNN: 11.5%

Rs. 983.80

Total Rs. 9538.80 p. m²

41
ARE

Unit Incharge
U.P. & P.M.L.
Ganga Sarda Ho
U.P. Sorker

Name of work :-Extension of Continuing Education Guest House

Details of Measurement

A. FIRST FLOOR PLINTH AREA

Hall.	16.07 X 11.61	=	186.57 m ²
Pantry	4.33 X 4.23	=	18.31 m ²
Lobby.	11.85 X 2.90	=	34.36 m ²
Room.	30.48 X 11.34	=	345.64 m ²
Toilet.	6 X 4.23 X 3.20	=	81.21 m ²
	6 X 1.83 X 6.00	=	65.88 m ²
Drawing Room/ Toilet	11.34 X 3.89	=	44.11 m ²
			<u>776.08 m²</u>

B. SECOND FLOOR PLINTH AREA SAME AS ABOVE = 776.08 m²

W/
ARE

PM

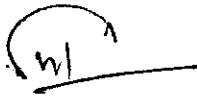
Name of work :-Extension of Continuing Education Guest House

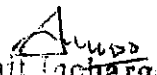
Abstract of cost

COST OF BUILDING

1.	First Floor	=	776.08 X 9538.00	=	Rs. 73,72,760.00
2.	Second Floor	=	776.08 X 9538.00	=	Rs. 73,72,760.00
					<u>1,47,45,520.00</u>

Say Rs. 147.45 Lacs


ARE


Unit Incharge
U.P. 2. PMN. 7
Ganga Bhawan H
I.I.T., Roorke



उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED
Muzaffar - Nagar Unit Muzaffar-Nagar (U.P)

**NAME OF WORK:- Extension of Continuing Education Office in Campus
of I.I.T Roorkee in Distt Haridwar (U.A)**

COST OF ESTIMATE :--- Rs 28.87 Lacs only

NAME OF UNIT:-----

U. P. R. N. N. Ltd
CAMP OFFICE GANGA BHAWAN HOSTEL BLOCK
I.I.T ROORKEE DISTT HARIDWAR (U.A)
Mobile Phone : + 91 9412231966

ऑफिस कार्यालय:

उत्तर प्रदेश,

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

प्रथम बल ई 34ए, नेहरू कॉलोनी

हरिद्वार-248001

FIRST FLOOR 2628139 कार्यालय

INDIAN FIBRE COLONY 2628139 (निवासी)

DEHRADUN-2428139

मुख्यालय:

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

विश्वेश्वरगंगा भवन

विभूती खण्ड,

गोमती नगर, लखनऊ,

गोमती नगर 0522 2392578 2392581

फैक्स: 0522,239258

ANALYSIS OF RATES.

(1)	Basic plinth area rates for Non- residential Buildings (Class-A) buildings framed structure.	Rs.	5880.00 (A)
(2)	Add. For Earth quake resistance.	Rs.	504.00
(3)	Add. For Internal water supply & Sanitary Work @6% of (A).	Rs.	352.80
(4)	Add. For External water supply and Sanitary Work @ 5% of (A).	Rs.	294.00
(5)	Add. For Internal Electrification @12.5% Of (A).	Rs.	735.00
(6)	Add. For Power wiring @ 4% of (A).	Rs.	235.00
(7)	Add. For Extra ceiling height above 2,90Mtr.	Rs.	252.00
(8)	Add. For brick coba treatment @0.5% of (A)	Rs.	29.40
(9)	Add. For contingency @ 5%	Rs.	294.00
(10)	Add. For Internal site development @ 5%	Rs.	428.80

Total Rs:-	<u>9005.20</u>
-------------------	-----------------------

LESS: 5% Due to RNN working.	(-)	Rs. 450.20
------------------------------	-----	------------

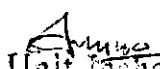
Rs. 8555.00

ADD. CENTAGE CHARGES OF UP RNN: 11.5%

Rs. 983.80

Total Rs. 9538.80 p. m²

WJ
ARE


 Joint Incharge
 U.P.R. N. PM L
 Ganga Bhawan Ho
 I.T., Roorkee

Name of work :- Extension of Continuing Education office.

Details of Measurements

A. First Floor Plinth Area	=	8.76 X 7.43	=	65.08 m ²
	=	3.83 X 4.19	=	16.05 m ²
	=	8.69 X 21.92	=	190.48 m ²
Stair	=	7.8 X 3.28	=	25.58 m ²
Projection	=	½ X 21.92 X 50	=	5.48 m ²

Total = 302.67 m²

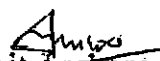

ARE

Name of work :- Extension of Continuing Education off

Abstract of Cost

Cost of Building = 302.67 X 9538.00 = Rs. 2,8,86,866.40
Say 28.87 Lacs


ARE


Unit Incharge
U P R **PM** Ltd
Ganga Shilpa Hos
IIT, Roorkee



UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED

MUZAFFAR-NAGAGUNIT MUZAFFAR -NAGAR (U.P)

**NAME OF WORK:- Construction of Covering of open drain work in campus of
I.I.T Roorkee in Distt Haridwar (UA)**

COST OF ESTIMATE :- Rs 95.39 Lacs only

CAMP OFFICE:-----

**U. P. R. N. N. Ltd
I.I.T ROORKEE ,
GANGA BHAWAN HOSTEL CAMPUS
ROORKEE (HARIDWAR)
PPP Mobile Phone : + 91 9412231966**

**G.M Office:-
U.P Rajkiya Nirman Nigam Ltd
1st floor E-34A Nehru colony
Dehradun (U.A) - 248001**

**Head office:-
U.P Rajkiya Nirman
Vishwariya Bhawan Vibhuti Khand
Gomati Negara Lucknow (U.P)**

UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED
MuZAFFAR _ NAGAR UNIT MUZAFFAR _ NAGAR (U.P)

Phone No : - 0132-2762863 , Mobile phone +919412231966

NAME OF WORK : - Construction of Covering open Drain work in campus of I.I.T Roorkee

ANALYSIS OF RATE

- (1) M150 Brick work in foundation up to plinth with mix motor 1:4 cement 6 Coarse sand including supply of all materials labour T&P etc complete
Take a Quantity 1.00 M³

- | | |
|--|--------------|
| (a) Cement 1.9 Bag @ Rs 230.00 per Bag | = Rs 437.00. |
| (b) Coarse Sand 0.27 M ³ @ Rs 925.00 per M ³ | = Rs 249.75 |
| (c) Bricks 460 No @ Rs 2350/1000 No of Brick Qty rate | = Rs 1081.00 |
| (d) Add T & P Sundries L.S | = Rs 25.00 |
| (e) Labour charge for doing Brick work
1.00M ³ @ Rs 300.00 per cubic metre | = Rs 300.00 |

(f) Add 1.5 % water charges

Rs 2092.75
Rs 31.39

Rs 2124.14

Say Rupees 2124.14 M³

- (2) Supply and fixing Pre cast concrete Main Hole cover of size 560mmx560mm heavy duty including supply of all materials labour T&P etc complete

- | | | |
|-----|--|--------------|
| (a) | Cost of Pre cast Concrete Main hole 560mmx560mm
Heavy size as per market rate | = Rs 1350.00 |
| (b) | Add Vat 12.5 % | = Rs 168.75 |
| (c) | Labour charge for fixing of M.H
560mmx560mm with fitting etc complete | = Rs 100.00 |

Rs 1618.75 Each

~~100~~
100


 कर्णार्थी ग. तारावी
 उ. र. ग. तारावी विद्यापीठ दिवस वि.
 गंगा प्रकाश हा. १२२२
 आई. आई. टी. १, २, ३

Say Rupees 59.96 Lcs only

UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED
MUZAFFAR NAGAR UNIT MUZAFFAR NAGAR (U.P)

PHONE No: - 0132- 2762863

Name of work :- Construction of Covering of open drain work in campus of I.I.T
Roorkee

ANALYSIS OF RATE

(1) Cartage of earth from out side of the campus up to a distance 10.00 K.M including excavation, loading, unloading, compacting etc complete.

(a) Excavation charges as per U.P.P.W.D Schedule of rate = Rs 25.00 Per Cubic Metre

(b) Cartage of earth

(1)	1 st K.M	1x44.25	= Rs 44.25
(2)	2 nd to 3 rd K.M	2x7.90	= Rs 15.80
(3)	4 th to 5 th K.M	2x5.65	= Rs 11.30
(4)	6 th to 10 th K.M	5x 4.65	= Rs 22.25

(c) Loading and Unloading charges as per P.W.D Schedule
itm no 235 (a) = Rs 19.50

(d) Labour charges for back filling including compacting
etc complete

1.0 Cubic Metre @ Rs 30.00 per Cubic Metre = Rs 30.00

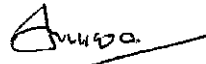
(e) Add 1.5 % water charges

Rs 168.10
Rs 2.52

Rs 170.62

Say Rupees 170.60 per cubic metre


2/10



कार्य प्रमाणित

उ.प्र. राजकीय निर्माण निगम लि.,

मुजफ्फर नगर, उ.प्र.

अ. ई. अ. ई. २१०, २२०

Name of work :--Construction of Covering of open drain work at I.I.T Rooorkee in Distt Haridwar (U.A)

Measurement of open drain work

(1) Earth work in Excavation in foundation trenches
etc complete

for Drain work

$$2 \times 5 \times 50.00 \times 0.90 \times 1.60 = 720.00 \text{ M}^3$$

$$2 \times 46.00 \times 0.90 \times 1.60 = 132.48$$

$$2 \times 49.00 \times 0.90 \times 1.60 = 141.12$$

$$2 \times 4 \times 50.00 \times 0.90 \times 1.60 = 576.00$$

$$2 \times 10 \times 0.90 \times 1.60 = 28.80$$

$$\text{-----}$$

$$1598.40 \text{ M}^3$$

(2) Laying P:C C 1:3:6 with fine sand of f.M 1.25
with mix 1cement 3 Fine Sand 6 Stone grit of 40mm size
etc complete

For Drain work

$$1 \times 9 \times 50.00 \times 4.35 \times 0.10 = 195.75 \text{ M}^3$$

$$1 \times 49.00 \times 4.35 \times 0.10 = 21.31$$

$$1 \times 10.00 \times 4.35 \times 0.10 = 4.35$$

$$\text{-----}$$

$$221.41 \text{ M}^3$$

(3) M150 Brick work in foundation up to plinth with
mix 1:6 mortar 1cement 6 fine sand of F.M 1.25
etc complete

Wall both side of Drain

$$2 \times 9 \times 50.00 \times 0.575 \times 0.575 = 297.56 \text{ M}^3$$

$$2 \times 49.00 \times 0.575 \times 0.575 = 32.40$$

$$2 \times 10.00 \times 0.575 \times 0.575 = 6.61$$

$$2 \times 9 \times 50.00 \times 0.46 \times 0.15 = 62.10$$

$$2 \times 49.00 \times 0.46 \times 0.15 = 6.76$$

$$2 \times 10.00 \times 0.46 \times 0.15 = 1.38$$

$$2 \times 9 \times 50.00 \times 0.345 \times 0.38 = 117.99$$

$$2 \times 49.00 \times 0.345 \times 0.38 = 12.85$$

$$2 \times 10.00 \times 0.34 \times 0.38 = 2.62$$

$$2 \times 9 \times 50.00 \times 0.23 \times 0.20 = 41.40$$

$$2 \times 49.00 \times 0.23 \times 0.20 = 4.51$$

$$2 \times 10.00 \times 0.23 \times 0.20 = 0.92$$

In bottom of Drain brick work $1 \times 9 \times 50.00 \times 3.00 \times 0.08 = 108.00$

$$1 \times 49.00 \times 3.00 \times 0.08 = 11.76$$

$$1 \times 10 \times 3.00 \times 0.08 = 2.40$$

$$2 \times 9 \times 50.00 \times 1.47 \times (0.30 + 0.73) / 2 = 681.35$$

$$2 \times 49.00 \times 1.47 \times (0.30 + 0.73) / 2 = 74.19$$

$$2 \times 10.00 \times 1.47 \times (0.30 + 0.73) / 2 = 15.14$$

$$\text{-----}$$

$$1479.94 \text{ M}^3$$

Handwritten signature
A2K

- (4) Laying R: C :C 1:1.5 :3 mix 1 cement , 1.5 Coarse ,
3 stone grit of 20mm size stone grit with centering
shuttering but excluding steel reinforcement with supply
of all materials lab our etc complete

$$\text{For Slab } 1 \times 9 \times 50.00 \times 3.46 \times 0.25 = 389.25 \text{ M}^3$$

$$1 \times 49.00 \times 3.46 \times 0.25 = 42.39$$

$$1 \times 10.00 \times 3.46 \times 0.25 = 8.65$$

$$\text{for beam } 1 \times 2 \times 9 \times 50.00 \times 0.23 \times 0.20 = 41.40$$

$$1 \times 2 \times 49.00 \times 0.23 \times 0.20 = 4.51$$

$$1 \times 2 \times 10.00 \times 0.23 \times 0.20 = 0.92$$

$$\text{-----}$$

$$487.12 \text{ M}^3$$

- (5) Steel reinforcement cutting bending and placing
in position etc complete

$$R; C :C \text{ Qty} = 487.12 \text{ M}^3$$

$$\text{Quantity of Steel} = (487.12 \times 1.75 \times 7850) / 100$$

$$= 66,918.11 \text{ Kg}$$

$$\text{or } 66.92 \text{ MT}$$

- (6) Laying C;C 1;2;4 1 cement 2 Coarse , 4 stone
grit of 20mm size with supply of all materials
lab our etc complete

$$1 \times 9 \times 50.00 \times 1.00 \times (0.25 + 0.10) / 2 = 78.75 \text{ M}^3$$

$$1 \times 49.00 \times 1.00 \times (0.25 + 0.10) / 2 = 8.58$$

$$1 \times 10.00 \times 1.00 \times (0.25 + 0.10) / 2 = 1.75$$

$$\text{-----}$$

$$89.08 \text{ M}^3$$

- (7) Cartage of earth from out side of campus with in a distance
10.00 KM including loading unloading compacting
watering remerging etc complete

$$2 \times 9 \times 50.00 \times 1.00 \times 0.30 = 270.00 \text{ M}^3$$

$$2 \times 49.00 \times 1.00 \times 0.30 = 29.40$$

$$2 \times 10.00 \times 1.00 \times 0.30 = 6.00$$

$$\text{-----}$$

$$305.00 \text{ M}^3$$

- (8) Laying 40 mm thick plain cc flooring with
floating coat of neat cement finish etc complete

$$1 \times 9 \times 50.00 \times 0.30 = 135.00 \text{ M}^2$$

$$1 \times 49.00 \times 0.30 = 14.70$$

$$1 \times 10.00 \times 0.30 = 3.00$$

$$1 \times 9 \times 50.00 \times 3.30 = 1485.0$$

$$1 \times 49.00 \times 3.30 = 161.70$$

$$1 \times 10.00 \times 3.30 = 32.00$$

$$\text{-----}$$

$$1831.40 \text{ M}^2$$

Handwritten signature
A.G.E.

- (9) 12 mm thick plaster with mix 1:4 1cement
 ,4 fine sand of F.M 1.25 etc Supply of all
 materials labour etc complete

Bearing plaster	$2 \times 9 \times 50.00 \times 0.23 = 207.00 \text{ M}^2$
	$2 \times 49.00 \times 0.23 = 22.54$
	$2 \times 10.00 \times 0.23 = 4.60$
in side plaster	$1 \times 9 \times 50.00 \times 3.00 = 1350.00$
	$1 \times 49.00 \times 3.00 = 147.00$
	$1 \times 10.00 \times 3.00 = 30.00$
	$2 \times 9 \times 50.00 \times 1.60 = 1440.00$
	$2 \times 49.00 \times 1.60 = 156.80$
	$1 \times 10.00 \times 1.60 = 1.60$
out side plaster	$2 \times 9 \times 50.00 \times 0.30 = 270.00$
	$2 \times 49.00 \times 0.30 = 29.40$
	$2 \times 10.00 \times 0.30 = 6.00$

 3679.34 M²

- (10) Finishing walls with water proofing cement paint
 of approved make and quality two coat to give
 an even shade etc complete

out side plaster	$2 \times 9 \times 50.00 \times 0.30 = 270.00$
	$2 \times 49.00 \times 0.30 = 29.40$
	$2 \times 10.00 \times 0.30 = 6.00$

 305.4M²

- (11) Supply and fixing Pre cast concrete Main hole
 Cover of size 550mm x560mm heavy duty size
 Including supply of all materials labour T & P
 etc complete

Main hole for drain 1x32N0 = 32 N0

ASh
 228

U.P.Rajkiya Nirman Nigam Ltd Muzaffar Nagar Unit Muzaffar – Nagar (U.P)

**Name of work :-- Construction of Covering of open drain work at I.I.T Roorkee
ABSTRACT OF COST**

S.NO	Particular of item	Qty	Rate	Amount (in lacs)
(1)/162	Earth work in Excavation in foundation trenches etc complete	1598.4 M3	Rs 30.00	Rs 0.48 Lacs
(2)/173	Laying P:C C 1:3:6 with fine sand of f.M 1.25 with mix 1cement 3 Fine Sand 6 Stone grit of 40mm size etc complete	221.41 M3	Rs 1710.00	Rs 3.79Lacs
(3)/ Analysis	M150 Brick work in foundation up to plinth with mix 1:4 mortar 1cement 4 Coarse sand including supply of all materials labour T & P etc complete	1479.94 M3	Rs 2124.14.	Rs 31.44 Lacs
(4)/181	Laying R: C :C 1:1.5 :3 mix 1cement , 1.5 Coarse , 3 stone grit of 20mm size stone grit with centering shuttering but excluding steel reinforcement with supply of all materials lab our etc complete	487.12M3	Rs4166.00	Rs 20.29 Lacs
(5)/314	Steel reinforcement cutting bending and placing in position etc complete	66918.11Kg	Rs 38.30	Rs 25.63 Lacs
(6)/282	Laying C:C 1;2;4 1cement 2 Coarse , 4 stone grit of 20mm size with supply of all materials lab our etc complete	89.08M3	Rs2380.00	Rs 2.12 Lacs
(7) Analysis	Cartage of earth from out side of campus with in a Distance 10.00 KM including loading unloading Compacting watering remerging etc complete	305.00M3	Rs 170.60	Rs 0.52 Lacs
(8)/605	Laying 40 mm thick plain cc flooring with floating coat of neat cement finish etc complete	1831.40M2	Rs 123.00	Rs 2.25 Lacs
				Rs 86.52 Lacs

[Signature]
A.D.E

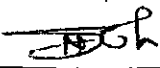
[Signature]
प्रमाणित
उप. राजकीय निर्माण निगम लि.
मुख्यालय, मुजफ्फरनगर
उ.प्र.

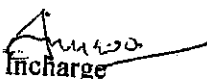
U.P.Rajkiya Nirman Nigam Ltd Muzaffar Nagar Unit Muzaffar - Nagar (U.P)

Name of work :---Construction of Covering of open Drain work at I.I.T Roorkee in
Distt Haridwar (U.A)

ABSTRACT OF COST

S.NO	Particular of item	Qty	Rate	Amount (in lacs)
(9) / 367	12 mm thick plaster with mix 1:4 cement 4 fine sand of F.M 1.25 etc Supply of all materials labour etc complete			B / F Rs 86.52 Lacs
		3679.34M2	Rs 79.00	Rs 2.91 Lacs
(10) / 662	Finishing walls with water proofing cement paint of approved make and quality two coat to give an even shade etc complete			
		305.40M2	Rs 33.00	Rs 0.10 lacs
(11) / Analysis	Supply and fixing Pre cast concrete Main hole Cover of size 550mm x 560mm heavy duty size Including supply of all materials labour T & P etc complete			
		32N0	Rs 1618.75	Rs 0.52 lacs
(12) Less 5 % due to UPRNN Ltd Working (--)				Rs 90.05 Lacs Rs 4.50 Lacs
(13) Add 11.5 % U.P.R.NN Ltd Centage Charges (+)				Rs 85.55 Lacs Rs 9.84 Lacs
				Rs 95.39 Lacs


A.R.E
UPRNN Ltd
Roorkee


Unit Incharge
UPRNN Ltd
Roorkee



उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED
Muzaffar - Nagar Unit Muzaffar-Nagar (U.P)

**NAME OF WORK:- Extension of A H E C Building in Campus I.I.T Roorkee
in Distt Haridwar (U.A)**

COST OF ESTIMATE :--- Rs 56.18 Lacs only

NAME OF UNIT:-----

U. P. R. N. N. Ltd
CAMP OFFICE GANGA BHAWAN HOSTEL BLOCK
I.I.T ROORKEE DISTT HARIDWAR (U.A)
Mobile Phone : + 91 9412231966

अपिल कार्यालय:

उत्तर प्रदेश,

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

प्रथम मंजरी 340, मेरठ कानून

महाराष्ट्र 208001

CHRS 111-001

2628139 कार्यालय

1-31, NEHRU COLONY 2628139 (निवासी)

DEHRADUN-2428139

मुख्यालय:

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

विश्वेश्वरगंगा भवन

निगुली मण्डल,

गोमती नगर, लखनऊ,

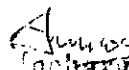
पिनकोड नगर 0522 2392572 2392581

फैक्स: 0522,239258

ANALYSIS OF RATES.

(1)	Basic plinth area rates for framed structure Buildings up to 6storeys.	Rs.	5376.00 (A)
(2)	Add. For Earth quake resistance.	Rs.	325.00
(3)	Add. For Internal water supply & Sanitary Work @ 15% of (A).	Rs.	806.40
(4)	Add. For External water supply and Sanitary Work @ 5% of (A).	Rs.	268.80
(5)	Add. For Power wiring @4% of (A).	Rs.	215.00
(6)	Add. For Extra ceiling height above 2,90Mtr.	Rs.	252.00
(7)	Add. For brick coba treatment @0.5% of (A)	Rs.	266.90
(8)	Add. For contingency @ 2%	Rs.	107.50
(9)	Add. For Internal Electrification @12. 5% of (A)	Rs.	672.00
Total Rs:-			8043.50
LESS: 5% Due to RNN working.		(-)	Rs. 402.50
ADD. CENTAGE CHARGES OF UP RNN: 11.5%			Rs. 7641.00
			Rs. 878.70
		Total Rs.	8519.70 p. m²

ARE


 Unit Incharge
 O.P.A.M.N.I.
 PM
 Ganga Bhawan
 IIT, Roorkee

Name of work :- Extension of AHEC

Details of Measurements

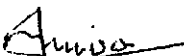
Second Floor Plinth Area.	=	40.30 X 14.86	=	598.86 m ²
Over windows	=	14.63 X 0.60	=	8.78 m ²
	=	40.30 X 0.60	=	24.18 m ²
	=	18.87 X 0.60	=	11.32 m ²
Mumty	=	3.89 X 7.23	=	28.12 m ²

Total = 671.26 m²

Ded, Near Porch	=	6.90 X 1.70 (-)	=	11.73 m ²
-----------------	---	-----------------	---	----------------------

Total = 659.53 m²


ARE


PM

Name of work :- Extension of AHEC

Abstract of cost

Cost of Extension work in AHEC = 659.53 X 8519.00 = 5618536.00
Say Rs. = 56.18 Lacs


ARE


Unit Incharge
UP R N. L.
Ganga Bhawan H
IIT, Roorkee