

**भवन एवं निर्माण कार्य समिति की
इक्कसवीं बैठक का कार्यवृत्त**

**MINUTES OF THE 21th MEETING
OF THE BUILDING & WORKS COMMITTEE**

4th DECEMBER 2008



**भारतीय प्रौद्योगिकी संस्थान रुड़की
रुड़की — २४७ ६६७ (भारत)**

**INDIAN INSTITUTE OF TECHNOLOGY ROORKEE
ROORKEE - 247 667 (INDIA)**

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE
ROORKEE 247 667



INDEX

Item No.	Particulars	Page(s)
21.1.0	To confirm the minutes of the 20 th meeting of the Building & Works Committee held on 9 th May 2008 and emergent meeting of the local members of the B&WC held on 18 th September 2008, respectively .	1
21.2.0	To receive a report on the action taken to implement the decisions of the 20 th meeting of the Building & Works Committee held on 9 th May 2008 and emergent meeting of the local members of the B&WC held on 18 th September 2008, respectively.	2
21.3.1	To consider the construction of a New Girls' Hostel (800 capacity) at IIT Roorkee.	2
21.3.2	To consider the extension of various departments due to expected increase in intake of the students as proposed by Prof. H.O. Gupta's Committee.	2
21.3.3	To consider the revised estimate of Rs.304.63 lacs for extension of the M.R.Chopra/Azad Wing.	3
21.3.4	To consider the estimate of Rs.22.18 lacs for construction of an additional toilet block in the Cautley Bhawan.	3
21.3.5	To consider the estimate of Rs.2.63 lacs for providing aluminium doors and windows in the extension of Training & Placement Building.	3
21.3.6	To consider the revised cost of the Library Building constructed by the CPWD.	4

21.3.7	To consider the revised cost of the Guest House building constructed by the CPWD.	4
21.3.8	To consider the revised cost of the Multistoried faculty residences Building constructed by the CPWD.	5
21.3.9	To consider the estimate for the additional work of lifts, DG Set and LT Panel in the construction of Multistoried Boys Hostel, being constructed by the CPWD.	6
21.3.10	To consider the request of IITR employees union for the construction of one additional room with balcony at first, second and third floor of the Solani Kunj residences (Block No. 190-200).	6
21.3.11	To consider the revised cost for construction of the Lecture Hall Complex at the IIT Roorkee Campus, submitted by the NBCC Ltd..	6
21.3.12	Progress report of the on going/ completed Major Works.	6
21.3.13	To consider the revised plan of building for the Department of Biotechnology and other Centres.	7
App. 'A'	Preliminary estimate for construction of New Girls Hostel	8-17
App. 'B'	Preliminary estimate for extension of various Departments and Boys Hostel	18-36
App. 'C'	Revised estimate for extension of M.R.Chopra/ Azad Wing	37-42
App. 'D'	Preliminary estimate for construction of an additional block in Cautley Bhawan	43-49
App. 'E'	Estimate for aluminum work in Training & Placement Building	50-54
App. 'F'	Letter No. 58(1)/रू०के०मं०/1740 dated 31.10.2008 of CPWD	55-57
App. 'G'	Letter No. 58(1)/रू०के०मं०/1741 dated 31.10.2008 of CPWD	58-60
App. 'H'	Letter No. 58(1)/रू०के०मं०/1786 dated 10.11.2008 of CPWD	61-80
App. 'I'	Estimate for the additional work of lifts, DG Set and LT Panel in Multistoried Boys Hostel	81-82
App. 'J'	Revised cost for construction of the Lecture Hall Complex of NBCC Ltd.	83-87
App. 'K'	Letter No. NBCC/Roorkee/ IIT/3(1)/2008/20 dated 3.12.2008 of NBCC Ltd.	88-90

INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE
ROORKEE - 247 667

Minutes of the 21st Meeting of the Building & Works Committee held on 4th December 2008 at 12.00 Noon 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 (Estate & Works) | - Member |
| 4. Er. M.S. Chandola, Dy. G.M., UPCL, Roorkee | - Member |
| 5. Prof. H.O. Gupta, Electrical Engineering Department | - Member |
| 6. Prof. P.K. Jain, Mechanical & Indl. Engineering Deptt. | - Member |
| 7. Er. Salek Chand, Institute Engineer | - Member |
| 8. Prof. Surendra Kumar, Dean (Finance & Planning) | - Permanent Invitee |
| 9. Lt. Col. (Retd) A.K. Srivastava, Registrar | - Member Secretary |

A communication was received from Er. B.B. Gupta, Chief Engineering, CPWD, Lucknow for not attending the meeting.

The Chairman, Building & Works Committee (B&WC), welcomed the members to the 21st Meeting of the Committee especially Er. M.S. Chandola, Dy. G.M., Uttarakhand Power Corporation Ltd., Roorkee who was attending the meeting first time.

Deliberations:

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

Item No. 21.1.0: To confirm the minutes of the 20th meeting of the Building & Works Committee held on 9th May 2008 and emergent meeting of the local members of the B&WC held on 18th September 2008, respectively .

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

Item No. 21.2.0 To receive a report on the action taken to implement the decisions of the 20th meeting of the Building & Works Committee held on 9th May 2008 and emergent meeting of the local members of the B&WC held on 18th September 2008, respectively.

Actions taken on the minutes of the 20th meeting of the Building & Works Committee held on 9th May 2008 and emergent meeting of the local members of the B&WC held on 18th September 2008, respectively, as given on pages 2-3 of the agenda were noted with the observation that the work to cover the octagonal open space will be executed by the Estate & Works Division only, in accordance with the decision taken vide Item No. 2 of the Minutes of the emergent meeting of the local members of the Building & Works held on 18th September 2008 .

Item No.21.3.1: To consider the preliminary estimate of Rs. 3300.00 lacs for construction of a New Girls' Hostel (800 capacity) at IIT Roorkee.

The B&WC considered the preliminary estimate submitted by the National Buildings Construction Corporation (NBCC) Ltd. for construction of a New Girls' Hostel (800 capacity) at the Roorkee Campus and decided that the work be assigned to the NBCC Ltd. at the estimated cost of Rs.3300.00 lacs (**Appendix 'A'**). The issue be placed before the Finance Committee and the Board of Governors for according administrative approval and expenditure sanction.

Item No. 21.3.2: To consider the extension of various departments due to expected increase in intake of the students as proposed by Prof. H.O. Gupta's Committee.

The B&WC considered the estimate submitted by the U.P. Rajkiya Nirman Nigam for extension of the Departments of Chemistry, Physics, Electrical Engineering, Electronics & Computer Engineering, Metallurgical & Materials Engineering, Chemical Engineering, Earth Sciences, Paper Technology and extension of the Boys' Hostel (Ganga Bhawan) and decided that the work be assigned to the U.P. Rajkiya Nirman Nigam as under (**Appendix 'B'**):

Sl.No.	Name of Works	Estimated cost
1.	Extension of the Departments	Rs. 450.81 Lacs
2.	Extension of the Ganga Bhawan (192 seats)	Rs. 332.95 lacs

The issue be placed before the Finance Committee and the Board of Governors for according administrative approval and expenditure sanction.

Item No. 21.3.3: To consider the revised estimate of Rs.304.63 lacs for extension of the M.R.Chopra/Azad Wing.

The B&WC considered the revised estimate submitted by the U.P. Rajkiya Nirman Nigam Ltd. for extension of the M.R. Chopra and Azad Wing (48 Suites) due to increase in the plinth area rates and increase of the Mumty area at the 4th floor and decided that the revised estimate of Rs. 304.63 lacs (**Appendix 'C'**) be placed before the Finance Committee and the Board of Governors for according the revised administrative approval and expenditure sanction.

Item No. 21.3.4: To consider the preliminary estimate of Rs.22.18 lacs for construction of an additional toilet block in the Cautley Bhawan.

The B&WC considered the preliminary estimate submitted by the U.P. Rajkiya Nirman Nigam Ltd. for construction of an additional Toilet Block in the Cautley Bhawan and decided that the work be assigned to the U.P.Rajkiya Nirman Nigam Ltd. at an estimated cost of Rs.22.18 lacs (**Appendix 'D'**). The issue be placed before the Finance Committee and the Board of Governors for according administrative approval and expenditure sanction.

Item No.21.3.5: To consider the estimate of Rs.2.63 lacs for providing aluminium doors and windows in the extension of Training & Placement Building.

The B&WC considered the estimate submitted by the U.P. Rajkiya Nirman Nigam Ltd. for providing

aluminium doors and windows for the extension of the Training & Placement Building, and decided that the estimate of Rs. 2.63 lacs, submitted by the UP Rajkiya Nirman Nigam be approved. **(Appendix 'E')**.

Item No.21.3.6: To consider the revised cost of the Library Building constructed by the CPWD.

The B&WC considered the letter No. No.58(1)/
रू०के०मं०/1740 dated 31.10.2008 **(Appendix 'F')** of CPWD requesting for the transfer of an additional amount of Rs.122.83 lacs due to excess expenditure on the construction of the New Library Building and decided that the amount on account of the excess expenditure be transferred to the CPWD since it is within the 10% cost over-run limit, after deducting the balance payment which is due to M/S C.P. Kukreja & Associates, Architect Consultants, amounting to Rs. 12,84,140.00, which will be paid to M/S C.P. Kukreja & Associates directly by the Institute. The breakdown of the amount to be transferred/paid to the CPWD and M/S C.P. Kukreja & Associates, respectively, would be as under:

(a)	Amount to be transferred to the CPWD	Rs.1,09,98,860.00
(b)	Amount to be paid directly to M/S C.P.Kukreja & Associates by the Institute	Rs. 12,84,140.00 -----
	Total	Rs.1,22,83,000.00 -----

The matter be reported to the Finance Committee and the Board of Governors.

Item No. 21.3.7: To consider the revised cost of the Guest House building constructed by the CPWD.

The B&WC considered the letter No. No.58(1)/
रू०के०मं०/1741 dated 31.10.2008 **(Appendix 'G')** of the CPWD requesting for the transfer of an additional amount of Rs.35.66 lacs due to excess expenditure on construction of the Main Guest House (N.C. Nigam

House), and decided that the excess amount of Rs. 35.66 lacs be transferred to the CPWD, since the same is within the 10% cost over-run limit. The matter be reported to the Finance Committee and the Board of Governors.

Item No. 21.3.8: To consider the revised cost of the Multistoried faculty residences Building constructed by the CPWD.

The estimate of Rs.1042.00 lacs for the construction of Phases-I and II of the Multistoried Flats was sanctioned by the Board of Governors in its meeting held on 7.6.2003. Accordingly, the approved funds were transferred to the CPWD. Subsequently, revised estimates, submitted by the CPWD, were placed before the Building & Works Committee held on 30.7.2005. In this meeting, the Chief Engineer CPWD had informed that both the works would be completed within the permissible 10% cost over run limit of the sanctioned amount, hence there was no need of approving the revised estimates. Accordingly, the 10% excess amount of Rs.104.20 lacs was also transferred to the CPWD. Now, the CPWD has communicated that the estimated cost of both the works had increased to Rs. 1383.00 lacs, due to certain changes in plinth area and increase in the initial cost index from 139 (Phase-I) and 146 (Phase-II), to 189 at the time of completion. However, both the works had been completed at the actual cost of Rs.1315.96 lacs, hence, Rs. 169.76 lacs [$\text{Rs.1315.96} - (\text{Rs.1042} + \text{Rs.104.2}) = \text{Rs. 169.76}$] was due to the CPWD for which the Department had made a request as per **Appendix 'H'**.

The B&WC considered the matter and recommended that the revised estimate of Rs. 1315.96 lacs (the actual cost of the work) be placed before the Finance Committee and the Board of Governors for according revised administrative approval and expenditure sanction for Rs. 1315.96 lacs and for transferring the balance amount of Rs. 169.76 lacs to the CPWD.

Item No.21.3.9: To consider the estimate of Rs. 67.46 lacs for the additional work of lifts, DG Set and LT Panel in the construction of Multistoried Boys Hostel, being constructed by the CPWD.

The B&WC considered the estimate of Rs. 67.46 lacs submitted by the CPWD for providing two additional lifts, a DG Set of 250 KVA instead of 125 KVA and a LT Panel for the Multistoried Boys' Hostel (**Appendix 'I'**) and decided that the said estimate be placed before the Finance Committee and the Board of Governors for according administrative approval and expenditure sanction.

Item No.21.3.10: To consider the request of IITR employees union for the construction of one additional room with balcony at first, second and third floor of the Solani Kunj residences (Block No. 190-200).

The issue was deferred.

Item No.21.3.11: To consider the revised cost for construction of the Lecture Hall Complex at the IIT Roorkee Campus, submitted by the NBCC Ltd..

The B&WC considered the revised estimate of Rs. 1,885.50 lacs submitted by the NBCC Ltd for construction of the Lecture Hall Complex at the IIT Roorkee Campus (**Appendix 'J'**) and decided that the said estimate be placed before the Finance Committee and the Board of Governors for according revised administrative approval and expenditure sanction.

Item No:21.3.12: Progress report of the on going/ completed Major Works.

Progress report in respect of the ongoing/ completed major works was noted with the directions to the Chairman, Estate & Works and the Institute Engineer to ensure that adequate alternate accommodation should be made available for the increased intake of students in July 2009, if the work for the construction of 632 seat Multistoried Boys' Hostel near Ganga Bhawan, which is being executed by the CPWD, falls behind schedule.

UNDER ANY OTHER ITEM:

Item No.21.3.13:To consider the revised plan of building for the Department of Biotechnology and other Centres.

The B&WC considered the letter No. NBCC/Roorkee / IIT/3(1)/2008/20 dated 3.12.2008 of NBCC Ltd to approve the revised Building Plan to save the cutting of a Pipal and Banyan trees exist at the work site, and decided that alternate-2 (**Appendix 'K'**), be approved in order to minimize the cutting down of trees in the Campus.

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

NATIONAL BUILDINGS CONSTRUCTION CORPORATION LTD.

(A Govt. of India Enterprise)
COMMITTED TO CUSTOMER'S DELIGHT

66/1, Ravindra Lok
IIT Campus
IIT Roorkee

No. NBCC/Roorkee/IIT/3(1)/2008

Date: 01.12.2008

The Institute Engineer,
Indian Institute of Technology,
IIT Roorkee

SUB: Construction of Girls Hostel for IIT Roorkee – Revised Building Plans and the Estimate of work.

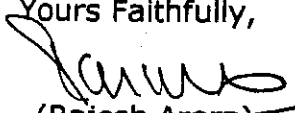
Dear Sir,

We are enclosing herewith the revised plans for the proposed construction of the Girls Hostel of 800 capacity. All the suggestions offered by the members of the Building Committee during the presentation of the scheme on 27.10.2008 have been incorporated in the revised building plans.

A cost estimate of the proposed girls Hostel for an amount of Rs. 33.00 Crores is also enclosed herewith. It is requested that approval of the Revised Building Plans and the Cost Estimate may be conveyed to us at an earliest so as to takeup further activities of the work.

Thanking you

Yours Faithfully,


(Rajesh Arora)
DGM (Engg.)

01.12.08

800- SEATER GIRLS HOSTEL AT IIT, ROORKEE

SUMMARY OF COST

S. No.	Description	Amounts (In Rs.)
1	a) Civil works	192,252,200.00
	Total (A)	192,252,200.00
2	a) Fire Fighting/Detection works	12,051,600.00
	Total (B)	12,051,600.00
3	a) Plumbing works	17,498,680.00
	Total (C)	17,498,680.00
4	a) Electrical Works	23,217,361.00
	Total (D)	23,217,361.00
5	a) Lift Work	9,900,000.00
	Total (E)	9,900,000.00
6	a) Development of Site	5,704,000.00
	Total (F)	5,704,000.00
	Total (A to F)	260,623,841.00
7	Escalation Charges over PAR 2007 @ 14% (Over Total of A to F)	36,487,337.74
	Total of PAR 2007 Cost incl. Escalation (G)	297,111,178.74
8	Misc. works - Electrical Panels	1,500,000.00
	Total (H)	1,500,000.00
7	Total Cost of work (G + H)	298,611,178.74
	Contingencies @ 0.5%	1,493,055.89
	Total	300,104,234.63
	Add NBCC Charges @ 10%	30,010,423.00
	Total Cost including NBCC Charges	330,114,657.63
		Say Rs. 3300.00 Lacs

800- SEATER GIRLS HOSTEL AT IIT, ROORKEE
COST ESTIMATE BASED ON CPWD PAR 2007 WITH C.I. AS ON 01.04.2008

S. No.	ITEMS	Unit	QTY	RATE (In Rs.)	AMOUNT (In Rs.)	Reference
1.0	CIVIL WORKS					
1.17	RCC frame structure upto six storeys. Floor Height 3.35 m	Sqm	18,448.00	9,100.00	167,876,800.00	PAR-2007/1.1.2
1.2	EXTRA FOR					
1.2.1	Every additional storey over six storeys upto nine storeys	Sqm	2,496.00	310.00	773,760.00	PAR-2007/1.2.1
1.2.2	RCC Raft Foundation (on GF area)	Sqm	3,365.00	3,560.00	11,979,400.00	PAR-2007/1.2.9
1.2.3	Resisting Earthquake Forces	Sqm	18,448.00	630.00	11,622,240.00	PAR-2007/1.2.8
	Total (A)				192,252,200.00	
2.0	FIRE FIGHTING/ DETECTION					
2.1	With Wet Riser System	Sqm	20,086.00	300.00	6,025,800.00	PAR-2007/1.4.1
2.2	Automatic Fire Alarm System	Sqm	20,086.00	300.00	6,025,800.00	PAR-2007/1.5.2
	Total (B)				12,051,600.00	
3.0	PLUMBING WORKS					
3.1	Internal Water Supply & Sanitary Installations	%	167,876,800.00	0.10	16,787,680.00	PAR-2007/3.1
3.3	Over head Tank without staging	Ltrs.	79,000.00	9.00	711,000.00	PAR-2007/5.1
	Total (C)				17,498,680.00	
4.0	ELECTRICAL WORKS					
4.1	Internal Electric Installations	12.50%	167,876,800.00	0.13	20,984,600.00	PAR-2007/3.3
4.4	Lightening Conductor 5 to 8 Storeys buildings	0.33%	167,876,800.00	0.00	553,993.00	PAR-2007/3.6.3.2
4.5	Telephone Conduits	0.50%	167,876,800.00	0.01	839,384.00	PAR-2007/3.6.4
4.6	Computer Conduiting	0.50%	167,876,800.00	0.01	839,384.00	PAR-2007/3.6.6
	Total (D)				23,217,361.00	
5.0	LIFTS					
5.1	13 Passenger with 1.0 m/sec speed G+ 6 Storeys	Nos.	5.00	1,980,000.00	9,900,000.00	PAR-2007/4.1.3
	Total (E)				9,900,000.00	

S. No.	ITEMS	Unit	QTY	RATE (In Rs.)	AMOUNT (In Rs.)	Reference
6.0	DEVELOPMENT OF SITE PLOT AREA CONSIDERED =11500 SQM					
6.1	Levelling	Sqm		55.00		PAR-2007/6.1
6.2	Internal Roads & Paths	Sqm		83.00		PAR-2007/6.2
6.3	Sewer	Sqm		63.00		PAR-2007/6.3
6.4	Filtered Water Supply- Distribution lines 100mm Dia & below	Sqm		46.00		PAR-2007/6.4.1
6.5	Unfiltered Water Supply distribution Lines	Sqm		27.00		PAR-2007/6.4.3
6.6	Storm Water Drains	Sqm		50.00		PAR-2007/6.5
6.7	Horticulture Operators	Sqm		47.00		PAR-2007/6.6
6.8	Street Lighting with HPMV Lamps	Sqm		75.00		PAR-2007/6.7.2
6.9	Exit Sign Board i/c electric Signange	Sqm		50.00		PAR-2007/6.7.4
	Total (F)	Sqm	11,500.00	496.00	5,704,000.00	
7.0	Misc. WORKS NOT COVD. IN PAR					
7.1	Electrical panels	L.S.			1,500,000.00	
	Total (G)				1,500,000.00	

PRELIMINARY ESTIMATE
(Based on CPWD PAR-2007)

Project:

**800 SEATER GIRLS HOSTEL AT IIT,
ROORKEE**

Total Plot Area Considered 11,500.00 Sqm.

<u>Area Details</u>	<u>Area in Sqm</u>
Ground Floor	- 3,278.00
First Floor	- 2,884.00
Second Floor	- 2,780.00
Third Floor	- 2,780.00
Fourth Floor	- 2,242.00
Fifth Floor	- 2,242.00
Sixth Floor	- 2,242.00
Total	- 18,448.00
	Say 18,448.00 Sqm

Heights

Plinth Height	- 0.450 m above Ground Level
Floor to Floor Height	- 2.9 m

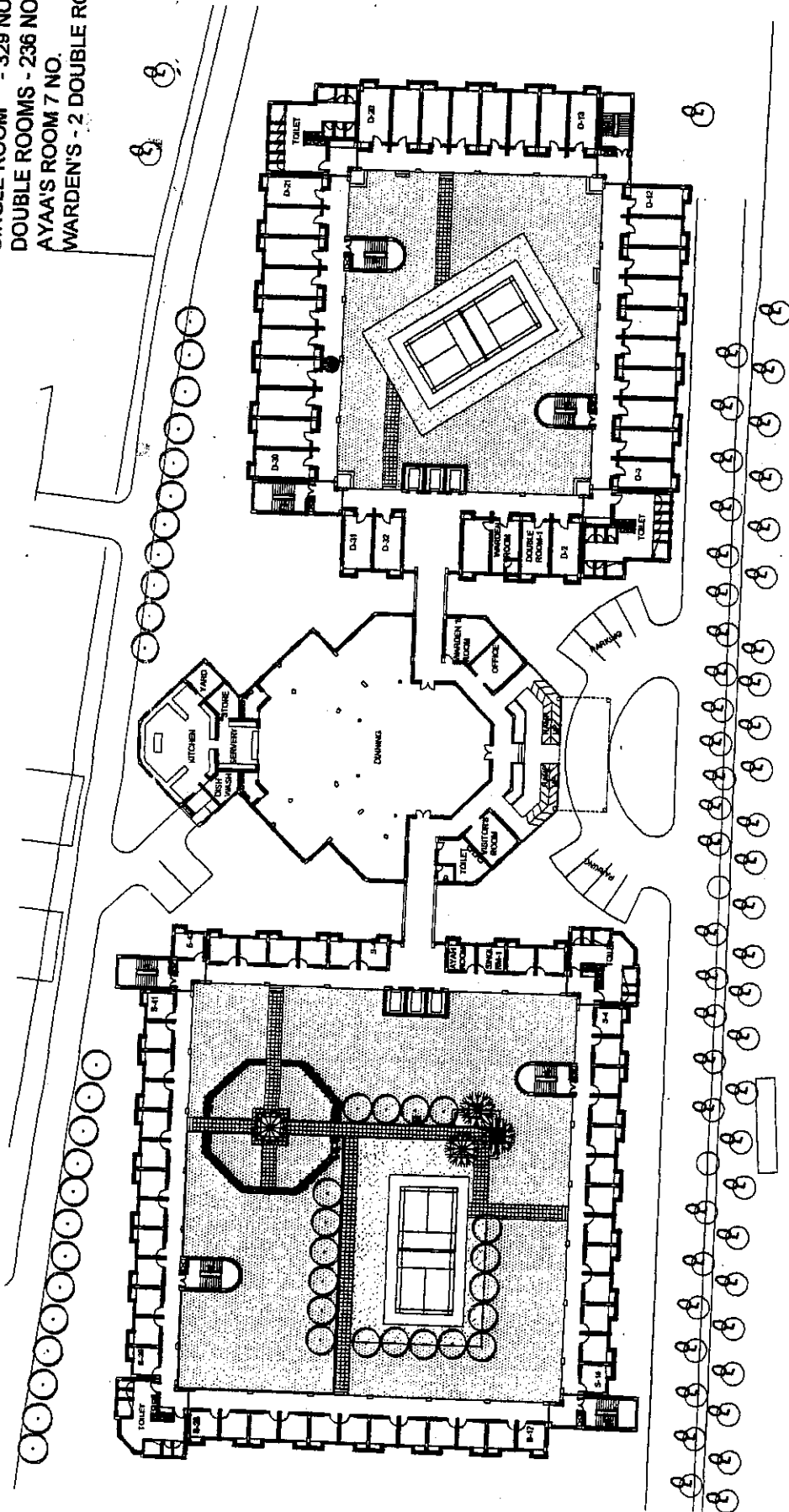
ROOM DETAILS:

SINGLE ROOM - 329 NOS

DOUBLE ROOMS - 236 NOS

AYAA'S ROOM 7 NO.

WARDEN'S - 2 DOUBLE ROOM



GIRL'S HOSTEL AT IIT ROORKEE

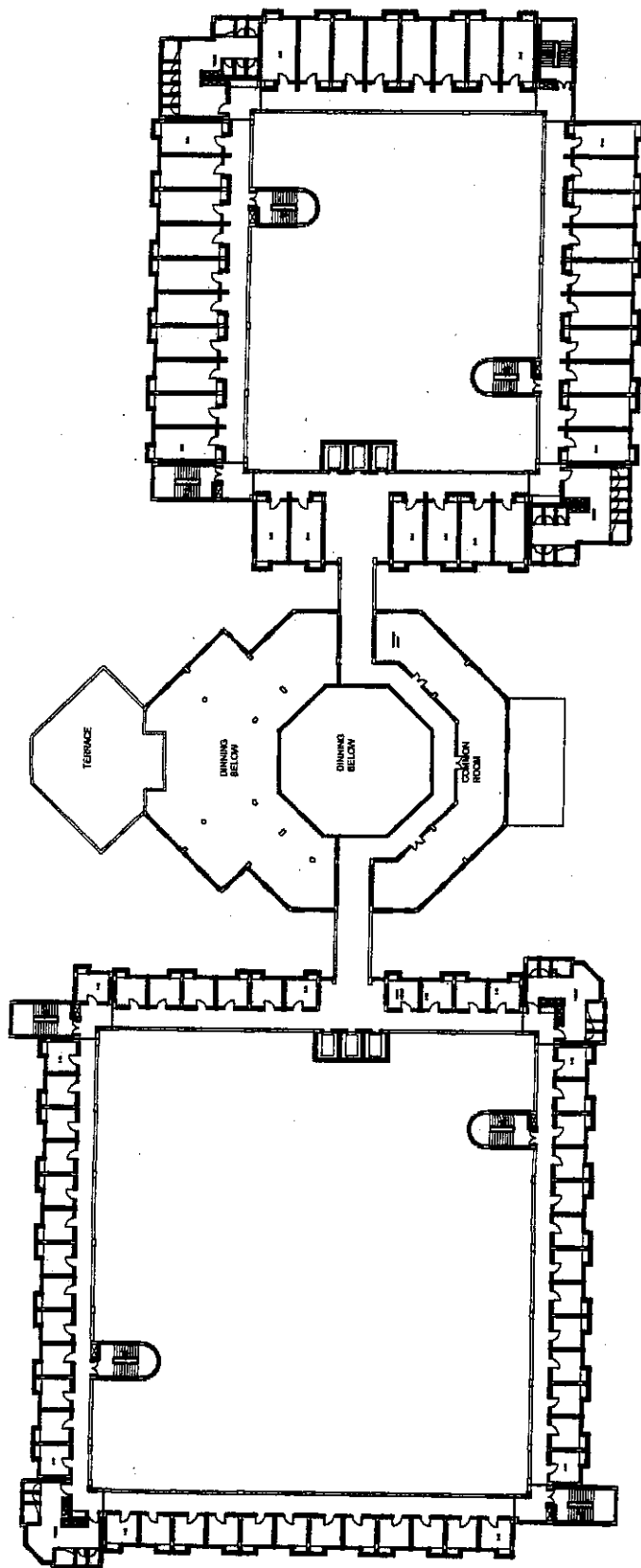
GROUND FLOOR PLAN

SCALE - 1:400

DATE - NOV. 2008



2



GIRL'S HOSTEL AT IIT ROORKEE

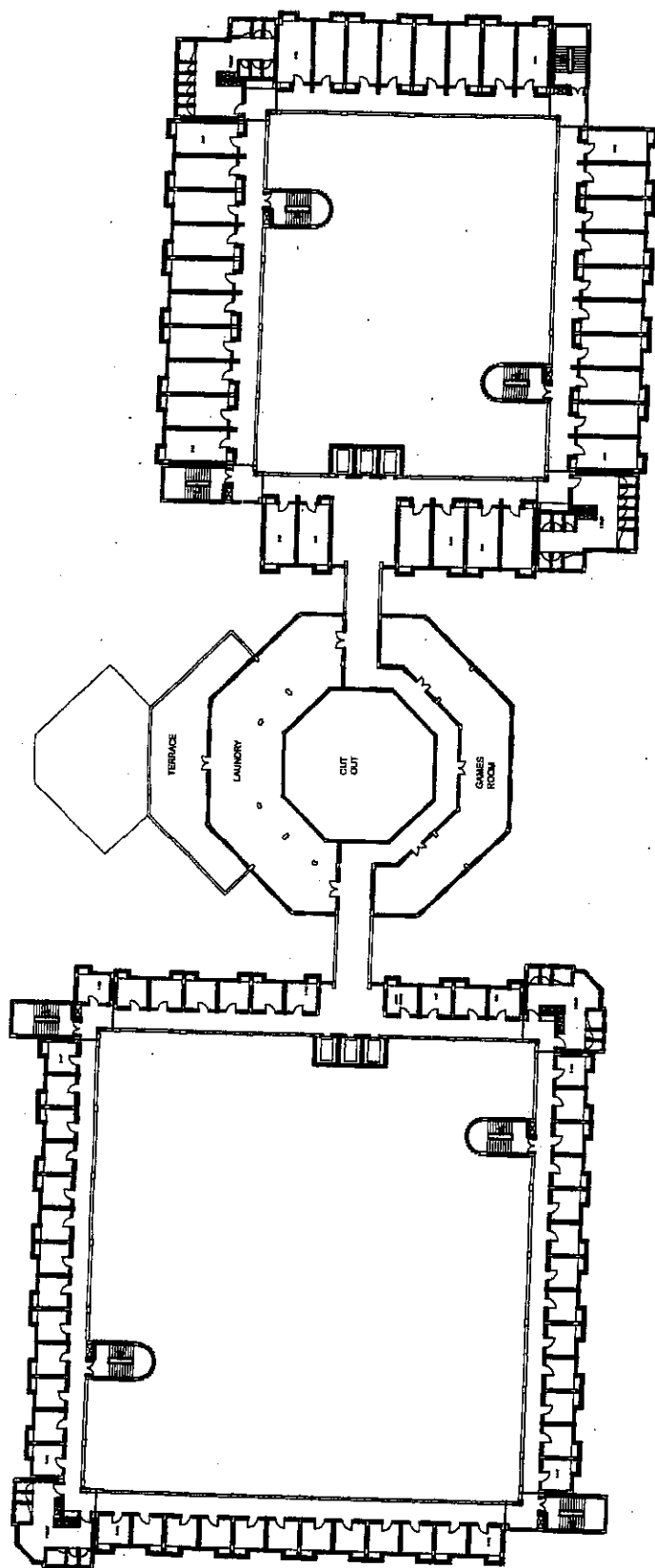
FIRST FLOOR PLAN

SCALE - 1:400

DATE - NOV. 2008



3



GIRL'S HOSTEL AT IIT ROORKEE

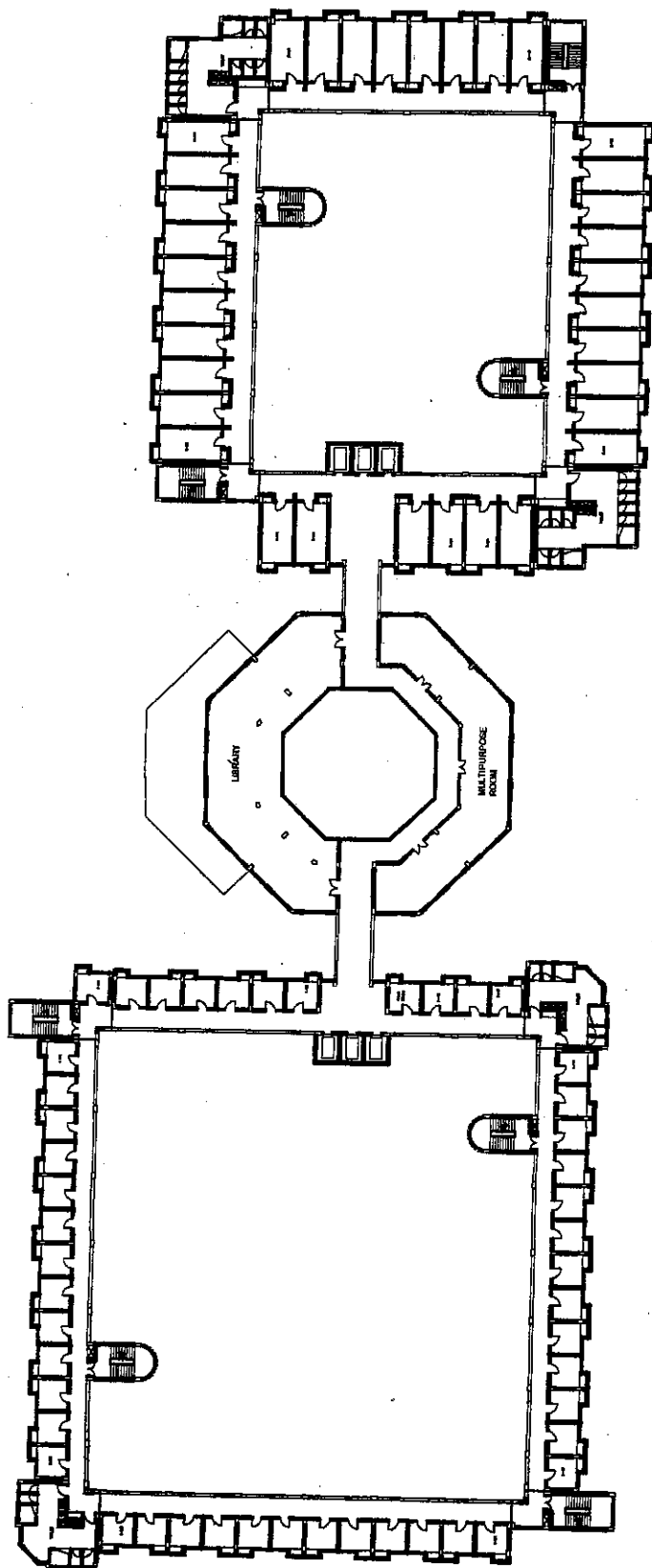
SECOND FLOOR PLAN

SCALE - 1:400

DATE - NOV. 2008



4



GIRL'S HOSTEL AT IIT ROORKEE

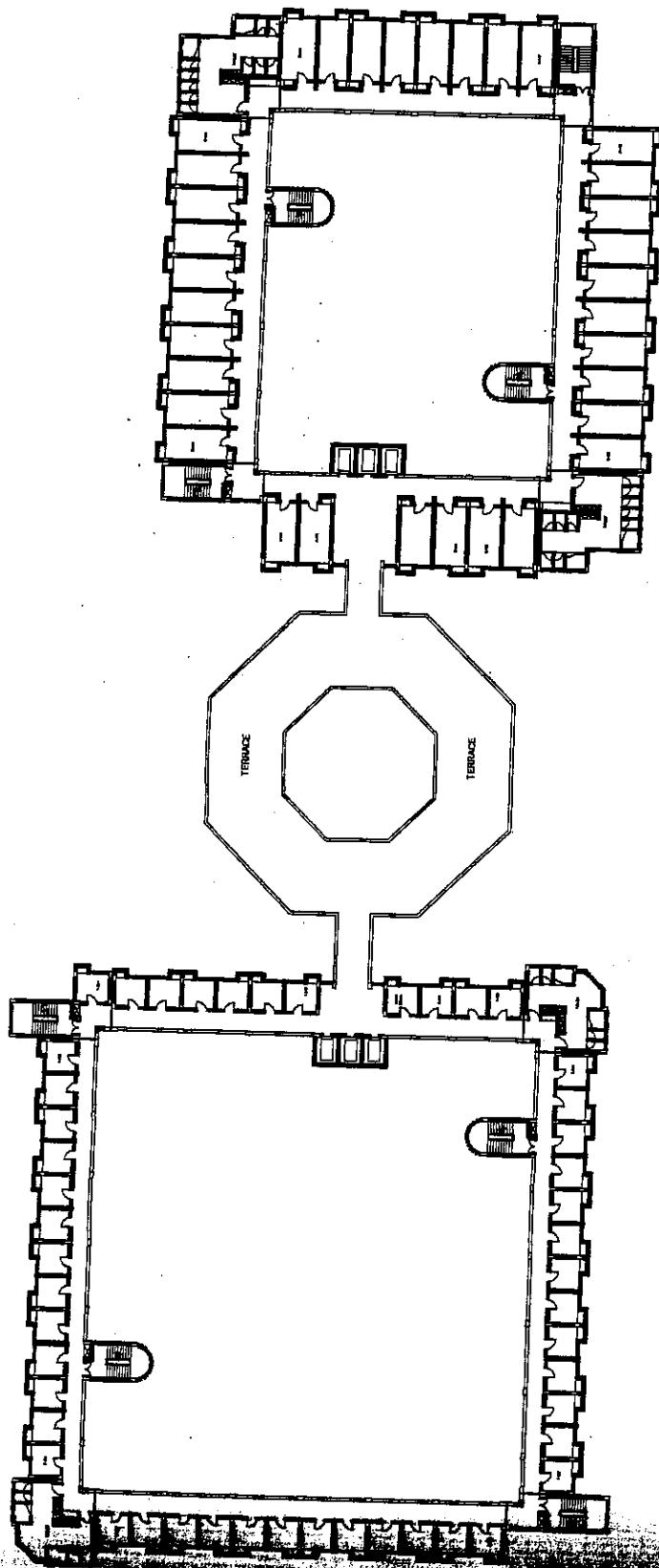
THIRD FLOOR PLAN

SCALE - 1:400

DATE - OCT 2008



5



GIRL'S HOSTEL AT IIT ROORKEE

FOURTH FLOOR PLAN
(5TH & 6TH SIMILAR)

SCALE - 1:40

DATE - NOV. 2008



6

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

(राज्य सरकार का उपक्रम)

(ISO 9001:2000 CERTIFIED)



U.P Rajkiya Nirman Nigam Ltd

Name of work :- Extension of Chemistry , Earth Science,
Chemical Engineering , Met & Mat Engg,
E&C Departments, Electrical Engineering,
Physics Departments in campus of I.I.T
Roorkee Distt Haridwar (U.K)

COST OF PRELIMINARY ESTIMATE :- Rs 450.81 Lacs

NAME OF UNIT :-

*U.P.R.N.N.Ltd
87 / 26 North Civil lines In front of Roadways
Bus - Stand Muzaffarnagar (U.P)*

G.M Office:-
*U.P Rajkiya Nirman Nigam Ltd
Officer s Colony
Officer hostel Campus
Delhi Road saharanpur (U.P)*

Head office :-
*U.P.Rajkiya Nirman Nigam Ltd
Vishwaria Bhawan Vibhuti Khand
Gomati nagar Lucknow (U.P)*

Brief Particular

- (1) **Name of work :-** Construction for the extension of Departments Chemistry, Earth Science, Chemical Engineering, Met & Materials Engg, E&C Departments Electrical Engineering Departments Physics Departments in campus of I.I.T Roorkee Distt Haridwar (U.K)
- (2) **Cost of Estimate: -** Cost of estimate Rs 450.81 Lacs
- (3) **Plinth Area :-** Ground Floor $349.93M^2$, First Floor $735.77M^2$, Second Floor $2033.09M^2$, Third Floor $842.57M^2$, Fourth Floor $58.42M^2$
- (4) **No of Floor of Building :-** Ground Floor, First Floor, Second Floor, Third Floor, Fourth Floor
- (5) **Class of Building :-** B Class Building, R.C.C Framed structure
- (6) **Specification :-** U.A P.W.D Specification of work
- (7) **Rate :-** U.A P.W.D Plinth Area Rate

U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)

Name of work : - Construction of extension of Different Deptt Block in campus of I.I.T Roorkee in Distt Haridwar (U.K)

Analysis of rate

(A) Ground floor Plinth area (Per Square meter)

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008		Rs 6180.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2	Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00		Rs 741.60
(4) Add Internal water supply & sewage system of work @ 12 %		Rs 741.60
(5) Add External water supply & sewage system of work @ 5 %		Rs 309.00
(6) Add Internal Electrification work @ 12 %		Rs 741.60
(7) Add for Ant termite treatment of work		Rs 180.00
(8) Add for Earthquake Provision		Rs 370.00
(9) Add for Power wiring 3%		Rs 185.40
(10) Add for provision for Ceiling Fan 4%		Rs 247.20
(11) Add for Contingencies 4%		Rs 394.26

Rs 10,250.66
Per Square meter

(B) First floor Plinth area (Per Square meter)

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008		Rs 5560.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2	Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00		Rs 667.20
(4) Add Internal water supply & sewage system of work @ 12 %		Rs 667.20
(5) Add External water supply & sewage system of work @ 5 %		Rs 278.00
(6) Add Internal Electrification work @ 12 %		Rs 667.20
(7) Add for Earthquake Provision		Rs 370.00
(8) Add for Power wiring 3%		Rs 166.80
(9) Add for provision for Ceiling Fan 4%		Rs 222.40
(10) Add for Contingencies 4%		Rs 350.35

Rs 9,109.15
Per Square meter


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


Unit Incharge
U.P.R.N.N.Ltd

U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)

**Name of work : - Construction of extension of Different Block in campus of I.I.T
Roorkee in Distt Haridwar (U.K)**

Analysis of rate

(C) Second Floor Plinth area (Per Square meter)

- | | |
|--|-------------------------------|
| (1) Plinth area rate as per U.A P.W.D vide Letter No
369/55 Bhawan -2008 dated 12-03-2008 | Rs 6180.00 |
| (2) Add Extra height for 0.30M beyond 2.90M
height is 3.20M | 1x160.00Per M2 Rs 160.00 |
| (3) Add for Provision for R.C.C Framed
structure @ 12 % on amount Rs 6180.00 | |
| (4) Add Internal water supply & sewage system of work @ 12 % | Rs 741.60 |
| (5) Add External water supply & sewage system of work @ 5 % | Rs 309.00 |
| (6) Add Internal Electrification work @ 12 % | Rs 741.60 |
| (7) Add for Earthquake Provision | Rs 370.00 |
| (8) Add for Power wiring 3% | Rs 185.40 |
| (9) Add for provision for Ceiling Fan 4% | Rs 247.20 |
| (10) Add for Contingencies 4% | Rs 394.26 |

**Rs 10,063.46
Per Square meter**

(D) 3rd Floor Plinth area (Per Square meter)

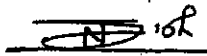
- | | |
|--|-------------------------------|
| (1) Plinth area rate as per U.A P.W.D vide Letter No
369/55 Bhawan -2008 dated 12-03-2008 | Rs 6180.00 |
| (2) Add Extra height for 0.30M beyond 2.90M
height is 3.20M | 1x160.00Per M2 Rs 160.00 |
| (3) Add for Provision for R.C.C Framed
structure @ 12 % on amount Rs 6180.00 | |
| (4) Add Internal water supply & sewage system of work @ 12 % | Rs 741.60 |
| (5) Add External water supply & sewage system of work @ 5 % | Rs 309.00 |
| (6) Add Internal Electrification work @ 12 % | Rs 741.60 |
| (7) Add for Earthquake Provision | Rs 370.00 |
| (8) Add for Power wiring 3% | Rs 185.40 |
| (9) Add for provision for Ceiling Fan 4% | Rs 247.20 |
| (10) Add for Contingencies 4% | Rs 394.26 |

**Rs 10,063.46
Per Square meter**

(E) 4th Floor Plinth Area (Per square meter)

(Plinth area rate same rate as 3rd Floor Plinth area rate)

**Rs 10,063.46
Per Square meter**


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


Unit Incharge
U.P.R.N.N.Ltd

Plinth Area Measurements

(I) Chemistry Department

(I) D Block

(a) Ground Floor Plinth Area

$$1 \times 35.46 \times 9.75 = 345.74 \text{M}^2$$

$$12 \times 2 \times 0.27 \times 0.23 = 1.49$$

$$1 \times 1/2 \times 3.40 \times 2.00 = 2.70$$

$$\underline{349.93 \text{M}^2}$$

(b) First Floor Plinth Area

$$\text{Same as G.F Plinth Area } 349.93 \text{M}^2$$

(c) Second Floor Plinth Area

$$\text{Same as per F.F Plinth Area } 349.43 \text{M}^2$$

(d) Third Floor Plinth Area

$$\text{Same as S.F Plinth Area } 349.93 \text{M}^2$$

(e) Fourth Floor Plinth Area

Stair case Mumty

$$1 \times 3.53 \times 3.59 = 7.12 \text{M}^2$$

$$2 \times 0.27 \times 0.23 = 0.12$$

$$\underline{7.14 \text{M}^2}$$

(II) C Block

(a) Third Floor Plinth Area

$$1 \times 15.61 \times 9.83 = 153.45 \text{M}^2$$

$$1 \times 15.61 \times 3.86 = 60.25$$

$$\underline{213.70 \text{M}^2}$$

(b) Fourth Floor Plinth Area

$$\text{Stair case Mumty } 1 \times 8.00 \times 3.86 = 30.88 \text{M}^2$$

(2) Physics Department

(a) Third Floor Plinth Area

$$1 \times 19.86 \times 10.14 = 215.28 \text{M}^2$$

$$1 \times 3.40 \times 2.35 = 7.99$$

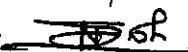
$$1 \times 3.40 \times 2.62 = 8.91$$

$$2 \times 1/2 \times 15.47 \times 0.60 = 9.28$$

$$\underline{241.46 \text{M}^2}$$

(b) Fourth floor plinth area

$$\text{Stair case mumty } 1 \times 6.00 \times 3.40 = 20.40 \text{M}^2$$


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

Co -to next page

(3) Electrical Engineering Department

(West Block)

Second Floor Plinth Area

Staff Room , Laboratory Corridor, Toilet Block

$$1 \times 26.20 \times 13.47 = 352.91 \text{M}^2$$

Third Floor

Stair case mummy

$$4.77 \times 3.89 = 18.55 \text{M}^2$$

(4) E&C Department

(I) West Block

Second Floor Plinth area

Laboratory $1 \times 28.68 \times 17.80 = 510.50 \text{M}^2$

Offsets $9 \times 0.45 \times 0.23 = 1.86$

$$1 \times 7.11 \times 2.00 = 14.22$$

Projection $1 \times 1/2 \times 29.50 \times 0.45 = 13.28$

$$539.86 \text{M}^2$$

(II) Workshop

(a) Second Floor Plinth Area

Work shop $28.86 \times 9.81 = 283.12 \text{M}^2$

$$283.12 \text{M}^2$$

(b) Third Floor Plinth Area

Stair case Mummy

$$1 \times 6.31 \times 3.00 = 18.93 \text{M}^2$$

(5) Metallurgical & Materials Engineering Department

Second Floor Plinth area

$$1 \times 14.99 \times 13.50 = 202.37 \text{M}^2$$

$$1 \times 1/2 \times 14.99 \times 0.600 = 4.50$$

$$3 \times 0.45 \times 0.23 = 0.31$$

$$207.18 \text{M}^2$$

(6) Chemical Engineering Department

(a) First Floor

South side block

$$1 \times (15.415 + 6.10) / 2 \times 13.50 = 145.23 \text{M}^2$$

$$15.77 \times (0 + 0.85) / 2 = 6.67$$

$$2 \times 8.50 \times 1.00 = 17.00$$

Corridor $8.61 \times 2.79 = 24.02$

$$192.92 \text{M}^2$$

(b) First Floor

North side block

$$(15.415 + 6.10) / 2 \times 13.50 = 145.23 \text{M}^2$$

$$15.77 \times (0 + 0.85) / 2 = 6.67$$

$$2 \times 8.50 \times 1.00 = 17.00$$

Corridor $8.61 \times 2.79 = 24.02$

$$192.92 \text{M}^2$$


A.R.E

U.P.R.N.N.Ltd

co -to next page

(7) Earth Science Department

Second Floor Plinth Area

$$1 \times 30.04 \times 9.99 = 300.09 \text{ M}^2$$



A.R.E

U.P.R.N.N.Ltd

Measurements

Supply & Fixing 20mm thick Kota stone flooring over mix mortar 1:4 cement , coarse sand including rubbing Polishing complete supply of all materials labor T&P etc complete

(1) Chemistry Department(D Block)

(a) Ground Floor

Lecture Hall	$1 \times 8.50 \times 6.40 = 54.40 \text{ M}^2$
Room	$1 \times 4 \times 9.50 \times 3.20 = 121.60$
Room	$1 \times 4 \times 3.20 \times 3.07 = 39.30$
Toilet	$2 \times 3.20 \times 2.00 = 12.80$

228.10 M²

(b) First Floor

Lecture Hall	$1 \times 8.50 \times 6.40 = 54.40 \text{ M}^2$
Room	$1 \times 4 \times 9.50 \times 3.20 = 121.60$
Room	$1 \times 4 \times 3.20 \times 3.07 = 39.30$
Toilet	$2 \times 3.20 \times 2.00 = 12.80$

228.10 M²

(c) Second Floor

Lecture Hall	$1 \times 8.50 \times 6.40 = 54.40 \text{ M}^2$
Room	$1 \times 4 \times 9.50 \times 3.20 = 121.60$
Room	$1 \times 4 \times 3.20 \times 3.07 = 39.30$
Toilet	$2 \times 3.20 \times 2.00 = 12.80$

228.10 M²

(d) Third Floor

Lecture Hall	$1 \times 8.50 \times 6.40 = 54.40 \text{ M}^2$
Room	$1 \times 4 \times 9.50 \times 3.20 = 121.60$
Room	$1 \times 4 \times 3.20 \times 3.07 = 39.30$
Toilet	$2 \times 3.20 \times 2.00 = 12.80$

228.10 M²

(2) Physics Departments

Third Floor

Laboratory	$13.70 \times 9.84 = 134.80 \text{ M}^2$
	$1 \times 3.00 \times 2.5 = 7.50$
	$1 \times 9.84 \times 5.00 = 49.20$
Toilet	$1 \times 3.00 \times 2.40 = 7.20$

198.70 M²


A.R.E

U.P.R.N.N.Ltd

Co -to -next page

**(3) Electrical Engineering Department
Second Floor(West Block)**

Staff room $1 \times 3 \times 5.90 \times 3.50 = 61.95M^2$
 $1 \times 4 \times 5.70 \times 3.50 = 79.80$
 $1 \times 2 \times 3.50 \times 4.00 = 28.00$
Toilet $1 \times 2 \times 3.50 \times 1.20 = 8.40$
Stair case $1 \times 3.50 \times 3.20 = 11.20$

189.38M²

(4) E&C Departments West Block

(i) Second Floor

Laboratory $1 \times 6 \times 7.00 \times 6.50 = 273.00M^2$
 $1 \times 2 \times 7.00 \times 3.50 = 49.00$

322.00M²

(ii) Second Floor (workshop)

Laboratory $1 \times 14.20 \times 6.50 = 92.30M^2$
Store /Stair case $1 \times 8.53 \times 3.50 = 29.86$

122.16M²

**(5) Mtallurgical&Materials Engineering Department
Second Floor**

Lecture hall $1 \times 2 \times 12.70 \times 7.09 = 180.09 M^2$
Riser $9 \times 2 \times 2.95 \times 0.200 = 10.62$

190.71M²

(6) Chemical Engineering Departments

First Floor(North side& South side)

Lecture Theatre
 $1 \times 2 \times (15.08 + 5.64) / 2 \times 12.80 = 265.15M^2$

**(7) Earth Science Departments
Second Floor**

Lecture Hall $1 \times 15.00 \times 8.70 = 130.50M^2$
 $1 \times 14.20 \times 8.70 = 123.54$

254.04M²


A.R.E

U.P.R.N.N.Ltd

Co -to -next page

(8) Chemistry Engineering Department
(Lab & Staff Room) C Block
(II) Third Floor

Staff Room	$1 \times 7.67 \times 3.62 = 27.77M^2$
	$1 \times 3.60 \times 2.45 = 8.82$
	$1 \times 2 \times 3.62 \times 2.99 = 21.65$
	$1 \times 6.09 \times 3.62 = 22.06$
Staircase	$1 \times 7.50 \times 3.40 = 25.50$

105.80M²

Grand total Quantity 1No of item To 8No of item = 2560.34M²


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

U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)
Name of work :- Extension in different Departments in campus of I.I.T Roorkee
ABSTRACT OF PLINTH AREA of BUILDING

S.No	Particular of Item	G.Floor Plinth Area	First Floor Plinth Area	Second Floor Plinth Area	Third Floor Plinth Area	Fourth Floor Plinth Area
(1)	Chemistry Department D Block C Block	349.93M ² Nil	349.93M ² Nil	349.93M ² Nil	349.93M ² 213.70M ²	7.14M ² 30.88M ²
(2)	Physics Department	Nil	Nil	Nil	241.46M ²	20.40M ²
(3)	Electrical Engineering Department West Block	Nil	Nil	352.91M ²	18.55	Nil
(4)	E&C Department West Block Work Shop	Nil Nil	Nil Nil	283.12 M ² 539.86M ²	18.93M ² Nil	Nil Nil
(5)	Metallurgical&Material Engineering Department	Nil	Nil	207.18 M ²	Nil	Nil
(6)	Chemical Engineering Department (a) South side block (b) North side block	Nil Nil	192.92M ² 192.92M ²	Nil	Nil	Nil
(7)	Earth Science Department	Nil	Nil	300.09M ²	Nil	Nil
		349.93M ²	735.77M ²	2033.09M ²	842.57M ²	58.42M ²


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

ABSTRACT OF COST

S.No	Particular of Item	Plinth Area	Rate	Amount
(1)	Extension of Chemistry, Earth Science, Chemical Engineering, Met & Mat Engg, E&C, Electrical Engg Physics Departments			
	(a) Ground Floor Plinth Area	349.93 M ²	Rs 10,250.66	Rs 35,87,013.45
	(b) First Floor Plinth area	735.77 M ²	Rs 9,109.15	Rs 67,02,239.30
	(c) Second Floor Plinth Area	2033.09 M ²	Rs 10,063.46	Rs 2,04,59,919.89
	(d) Third Floor Plinth Area	842.57 M ²	Rs 10,063.46	Rs 84,79,169.49
	(e) Forth Floor Plinth Area	58.42 M ²	Rs 10,063.46	Rs 5,87,907.33
(2)	(i) Add extra floor height beyond 3.20M Height of lecture block in Chemical Engg Deptt 4.475M Height Differences 4.475 - 3.20 = 1.175 M = 1.275 / 0.30 = 4.25 No of Floor Height	2x 4.25 No of floor Height x 192.92 M ²	Rs 160.00	Rs 2,62,371.20
	(ii) Add extra floor height beyond 3.20M Height of lecture block in Metallurgical & Matrrical Engg Deptt 3.50 M Height Difference 3.50 - 3.20 = 0.30 M = 0.30 / 0.30 = 01 no of Floor Height	1x 01 No of floor Height x 207.18 M ²	Rs 160.00	Rs 33,148.80
	(iii) Add extra floor height beyond 3.20M Height of lecture block in Earth Science Deptt 3.50 M Height Difference 3.50 - 3.20 = 0.30 M = 0.30 / 0.30 = 01 no of Floor Height	1x 01 No of floor Height x 300.09 M ²	Rs 160.00	Rs 48,014.40
(3)	Add for Provision of In ternate @ 0.50%			Rs 4,01,59,783.86
(4)	Add for Provision of Telephone wiring @ 0.50%			Rs 2,00,798.92
(5)	Add Brick Coba Treatment over roof	2874.09 M ²	Rs 355.00	Rs 2,00,798.92
(6)	Supply & fixing 20 mm thick kota stone flooring over Coarse sand mortar mix 1:4 etc complete	2560.34 M ²	(Rs 614.00 - 232.00) Difference of rate	Rs 10,20,301.95
(7)	Less 5 % due to U.P.R.N.N.Ltd working	(--)		Rs 4,25,59,733.53 Rs 21,27,986.68
(8)	Add 11.5 % U.P.R.N.N.Ltd Cent age Charges	(+)		Rs 4,04,31,746.85 Rs 46,49,650.89
				Rs 4,50,81,397.74 Say Rs 450.81 Lacs


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


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

U.P.R.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar(U.P)

Name of work :- Construction Extension of Departments of Chemistry, Physics, Electrical Engineering, Electronic & Computer Engineering, Metallurgical & Materials Engineering, Chemical Engineering, Earth Science in campus of I.I.T Roorkee

Summery of Cost

S.I.No	Particular of Item	Amount
(1)	Construction Extension of Departments of Chemistry, Physics, Electrical Engineering, Electronic & Computer Engineering, Metallurgical & Materials Engineering, Chemical Engineering, Earth Science in campus of I.I.T Roorkee	Rs 450.81Lacs
Total Cost		Rs 450.81 Lacs

Note :-

The Provisions has been made in Preliminary Estimate

- (1) window / ventilator of M.S z-section
- (2) Mosaic Flooring in all Room
- (3) Corridor Kota stone Flooring
- (4) Door 35mm Thick Flush Door Shutter

Except of above items for Aluminums Door, Aluminums window/Ventilator, Vitrified Tile Flooring work & Wooden work difference of cost shall be charged extra payment


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


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

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

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



UTTAR PRADESH RAJIKIYA NIRMAN NIGAM LIMITED

**Name of work :- Construction of Ganga Bhawan Hostel Block in
campus of I.I.T Roorkee in Distt Haridwar (U.K)**

(192 seats)

Cost of of Preliminary estimate:- Rs 332.95 Lacs only

G.M Office :-

**U.P Rajikiya Nirman Nigam Ltd
Officer's Colony officer Hostel campus
Delhi Saharanpur Road Saharanpur (U.P)**

Head Office:-

**U.P Rajikiya Nirman Nigam Ltd
Vishwariaya Bhawan Vibhuti Khand
Gomati Nagar Lucknow (U.P)**

U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)

Name of work : - Construction of extension of Ganga Bhawan Hostel Block in
campus of I.I.T Roorkee in Distt Haridwar (U.K) (192 seats)

Plinth Area Measurement

(A) Ground Floor Plinth Area

$$1 \times 85.31 \times 9.33 = 795.94 \text{ M}^2$$

Deduction
stair case offsets

$$1 \times 2 \times 2.70 \times 2.15 = 11.61$$

$$784.33 \text{ M}^2$$

(B) First Floor Plinth area

Same as G.F Plinth area

$$784.33 \text{ M}^2$$

(C) Second Floor Plinth Area

Same as first floor plinth area

$$784.33 \text{ M}^2$$

(D) Third Floor Plinth area

Same as second floor plinth area

$$784.33 \text{ M}^2$$

Extra for stair case Mumty

$$1 \times 6.50 \times 2.71 = 17.62$$

$$801.95 \text{ M}^2$$


A.R.E

U.P.R.N.N.Ltd

U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)

Name of work : - Construction of extension of Ganga Bhawan Hostel Block in campus of I.I.T Roorkee in Distt Haridwar (U.K)

Analysis of rate

(A) Ground floor Plinth area (Per Square meter)

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008		Rs 6180.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2	Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00		Rs 741.60
(4) Add Internal water supply & sewage system of work @ 12 %		Rs 741.60
(5) Add External water supply & sewage system of work @ 5 %		Rs 309.00
(6) Add Internal Electrification work @ 12 %		Rs 741.60
(7) Add for Ant termite treatment of work		Rs 180.00
(8) Add for Earthquake Provision		Rs 370.00
(9) Add for Power wiring 3%		Rs 185.40
(10) Add for provision for Ceiling Fan 4%		Rs 247.20
(11) Add for Contingencies 4%		Rs 394.26


**Rs 10,250.66
Per Square meter**

(B) First floor Plinth area (Per Square meter)

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008		Rs 5560.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2	Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00		Rs 667.20
(4) Add Internal water supply & sewage system of work @ 12 %		Rs 667.20
(5) Add External water supply & sewage system of work @ 5 %		Rs 278.00
(6) Add Internal Electrification work @ 12 %		Rs 667.20
(7) Add for Earthquake Provision		Rs 370.00
(8) Add for Power wiring 3%		Rs 166.80
(9) Add for provision for Ceiling Fan 4%		Rs 222.40
(10) Add for Contingencies 4%		Rs 350.35

**Rs 9,109.15
Per Square meter**


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


Unit Incharge
U.P.R.N.N.Ltd
Unit Incharge
U.P.R.N.N.Ltd
Ganga Bhawan Hostel
I.I.T., Roorkee

U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)

Name of work : - Construction of extension of Ganga Bhawan Hostel Block in campus of I.I.T Roorkee in Distt Haridwar (U.K)

Analysis of rate

(C) Second Floor Plinth area (Per Square meter)

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008		Rs 6180.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2	Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00		
(4) Add Internal water supply & sewage system of work @ 12 %		Rs 741.60
(5) Add External water supply & sewage system of work @ 5 %		Rs 309.00
(6) Add Internal Electrification work @ 12 %		Rs 741.60
(7) Add for Earthquake Provision		Rs 370.00
(8) Add for Power wiring 3%		Rs 185.40
(9) Add for provision for Ceiling Fan 4%		Rs 247.20
(10) Add for Contingencies 4%		Rs 394.26


Rs 10,063.46
Per Square meter

(D) 3rd Floor Plinth area (Per Square meter)

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008		Rs 6180.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2	Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00		
(4) Add Internal water supply & sewage system of work @ 12 %		Rs 741.60
(5) Add External water supply & sewage system of work @ 5 %		Rs 309.00
(6) Add Internal Electrification work @ 12 %		Rs 741.60
(7) Add for Earthquake Provision		Rs 370.00
(8) Add for Power wiring 3%		Rs 185.40
(9) Add for provision for Ceiling Fan 4%		Rs 247.20
(10) Add for Contingencies 4%		Rs 394.26

Rs 10,063.46
Per Square meter


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



Unit Incharge
U.P.R.N.N.Ltd
Unit Incharge
U P. R. N. N. Ltd
Ganga Bhawan Hostel
I.I.T., Roorkee

U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)

Name of work : - Construction of extension of Ganga Bhawan Hostel Block in campus of I.I.T Roorkee in Distt Haridwar (U.K) (192 seats)

Abstract of cost				
S.No	Particular of Item	Plinth area	Rate	Amount
(1)	Construction of extension of Ganga Bhawan Hostel Block in campus of I.I.T Roorkee in Distt Haridwar (U.K)			
	(a) Ground Floor Plinth Area	784.33 M ²	Rs 10,250.66	Rs 80.40 Lacs
	(b) First Floor Plinth Area	784.33 M ²	Rs 9109.15	Rs 71.45 Lacs
	(c) Second Floor Plinth Area	784.33 M ²	Rs 10,063.46	Rs 78.93 Lacs
	(d) Third Floor Plinth Area	801.95 M ²	Rs 10,063.46	Rs 80.70 Lacs
(2)	Add for Brick coba treatment of work	801.95 M ²	Rs 355.00	Rs 2.85 Lacs
				Rs 314.33 Lacs
(3)	Less 5% due to U.P.R.N.N.Ltd working	(---)		Rs 15.72 Lacs
				Rs 298.61 Lacs
(4)	Add 11.5 % U.P.R.N.N.Ltd Centage Charges	(+)		Rs 34.34 Lacs
				Rs 332.95 Lacs


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


Unit Incharge
U.P.R.N.N.Ltd
Unit Incharge
U.P. R. N. N. Ltd.
Ganga Bhawan Hostel
I.I.T., Roorkee

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

(राज्य सरकार का उपक्रम)

(ISO 9001:2000 CERTIFIED)



U.P Rajkiya Nirman Nigam Ltd

NAME OF WORK :- Construction for the extension of M.R Chopara & Azad Wing Hostel Block 48 No Room in campus of I.I.T Roorkee

COST OF PRELIMINARY ESTIMATE :- Rs 304.63 Lacs only

NAME OF UNIT :-

U.P.R.N.N.Ltd

*Camp office D Type of residence campus
Vikasnagar I.I.T Roorkee*

G.M Office:-

*U.P Rajkiya Nirman Nigam Ltd
Officer s Colony
Officer hostel Campus
Delhi Road saharanpur (U.P)*

Head office :-

*U.P.Rajkiya Nirman Nigam Ltd
Vishwaria Bhawan Vibhuti Khand
Gomati nagar Lucknow (U.P)*

U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)

Name of work : - Extension of M.R Chopra & Azad wing 48 No of Suites in campus of I.I.T Roorkee

Detail of Measurement of Plinth Area

(A) Ground Floor Plinth area

	$1 \times 25.03 \times 7.04 = 176.21 \text{M}^2$
Passage	$1 \times 1/2 \times 25.03 \times 1.20 = 15.02$
Balcony	$1 \times 1/2 \times 6.69 \times 2.00 = 6.69$
Staircase	$1 \times 6.32 \times 4.73 = 29.89$
	<hr/>
	227.81M^2

Area for 03 Block at Ground Floor $3 \times 227.81 = 683.43 \text{M}^2$
Add for area Passage $1 \times 1/2 \times 9.75 \times 2.45 = 11.94$

 695.37M^2

(B) First Floor Plinth Area

Same as Ground Floor Plinth Area 695.37M^2

(C) Second Floor Plinth Area

Same as per First Floor Plinth Area 695.37M^2

(D) Third Floor Plinth Area

Same as per Second Floor Plinth Area 695.37M^2

(E) Fourth Floor Plinth Area

Stair case Mumty $2 \times 6.63 \times 4.73 = 62.72 \text{M}^2$

Area for Three Block $4 \times 695.37 + 62.72 = 2843.40 \text{M}^2$


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

U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)

Name of work : - Extension of M.R Chopra & Azad wing 48 No of Suites in campus of I.I.T Roorkee

Analysis of rate

(A) Ground floor Plinth area (Per Square meter)

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008		Rs 6180.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2	Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00		Rs 741.60
(4) Add Internal water supply & sewage system of work @ 12 %		Rs 741.60
(5) Add External water supply & sewage system of work @ 5 %		Rs 309.00
(6) Add Internal Electrification work @ 12 %		Rs 741.60
(7) Add for Ant termite treatment of work		Rs 180.00
(8) Add for Earthquake Provision		Rs 370.00
(9) Add for Power wiring 3%		Rs 185.40
(10) Add for provision for Ceiling Fan 4%		Rs 247.20
(11) Add for Contingencies 4%		Rs 394.26

Rs 10,250.66
Per Square meter

(B) First floor Plinth area (Per Square meter)

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008		Rs 5560.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2	Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00		Rs 667.20
(4) Add Internal water supply & sewage system of work @ 12 %		Rs 667.20
(5) Add External water supply & sewage system of work @ 5 %		Rs 278.00
(6) Add Internal Electrification work @ 12 %		Rs 667.20
(7) Add for Earthquake Provision		Rs 370.00
(8) Add for Power wiring 3%		Rs 166.80
(9) Add for provision for Ceiling Fan 4%		Rs 222.40
(10) Add for Contingencies 4%		Rs 350.35

Rs 9,109.15
Per Square meter


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


Unit Incharge
U.P.R.N.N.Ltd

U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)

Name of work :- Extension of M.R Chopra & Azad wing 48 No of Suites in campus of I.I.T Roorkee

Analysis of rate

(C) Second Floor Plinth area (Per Square meter)

- | | |
|---|--------------------------|
| (1) Plinth area rate as per U.A.P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008 | Rs 6180.00 |
| (2) Add Extra height for 0.30M beyond 2.90M height is 3.20M | 1x160.00Per M2 Rs 160.00 |
| (3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00 | |
| (4) Add Internal water supply & sewage system of work @ 12 % | Rs 741.60 |
| (5) Add External water supply & sewage system of work @ 5 % | Rs 309.00 |
| (6) Add Internal Electrification work @ 12 % | Rs 741.60 |
| (7) Add for Earthquake Provision | Rs 370.00 |
| (8) Add for Power wiring 3% | Rs 185.40 |
| (9) Add for provision for Ceiling Fan 4% | Rs 247.20 |
| (10) Add for Contingencies 4% | Rs 394.26 |

**Rs 10,063.46
Per Square meter**

(D) Third Floor Plinth area (Per Square meter)

Same rate as per second floor Plinth area rate

**Rs 10,063.46
Per Square meter**

(E) Fourth Floor Plinth area (Per Square meter)

Same rate as per third floor Plinth area rate

**Rs 10,063.46
Per Square meter**


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


Unit Incharge
U.P.R.N.N.Ltd

U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)

Name of work : - Extension of M.R Chopra & Azad wing 48 No of Suites in campus of I.I.T Roorkee

Abstract of cost

S.No	Particular of Item	Plinth area	Rate	Amount
(1)	Construction for Extension of M.R Chopra & Azad wing 48 No of Suites in campus of I.I.T RRoork			
	Ground Floor Plinth area	695.37M ²	Rs 10,250.66	Rs 71.28Lacs
	First Floor Plinth area	695.37M ²	Rs 9,109.15	Rs 63.34Lacs
	Second Floor Plinth area	695.37M ²	Rs 10,063.46	Rs 69.98 Lacs
	Third Floor Plinth Area	695.37M ²	Rs 10,063.46	Rs 69.98 Lacs
	Fourth Floor Plinth Area	62.72M ²	Rs 10,063.46	Rs 6.32 Lacs
(2)	Add for Brick coba treatment of work	2158.38 M ²	Rs 355.00	Rs 7.66 Lacs
(3)	Less 5% due to U.P.R.N.N.Ltd working	(---)		Rs 287.96 Lacs Rs 14.40 Lacs
(4)	Add 11.5 % U.P.R.N.N.Ltd Centage Charges	(+)		Rs 273.56 Lacs Rs 31.46 Lacs
				Rs 304.63Lacs


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


Unit Incharge
U.P.R.N.N.Ltd

U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)

Name of work : - Extension of M.R Chopra & Azad wing 48 No of Suites in campus of I.I.T Roorkee

Summary of cost

S.No	Particular of Item	Amount
(1)	Construction Extension of M.R Chopra & Azad wing 48 No of Suites in campus of I.I.T Roorkee	Rs 304.63 Lacs


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


Unit Incharge
U.P.R.N.N.Ltd

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

(राज्य सरकार का उपक्रम)

(ISO 9001:2000 CERTIFIED)

कैम्प कार्यालय,
आई०आई०टी० परिसर,
गंगा भवन होस्टल,
रुड़की (हरिद्वार)



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

पत्रांक.....सेवा में,

दिनांक: 25.10.08

संस्थान अभियंता
आई०आई०टी०,
रुड़की।

विषय: काटले भवन हास्टल में टायलेट ब्लॉक के आगणन के
संबंध में।

महोदय,

कृपया अवगत कराना है कि काटले भवन हास्टल का आगणन तैयार करते
समय टायलेट ब्लॉक का प्राविधान करना त्रुटिवशः छुट गया था। जिसे संशोधित
करते हुये टायलेट ब्लॉक का आगणन रु.22.18 लाख का सूचनार्थ एवं आवश्यक
कार्यवाही हेतु संलग्न कर प्रेषित किया जा रहा है।

सधन्यवाद,

संलग्नक/उपरोक्तानुसार

भवदीय,

इकाई प्रभारी

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

(राज्य सरकार का उपक्रम)

(ISO 9001:2000 CERTIFIED)



U.P Rajkiya Nirman Nigam Ltd

NAME OF WORK :- Construction of Toilet Block in Cautely Bhawan Hostel block in campus of I.I.T Roorkee in Distt Haridwar

COST OF PRELIMINARY ESTIMATE :- Rs 22.18 Lacs only

NAME OF UNIT :-

U.P.R.N.N.Ltd

***Camp office D Type of residence campus
Vikasnagar I.I.T Roorkee***

G.M Office:-

***U.P Rajkiya Nirman Nigam Ltd
Officer s Colony
Officer hostel Campus
Delhi Road saharanpur (U.P)***

Head office :-

***U.P.Rajkiya Nirman Nigam Ltd
Vishwaria Bhawan Vibhuti Khand
Gomati nagar Lucknow (U.P)***

U.P.R.ajkiyaNirman.Nigam.Ltd MuzaffarnagarUnitMuzaffarnagar(U.P)

**Name of work : - Construction of Toilet Block in cautelay Bhawan hostel
block in campus of I.I.T Roorkee**

Plinth Area measurements

Ground Floor Plinth Area

Toilet Block $1 \times 7.53 \times 6.99 = 52.56 \text{ M}^2$

First Floor Plinth Area

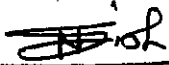
Toilet Block $1 \times 7.53 \times 6.99 = 52.56 \text{ M}^2$

Second Floor Plinth Area

Toilet Block $1 \times 7.53 \times 6.99 = 52.56 \text{ M}^2$

Third Floor Plinth Area

Toilet Block $1 \times 7.53 \times 6.99 = 52.56 \text{ M}^2$



A.R.E

U.P.R.N.N.Ltd

U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)

Name of work : - Construction of Toilet Block in Cautelay Bhawan Hostel Block in campus of I.I.T Roorkee in Distt Haridwar (U.K)

Analysis of rate

(A) Ground floor Plinth area (Per Square meter)

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008	Rs 6180.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2 Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00	Rs 741.60
(4) Add Internal water supply & sewage system of work @ 12 %	Rs 741.60
(5) Add External water supply & sewage system of work @ 5 %	Rs 309.00
(6) Add Internal Electrification work @ 12 %	Rs 741.60
(7) Add for Ant termite treatment of work	Rs 180.00
(8) Add for Earthquake Provision	Rs 370.00
(9) Add for Power wiring 3%	Rs 185.40
(10) Add for provision for Ceiling Fan 4%	Rs 247.20
(11) Add for Contingencies 4%	Rs 394.26

Rs 10,250.66

Per Square meter

(B) First floor Plinth area (Per Square meter)

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008	Rs 5560.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2 Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00	Rs 667.20
(4) Add Internal water supply & sewage system of work @ 12 %	Rs 667.20
(5) Add External water supply & sewage system of work @ 5 %	Rs 278.00
(6) Add Internal Electrification work @ 12 %	Rs 667.20
(7) Add for Earthquake Provision	Rs 370.00
(8) Add for Power wiring 3%	Rs 166.80
(9) Add for provision for Ceiling Fan 4%	Rs 222.40
(10) Add for Contingencies 4%	Rs 350.35

Rs 9,109.15

Per Square meter


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


Unit Incharge
U.P.R.N.N.Ltd

U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)

Name of work : - Construction of Toilet Block in Cautelay Bhawan Hostel Block in campus of I.I.T Roorkee in Distt Haridwar (U.K)

Analysis of rate

(C) Second Floor Plinth area (Per Square meter)

- | | |
|---|--------------------------|
| (1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008 | Rs 6180.00 |
| (2) Add Extra height for 0.30M beyond 2.90M height is 3.20M | 1x160.00Per M2 Rs 160.00 |
| (3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00 | |
| (4) Add Internal water supply & sewage system of work @ 12 % | Rs 741.60 |
| (5) Add External water supply & sewage system of work @ 5 % | Rs 309.00 |
| (6) Add Internal Electrification work @ 12 % | Rs 741.60 |
| (7) Add for Earthquake Provision | Rs 370.00 |
| (8) Add for Power wiring 3% | Rs 185.40 |
| (9) Add for provision for Ceiling Fan 4% | Rs 247.20 |
| (10) Add for Contingencies 4% | Rs 394.26 |

Rs 10,063.46
Per Square meter

(D) 3rd Floor Plinth area (Per Square meter)

- | | |
|---|--------------------------|
| (1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008 | Rs 6180.00 |
| (2) Add Extra height for 0.30M beyond 2.90M height is 3.20M | 1x160.00Per M2 Rs 160.00 |
| (3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00 | |
| (4) Add Internal water supply & sewage system of work @ 12 % | Rs 741.60 |
| (5) Add External water supply & sewage system of work @ 5 % | Rs 309.00 |
| (6) Add Internal Electrification work @ 12 % | Rs 741.60 |
| (7) Add for Earthquake Provision | Rs 370.00 |
| (8) Add for Power wiring 3% | Rs 185.40 |
| (9) Add for provision for Ceiling Fan 4% | Rs 247.20 |
| (10) Add for Contingencies 4% | Rs 394.26 |

Rs 10,063.46
Per Square meter


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


Unit Incharge
U.P.R.N.N.Ltd

U.P.R.ajkiya Nirman.Nigam.Ltd Muzaffarnagar Unit Muzaffarnagar(U.P)
Name of work : - Construction of Toilet Block in cautelay Bhawan hostel
block in campus of I.I.T Roorkee

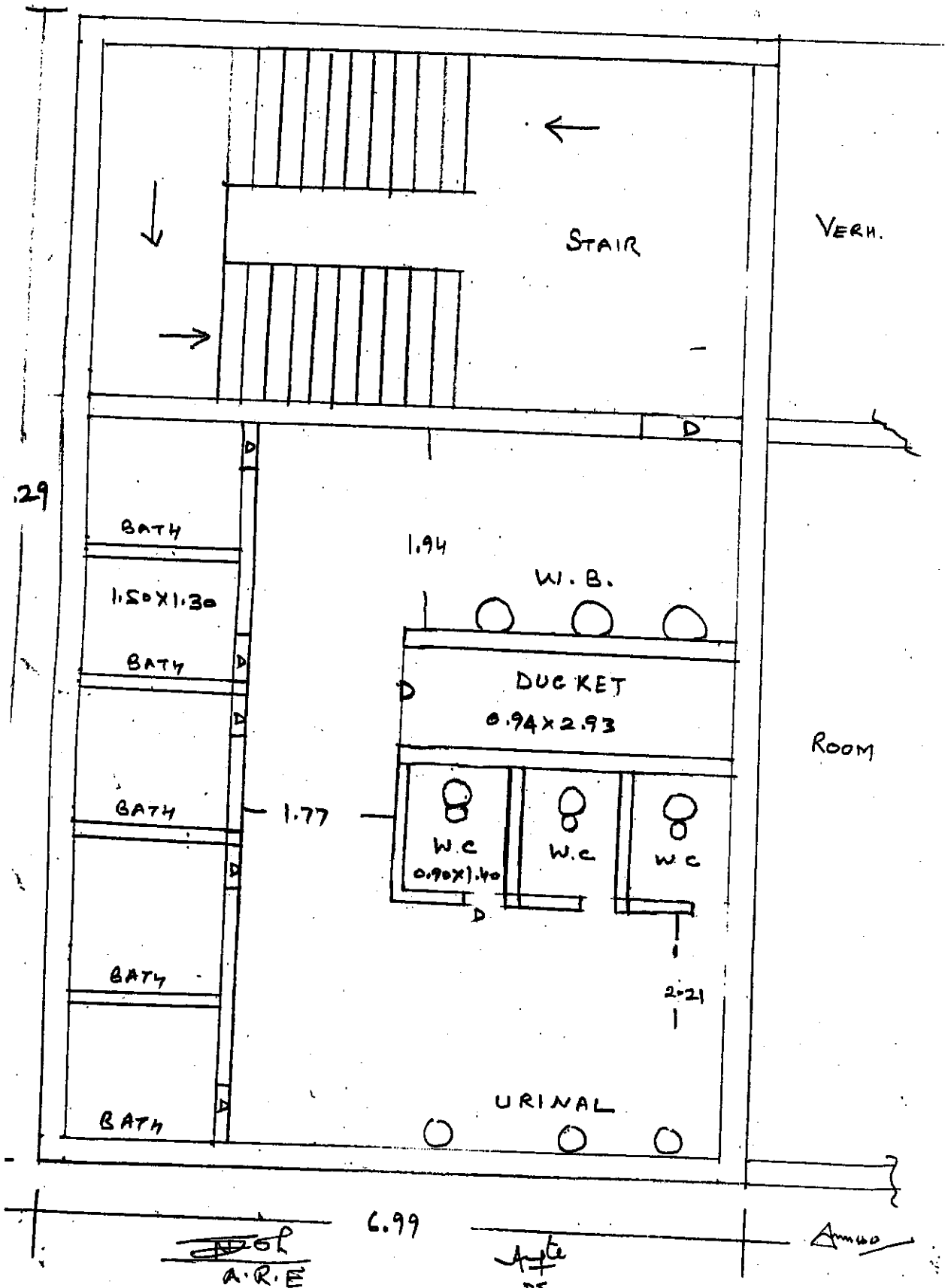
Abstract of cost

S.No	Particular of Item	Plinth area	Rate (Per Sqm)	Amount
(1)	Construction of Toilet block in cautelay Bhawan hostel Block			
(a)	Ground Floor Plinth Area	52.56M ²	Rs 10,250.66	Rs 5,38,774.69
(b)	First Floor Plinth area	52.56M ²	Rs 9,109.15	Rs 4,78,776.92
(c)	Second Floor Plinth Are	52.56M ²	Rs 10,063.46	Rs 5,28,935.46
(d)	Third Floor Plinth area	52.56M ²	Rs 10,063.46	Rs 5,28,935.46
(2)	Add Brick Coba treatment over Roof complete	52.56M ²	Rs 355.00	Rs 18,658.80
(3)	Less 5 % due to U.P.R.N.N.Ltd working	(--)		Rs 20,94,081.33 Rs 1,04,704.07
(4)	Add 11.5 % U.P.R.N.N.Ltd Centage Charges	(+)		Rs 19,89,377.26 Rs 2,28,778.38
				Rs 22,18,155.64 Say Rs 22.18 Lacs


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


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

CAUTLEY BHAWAN
TOILET BLOCK, STAIR



उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

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

कैम्प कार्यालय,
आई०आई०टी० परिसर,
गंगा भवन होस्टल,
रुड़की (हरिद्वार)



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

पत्रांक.....198/2.NN/F-50/08

दिनांक:....2.5.10....08

TO|

The Institute Engineer,
I.I.T.,
Roorkee.

Training & Placement
Sub: Estimate of Aluminium work in STEP Building. *Building*

Dear Sir,

Kindly refer your letter dtd 3-10-08 and in this connection an Estimate amounting to Rs 262585.42 for the difference of Aluminium Windows and Doors, is enclosed herewith for Your kind information and necessary action.

Thanking You,

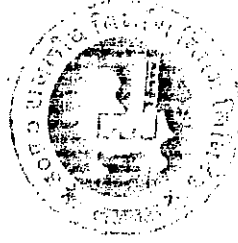
Encls: As above.

Yours Faithfully,

Ammao
Unit Incharge.

उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

राज्य निर्माण निगम लिमिटेड
(क.स.स. 1952 में स्थापित)



U.P Rajkiya Nirman Nigam Ltd

Training & Placement
NAME OF WORK :- Construction of **STEP** Building (Aluminum work) in
campus of I.I.T Roorkee in Distt Haridwar (U.K)

COST OF DETAILED ESTIMATE :- Rs 2,62,585.42 only

Say Rs 2.63 lacs

NAME OF UNIT :-

U.P.R.N.N.Ltd

***Camp office D Type of residence campus
Vikasnagar I.I.T Roorkee***

G.M Office:-

***U.P Rajkiya Nirman Nigam Ltd
Officer s Colony
Officer hostel Campus
Delhi Road saharanpur (U.P)***

Head office :-

***U.P.Rajkiya Nirman Nigam Ltd
Vishwaria Bhawan Vibhuti Khand
Gomati nagar Lucknow (U.P)***

OFFICE OF THE PROFESSOR & COORDINATOR, TRAINING AND PLACEMENT CELL
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

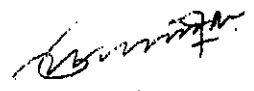
No. TPC/395

Dated: 3rd October 2008

Institute Engineer


Please arrange to provide the following side by side in under construction lecture room/committee room/board rooms, in Placement Complex for speedy completion of the work:

- 1 Internet/Telephone connections in each rooms.
- 2 Aluminum windows and doors.
- 3 False ceiling in each room.


(P.K. Jain)
Professor & Coordinator,
Training & Placement Cell

Unit Incharge UPRNN Roorkee

- ① Please provide Internet and Telephone wire in each room
- ② Please discuss with Prof P.K. Jain and give estimate for the difference of Aluminum windows and doors
- ③ False ceiling is not required as ceiling height is OK for A.C.


3/10/08
Copy to Coordinator TPC cell to kindly inform and discuss with Er S.K. Jain Unit Incharge Mobile -- 9412239666

U.P.R.N.N.Ltd Camp office At I.I.T Roorkee

Name of work :- Construction for extension of STEP Building in campus of I.I.T Roorkee in Distt Haridwar

Measurement

(1) Supply & Fixing & fixing Anodized Aluminum glazing with 5mm thick glass ,rubber beading etc complete including supply of all materials

labourT&P etc complete for proper completion of work

(a) First Floor (Open able Portion)

(I) Window $1 \times 13 \times 1.50 \times 2.20 = 42.90M^2$

$1 \times 9 \times 1.35 \times 1.20 = 14.58$

$1 \times 2.00 \times 1.200 = 2.40$

$1 \times 0.90 \times 1.20 = 1.08$

$1 \times 1.20 \times 1.35 = 1.62$

$1 \times 4 \times 0.75 \times 1.20 = 3.60$

$1 \times 4 \times 0.95 \times 1.35 = 5.13$

 $71.31M^2$

(II) Door $1 \times 3 \times 1.20 \times 2.10 = 7.56 M^2$

$1 \times 6 \times 0.90 \times 2.10 = 11.34$

$1 \times 4 \times 0.75 \times 2.10 = 6.30$

$1 \times 2 \times 1.00 \times 2.10 = 4.20$

 $29.40M^2$

(b) First Floor Fixed(Portion)


In Hall $1 \times 8.80 \times 3.50 = 30.80M^2$

$1 \times 3.90 \times 3.50 = 13.65$

 $44.45M^2$

(2) Supply and Fixing Door Floor Spring etc complete
First Floor

For door $1 \times 11 = 11No$


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

U.P.R.N.N.Ltd Camp office At I.I.T Roorkee

Name of work :- Construction for extension of STEP Building in campus of I.I.T Roorkee in Distt Haridwar

Abstract of cost					
SI No	Particular of item	Unit	Rate	Qty	Amount
(1) Supply & Fixing Anodized					
	Aluminum glazing with 5mm thick glass, rubber beading etc complete including supply of all materials lab our T&P etc complete for proper completion of work				
(a) Open able Portion					
	(i) Window	M ²	(Rs2475.00 -- Rs 1350.00) Per square meter	71.31M ²	Rs Rs 80,223.75
	(ii) Door	M ²	(Rs 2475.00 -- Rs1076.00) Per Square meter	29.40 M ²	Rs 41,160.00
	(b) Fixed Potion	M ²	Rs 2475.00 Per Sqm	44.45M ²	Rs 1,10,013.75
(2) Supply & fixing door floor spring complete					
		No	Rs 1500.00 Each	11No	Rs 16,500.00
					Rs 2,47,897.50
(3) Less 5 % Due to U.P.R.N.N.Ltd working					(---) Rs 12,394.88
(4) Add 11.5 % U.P.R.N.N.Ltd Centage Charges					(+) Rs 2,35,502.62 Rs 27,082.80
					Rs 2,62,585.42

Say Rs 2.63 Lacs


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


Unit Incharge
U.P.R.N.N.ltd

केन्द्रीय लोक निर्माण विभाग

पत्रांक: 58(1)/रू0के0मं0/ 1740

दिनांक: 31/10/08

सेवा में,

संस्थान अभियन्ता
भारतीय प्रौद्योगिकी संस्थान
रूडकी।

विषय:- भारतीय प्रौद्योगिकी संस्थान में लाईब्रेरी बिल्डिंग का निर्माण ।

- संदर्भ: (1) आपका पत्रांक सं0 एवं कार्य/257/सं0अ0 दिनांक 25.07.08
(2) इस कार्यालय का पत्रांक सं0 58(1)/रू0के0मं0/1404 दिनांक 01.09.08

महोदय,

कृपया उपरोक्त संदर्भित पत्रों का अवलोकन करें। जिसके क्रम में लेख है कि कार्य की A/A & E/S संस्थान अभियन्ता के पत्र सं0 Const/216/IE/dt. 09.04.2003 द्वारा रू0 1200 लाख की प्रदान की गई थी। तथा वैधुत प्रावधानों के लिये रू0 80.00 लाख की अलग से स्वीकृति बोर्ड ऑफ गवर्नर द्वारा जारी की गई थी। अतः इसे प्रारम्भिक अनुमान का 10% का हिस्सा मानना न्याय संगत नहीं है। इस सम्बन्ध में आपके कार्यालय पत्र संख्या 155 दिनांक 14.07.06 के द्वारा मांगी गई, विस्तृत आख्या SE/DCC के कार्यालय पत्र संख्या 23(311)/दे0के0परि0/2765 दिनांक 21.08.06 (प्रतिलिपि संलग्न) द्वारा पहले ही आपको भेज दी गई है। उपरोक्त कार्य के लिये आई0आई0टी0 द्वारा M/s C.P. Kuckerja & Associates को consultant नियुक्त किया गया था जिसके लिए उसे कुल रू0 36,11,261/- का भुगतान किया जाना है। जिसके तहत उसे रू0 23,27,121/- लाख का भुगतान किया जा चुका है तथा रू0 12,84,140/- का भुगतान किया जाना बाकी है। Consultnat को किये जाने वाले भुगतान का प्रावधान प्रारम्भिक अनुमान में Dep. Charge में होता है। जो कि भा0प्रौ0सं0 को प्रेषित अनुमानों में नहीं लगाया जा रहा है।

क्र0सं0 पेज-2

उपरोक्त कार्य का final खर्चा इस प्रकार है।

A/A & E/S : 1200 + 80 = 1280 Lacs

Upto date expdr. &
Liabilities : 1402.83 Lacs

Amount paid to consultant : 36.11 Lacs

Actual expdr. on work : 1366.72 lacs which is 6.78% more than the A/A
& E/S amount

CPWD work manual के पैरा 2.3.5 एवं 2.4.2 के अनुसार CPWD A/A & E/S amount से 10% की सीमा तक अधिक व्यय कर सकती है। जबकि उपरोक्त कार्य में केवल 6.78% अधिक व्यय ही हुआ है। अतः आपसे अनुरोध है कि बकाया राशि रू0 122.83 लाख का भुगतान शीघ्र इस कार्यालय को करने की कृपा करें।

संलग्न: उपरोक्तानुसार

कार्यपालक अभियन्ता
रूडकी केन्द्रीय मण्डल
क०लो०नि०वि०, रूडकी

UTILIZATION CERTIFICATE

1. Name of the State : Uttarakhand
2. Name of the Project & Location : C/o Central Library building for IIT Roorkee.
3. Year of Sanction : 2003
4. No. & Date of Sanction : Constn/26/IE dt. 09.04.2003 for Rs. 1200.00 Lacs
5. Cost of Project : Rs. 1200.00 Lacs
6. Status of work : Work completed and handed over.
7. Amount released so far :-

Installed by	Installment	Date of Release	Amount Released
I.I.T., Roorkee	4 Nos	DCDI	Rs. 545.00 Lacs
		April'04	Rs. 250.00 Lacs
		Jan'05	Rs. 405.00 Lacs
		Feb'05	Rs. 80.00 Lacs
		Total	Rs. 1280.00 Lacs

8. Amount utilized till date : **Rs. 12,80,00,000/-**

9. Item wise details of expenditure (Indicate major items)


Sl. No.	Item name	No. of item	Details	Expenditure
1.	C/o Central Library building for IIT at Roorkee.	1	Actual Expdr. and Liabilities.	Rs. 14,02,83,000/-

10. Details of next installment :-

- (a) Installment : (Next) **Rs. 122.83 Lacs** (Final)
- (b) Projected progress Work completed and handed over.

It is certified that the expenditure, as detail above, has been incurred only on those items for which financial sanction was accord by the Indian Institute of Technology Roorkee.

Place: Roorkee
Date : 09.07.2008


Executive Engineer
Roorkee Central Division
CPWD, Roorkee.

भारत सरकार
केन्द्रीय लोक निर्माण विभाग

पत्रांक: 58(1)/रू0के0मं0/ 1741

दिनांक: 31/10/08

सेवा में,

संस्थान अभियन्ता
भारतीय प्रौद्योगिकी संस्थान
रूडकी।

विषय:- भारतीय प्रौद्योगिकी संस्थान में मैन गैस्ट हाऊस का निर्माण

संदर्भ: (1) आपका पत्रांक सं0 एवं कार्य/257/स0अ0 दिनांक 25.07.08
(2) इस कार्यालय का पत्रांक सं0 58(1)/रू0के0मं0/1404 दिनांक 01.09.08

महोदय,

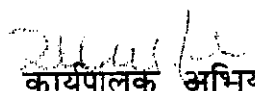
कृपया उपरोक्त संदर्भित पत्रों का अवलोकन करें। जिसके क्रम में लेख है कि इस कार्यालय द्वारा मैन गैस्ट हाऊस का प्रारम्भिक अनुमान रू0 3,31,71,700/- का आपके कार्यालय को प्रेषित किया गया था जिसमें से हीटर, टी0वी0, फ्रिज का प्रावधान काटने व फर्नीचर के रेट कम करने के उपरान्त रू0 235.00 लाख का A/A & E/S प्रदान किया गया। यह अनुमान बिना वास्तुकीय नक्शों के 2000 वर्गमी0 plinth area के लिये बनाया गया था। इसके उपरान्त भा0प्रौ0 सं0 द्वारा नियुक्त consultant द्वारा जारी वास्तुकीय नक्शों में Plinth area 2000 Sqmtr से बढ़ाकर 3038 Sqmtr कर दिया गया जिसके कारण दोबारा रू0 317.00 लाख का प्रारम्भिक अनुमान प्रेषित किया गया था जैसा कि इस अनुमान की History sheet से पता चलता है कि इसमें furniture का प्रावधान नहीं लिया गया था जिसके लिए रू0 50.00 लाख का अलग से अनुमान प्रेषित किया गया था। इसके अतिरिक्त उपरोक्त कार्य के लिये नियुक्त consultant श्री जसबीर साहनी एण्ड एसोसिएट्स को रूपये 14,78,550/- का भी भुगतान किया गया है जो कि प्रारम्भिक अनुमान में शामिल नहीं था। इसका प्रावधान Departmental charges में शामिल होता है जो भा0प्रौ0सं0 को दिए जा रहे प्राक्कलन में शामिल नहीं किया जा रहा है।

क्र0सं0 पेज-2

उपरोक्त कार्य का Final खर्चा इस प्रकार है:

- | | |
|--|---|
| 1) A/A & E/S received | : 317 + 50 = 367 Lacs |
| 2) Upto date expenditure & liabilities | : 403 Lacs |
| 3) Paid to consultant | : 14.79 Lacs |
| 4) Actual exp. On work= | 388.21 lacs which is
5.78% more than the A/A
& E/S of the work. |

CPWD work manual के पैरा 2.3.5 एवं 2.4.2 के अनुसार CPWD A/A & E/S amount से 10% की सीमा तक अधिक व्यय कर सकती है। जबकि उपरोक्त कार्य में केवल 5.78% अधिक व्यय ही हुआ है। अतः आपसे अनुरोध है कि बकाया राशि **रु0 36.00 लाख** का भुगतान शीघ्र इस कार्यालय को करने की कृपा करें।


कार्यपालक अभियन्ता
रूडकी केन्द्रीय मण्डल
के0लो0नि0वि0, रूडकी

UTILIZATION CERTIFICATE

1. Name of the State : Uttarakhand
2. Name of the Project & Location : C/o V.V.I.P. Guest House for IIT at Roorkee.
3. Year of Sanction : 2005
4. No. & Date of Sanction : Constn./173/IE Dated 13.01.2003 for Rs. 235.00 lacs.
5. Cost of Project : (i) Civil Work: Rs. 317.00 Lacs
(ii) Furniture: Rs. 50.00 Lacs

Rs. 367.00 Lacs

6. Status of work : Work completed & handed over.

7. Amount released so far:-

Installed by	Installment	Date of Release	Amount Released
I.I.T., Roorkee	4 Nos	DCDI April'04 Nov'04 Mar'06	Rs. 160.00 Lacs Rs. 50.00 Lacs Rs. 107.00 Lacs Rs. 50.00 Lacs
		Total	Rs. 367.00 Lacs

8. Amount utilized till date : Rs. 3,67,00,000/-

9. Item wise details of expenditure (Indicate major items)

Sl. No.	Item name	No. of item	Details	Expenditure
1.	C/o V.V.I.P. Guest House for IIT at Roorkee.	1. Civil work 2. Furniture work	Actual Expdr. Liabilities.	Rs. 4,02,66,000/-


10. Details of next installment:

(a) Installment : (Next) **Rs. 35.66 Lacs** (Final)

(b) Projected progress : Work completed and handed over.

It is certified that the expenditure, as detail above, has been incurred only on those items for which financial sanction was accord by the Indian Institute of Technology Roorkee.

Place: Roorkee
Date : 09.07.2008


Executive Engineer
Roorkee Central Division
CPWD, Roorkee.

केन्द्रीय लोक निर्माण विभाग

पत्रांक: 58(1)/रू0के0मं0/1786

दिनांक: 10-11-08

सेवा में,

संस्थान अभियन्ता

भारतीय प्रौद्योगिकी संस्थान

रूडकी।

विषय:- भारतीय प्रौद्योगिकी संस्थान में मल्टीस्टोरिड आवासों का निर्माण कार्य (फेज-I एवं II)

संदर्भ: (1) आपका पत्रांक सं0 एवं कार्य/257/स0अ0 दिनांक 25.07.08

(2) इस कार्यालय का पत्रांक सं0 58(1)/रू0के0मं0/1404 दिनांक 01.09.08

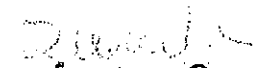
महोदय,

कृपया उपरोक्त संदर्भित पत्रों का अवलोकन करें। जिसके क्रम में लेख है कि इस कार्यालय द्वारा मल्टीस्टोरिड आवासों फेज-I का प्रारम्भिक अनुमान रू0 535.56 लाख का आपके कार्यालय को प्रेषित किया गया था जिसमें से आपके द्वारा अपने स्तर पर Modification करते हुये रू0 521.44 लाख की A/A & E/S प्रदान की गई। इसी प्रकार मल्टीस्टोरिड आवासों फेज-II का प्रारम्भिक अनुमान भी रू0 522.19 लाख का प्रेषित किया गया था। जिसकी A/A & E/S आपके कार्यालय द्वारा प्रदान की गई। यह अनुमान 5661 वर्गमीटर Plinth area पर व 1600 वर्गमीटर Development area के आधार पर बनाया गया था। इसके उपरान्त भारतीय प्रौद्योगिकी संस्थान द्वारा कुछ Modification करने के उपरान्त नक्शों पास किये गये जिससे Plinth area 5661 वर्गमी0 से बढ़कर 6359 वर्गमी0 हो गया एवं Site पर उपलब्ध Development area 6000 वर्गमीटर हो गया। इसके साथ ही फेज-I का प्रारम्भिक अनुमान भेजते समय Cost Index 139 एवं फेज-II का प्रारम्भिक अनुमान भेजते समय Cost Index 146 था। जो कार्य पूर्ण होने तक बढ़कर 189 हो गया। इन

रू0सं0 फेज-2

सभी कारणों से कार्य की लागत बढ़कर लगभग रू० 1383.00 लाख (रू० 726.00 लाख फेज- I एवं रू० 657.00 फेज- II) बनती है। केन्द्रीय लोक निर्माण विभाग द्वारा लागत कम करने हेतु किये गये प्रयासों के अनुरूप ही, जैसा कि आपके उपरोक्त संदर्भित पत्र में विदित है, कार्य की लागत Revised A/A & E/S से कम (रू० 1383.00 लाख के स्थान रू० 1316.00 लाख) हुई है और इसी की Demand भारतीय प्रौद्योगिकी संस्थान से की गई है।

अतः आपसे अनुरोध है कि वकाया राशि रू० 169.76 लाख का भुगतान शीघ्र इस कार्यालय को करने की कृपा करें।


कार्यपालक अभियन्ता
रूडकी केन्द्रीय मण्डल
के०लो०नि०वि०, रूडकी

UTILIZATION CERTIFICATE

1. Name of the State : Uttarakhand
2. Name of the Project & Location : C/o 28 Nos Multistoried Flats at I.I.T., Roorkee (Phase I & II)
3. Year of Sanction : 2003
4. No. & Date of Sanction : **Ph-I:** Constn/173/IE dt. 13.01.2003 for Rs. 521.00 Lacs
Ph-II: Constn/594/IE dt. 26.06.2003 for Rs. 520.00 Lacs

Total = Rs. 1041.00 Lacs

5. Cost of Project : Rs. 1041.00 Lacs
6. Status of work : Work completed and handed over.
7. Amount released so far :-

Installment by	Installment	Date of Release	Amount Released
I.I.T., Roorkee	4 Nos	DCD-I April'04 July'06 Jan'07	Rs. 844.10 Lacs Rs. 100.00 Lacs Rs. 97.00 Lacs Rs. 104.20 Lacs ----- Rs. 11,46,20,000/-

8. Amount utilized till date : Rs. 11,46,20,000/-

9. Item wise details of expenditure (Indicate major items)


Sl. No.	Item name	No. of item	Details	Expenditure
1.	C/o 28 Nos Multistoried Flats at IIT Roorkee. (Phase I & II).	Phase-I Phase -II	Actual Expenditure and Liabilities.	Rs. 13.15,96,000/-

10. Details of next installment:-

- (a) Installment : (Next) **Rs. 169.76 Lacs** (Final)
- (b) Projected progress : Work completed and handed over.

It is certified that the expenditure, as detail above, has been incurred only on those items for which financial sanction was accord by the Indian Institute of Technology Roorkee.

Place: Roorkee
Date : 09.07.2008


Executive Engineer
Roorkee Central Division
CPWD, Roorkee.

स्पीड पोस्ट



भारत सरकार
केन्द्रीय लोक निर्माण विभाग
कार्यालय मुख्य अभियन्ता (उ०अं०-११)
केन्द्रीय भवन "तृतीय तल",
अलीगंज, लखनऊ

पत्रांक - 23(305)/अ०अ०गि० (नि०)/उ०अं०-११/पी०-११/7277-80

दिनांक: 16/6/05

सेवा में,

रांस्थान अभियन्ता
आई०आई०टी०,
रुड़की।

विषय : कं० आफ 28 नं० मल्टी स्टोरीड फ्लैट्स एट आई०आई०टी० रुड़की (फेज-१ एवं ११)

उपरोक्त कार्य का संशोधित प्रारम्भिक अनुमान फेज-१ की राशि रु० 726.00 लाख एवं फेज-११ की राशि रु० 657.00 लाख की राशिम 'अधिकारी द्वारा प्रशासनिक अनुमोदन एवं व्यय स्वीकृति हेतु प्रेषित किया जाता है। इसका विवरण इतिवृत्त में दिया गया है।

संलग्नक: उपरोक्तानुसार।

कार्यपालक अभियन्ता (नि०-११)
उ०अं०-११, के०लो०नि०वि०, लखनऊ

प्रतिलिपि:

1. अधीक्षण अभियन्ता, देहरादून केन्द्रीय परिमण्डल, के०लो०नि०वि०, देहरादून को सूचनार्थ एवं शीघ्र आवश्यक कार्यवाही हेतु प्रेषित।
2. अधीक्षण अभियन्ता (वैद्युत), लखनऊ केन्द्रीय वैद्युत परिमण्डल, के०लो०नि०वि०, लखनऊ को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।
3. कार्यपालक अभियन्ता, रुड़की केन्द्रीय मण्डल, के०लो०नि०वि०, रुड़की को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

कार्यपालक अभियन्ता (नि०-११)

केन्द्रीय लोक निर्माण विभाग

पत्रांक: डी.सी. 4/ 2005/70/

दिनांक

22/6/05

प्रतिनिधि:

- | | |
|---------------------|--|
| 1- मुख्य अभियन्ता-१ | अधीनस्थ रु० मं० के० लो
नि० वि० रुड़की की
सूचनाएं एवं आवश्यक
कार्यवाही हेतु प्रेषित। |
| 2- मुख्य अभियन्ता-२ | |
| 3- मुख्य अभियन्ता-३ | |

कार्यपालक अभियन्ता
रु० मं० के० लो नि वि

रुड़की
9/4/05



भारत सरकार
GOVERNMENT OF INDIA

मुख्य अभियन्ता (उ०अ०-॥)
केन्द्रीय लोक निर्माण विभाग
अलीगंज, लखनऊ- 226 024

CHIEF ENGINEER (NZ-II)
CENTRAL PUBLIC WORKS DEPARTMENT
ALIGANJ, LUCKNOW- 226 024

संशोधित प्रारंभिक प्राक्कलन
REVISED PRELIMINARY ESTIMATE

कार्य का नाम :

NAME OF WORKS: Construction of 28 Nos. Multi Storied Flats at
IIT Roorkee (Phase-II)

अनुमानित लागत
ESTIMATED COST

Total Rs. 657.00 Lacs

**GOVERNMENT OF INDIA
CENTRAL PUBLIC WORKS DEPARTMENT**

State: Uttaranchal **Division:-** Roorkee Central Division **Branch:** B&R

Name of Work: Construction of 28 Nos. Multi Storied Flats at IIT Roorkee (Phase-II)

Funds :

Major Head :

Minor Head : Deposit

Detailed Head :

The revised preliminary estimate framed by Er. V.K. Asol, Executive Engineer, Roorkee Central Division, CPWD, Roorkee and further processed by Er. Manu Amitabh, Executive Engineer(P-II), NZ-II, CPWD, Lucknow for the probable cost of Rs. 657.00 Lacs i/c 3% contingencies

REPORT

History: This preliminary estimate amounting to Rs. 657.00 Lacs i/c 3% contingencies has been framed to cover the probable cost of the above mentioned work and for accord of revised A/A & E/S from the competent authority. Earlier on the basis of preliminary drawings approved by the IIT, a Preliminary Estimate was submitted for cost of Rs. 5,35,55,500.00. This estimate was modified by IIT at their level and sanction was conveyed for Rs. 521.00 Lacs only vide their letter No. Constn./594/IE date 26-06-2003

This revised preliminary estimate has been framed on basis of the drawing and specifications prepared the architect and duly approved by the IIT. In the original PE, cost of development was calculated on the basis of 1600 sqm. area required to be developed. However, the total area required to be developed for making the building functional is 6000 sqm. The cost of internal electrical installation has also increased due to adoption of better specifications and increase in number of points.

Subsequent to the approval of drawings some modifications were made in the drawings which resulted in increase in the area. These drawings were finally approved by the IIT.

The increase in cost is mainly due to increase in plinth area, provision of richer specifications and development work.

Design and Scope:

Following provision have also been made in this estimate:-

- (i) All framed structure duly designed for earthquake resistance.
- (ii) Provision for fire fighting internal water supply and sanitary installation internal electrical installation i/c copper wiring and wiring for telephone and power points.
- (iii) Provision has also been made for development work, bulk services and septic tanks under ground sump well and horticulture works. Area of development work is increased from 1600 sqm in original estimate to 6000 sqm. as per the site requirement.
- (iv) Provision of deluxe unigloss exterior paint finish in place of stone grit wash has been made in this revised estimate.

Specification:-

The work shall be carried out as per CPWD specifications 1996 Vol. I to VI with upto date correction slips and/or manufactures requirement.

- Foundation :** RCC Raft foundation
- Superstructure :** RCC beams, columns and slabs, 23 cm/115 cm thick brick masonry filler walls where required.
- Flooring :** Mosaic flooring is 100% white marble chips in white cement in D/D & Lobby area & mosaic flooring in 50% white cement & 50% grey cement bed room with 80% white, 10% cherry red 10% green marble chips.
- Doors & Window:** Both sides teak veneering flush door shutters for doors. Aluminium section windows in lift block MS grills in the windows with external doors & window having wire gauge shutters. For windows shutters teak wood glazed and wire glazed shutters provided
- Finishing :** All internal portion of walls shall be plastered with cement mortar and finished with POP & acrylic distemper. External portion shall be plastered & finished with Multi surface superior unigloss paint.

Rates:-

Plinth Area Rates 01-01-1992 enhanced by 89% cost index rates and prevailing market rate.

Cost:-

Rs. 657.00 Lacs

Land:-

Available with client department in IIT Roorkee.

Method:-

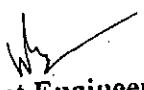
By contract after call of tenders.

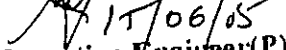
T & P:-

All required T&P required. All necessary T&P shall be arranged by the contractor at his own cost.

Time:-

Work nearing completion


Assistant Engineer (P)
NZ-II, CPWD, Lucknow


Executive Engineer (P)-II
NZ-II, CPWD, Lucknow

Superintending Engineer (P)
NZ-II, CPWD, Lucknow

Date of Receipt 14.8.93 26.1.94

Work

103.04
103.2004
01.01.2005

146
189
220

General Abstract of Revised Preliminary Estimate


Name of Work: C/o 28 Nos. Multistoried Flats at IIT, Roorkee.(Phase-II)


Sl. No.	Description of Work	As per Sanctioned Estimate			Revised Estimate			Differences (Saving+)/Excess(-))
		Civil	Electrical	Total	Civil	Electrical	Total	
1	Building Portion	40753085.00	1324126.00	42077211.00	54143972.00	3467683.00	57611655.00	15534444.00
2	Development Work	1318000.00	81800.00	1399800.00	3020558.00	396893.00	3417451.00	2017651.00
3	Bulk Services	----	8667450.00	8667450.00	----	4635000.00	4635000.00	-4032450.00
4	Total	42071085.00	10773376.00	52144461.00	57164530.00	8499576.00	65664106.00	13519645.00

Say Rs. 521.00
Lacs

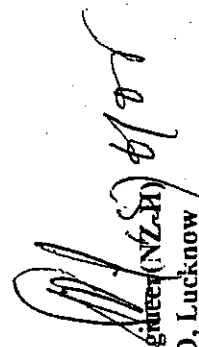
Say Rs. 657.00
Lacs

* Note: Civil & Electrical amount interchanged by mistake


AE(P)
CPWD, Lucknow


EE(P)-II
CPWD, Lucknow

SE(P)
CPWD, Lucknow


Chief Engineer (NZ-H)
CPWD, Lucknow

[illegible]

Abstract of Original & Revised Preliminary Estimate										
Name of Work: C/o 28 Nos. Multistoried Flats at IIT, Roorkee.(Phase-II)										
SL No.	Sub-Head and Item of work	As per Sanctioned Estimate			Revised Estimate			Differences		
		Qty.	Rate	Unit.	Amount	Qty.	Rate	Unit	Amount	
1	a) RCC framed structure upto 6 storied (floor height 2.90 mtr)	5661.00	2810.00	sqm	15907410.00	6359.00	2810.00	sqm	17868790.00	Minor increase in plinth area due to addition of lift block
	b) Wet riser & water supply	63.75	2595.00	sqm	165431.00	63.75	2595.00	sqm	165431.00	
2	Extra for Additional two stories over six stories	5661.00	50.00	sqm	283050.00	6359.00	100.00	sqm	635900.00	
3	Extra for Additional height (2.05-2.90)=0.15 except Garage (GF) 12.5/0.36x0.15=62.50	5661.00	62.50	sqm	353813.00	6359.00	62.50	sqm	397438.00	
4	Garrages	754.00	1715.00	sqm	1293110.00	784.00	1715.00	sqm	1344560.00	
5	Resisting earth quake forces	6415.00	250.00	sqm	1603750.00	7143.00	250.00	sqm	1785750.00	
6	Fire fighting	6415.00	185.00	sqm	1186775.00	7143.00	185.00	sqm	1321455.00	
7	Internal water supply and sanitary installation	28.00	43800.00	sqm	1226400.00	28.00	43800.00	sqm	1226400.00	
8	a) Extra for pile foundation upto a depth of 15 mtr.	5661.00	615.00	sqm	3481515.00	6359.00	440.00	sqm	2797960.00	
	b) Extra for raft foundation	3269.28	57.10	sqm	186676.00	1634.64	57.10	sqm	93338.00	
9	Extra for using white cement mosaic flooring instead of ordinary mosaic flooring Diff of cost = 217.85-166.75=57.10					1634.64	28.55	sqm	46669.00	
	i) Using 50% white cement instead of ordinary cement	3900.00	550.00	sqm	2145000.00	5800.00	60.00	sqm	348000.00	
10	Extra for superior quality external finish				27832930.00				28031691.00	
	Add 1.5% cost index on item No. 6 in original estimate and 15.28% in revised estimate being DSR 1967 item i.e. on Rs. 1.40,007/- @ 15.28%				11730577.00				24513879.00	
						Add CI 89% as approved for Roorkee (sl 1 to 8)				12785362.00
					2595.00				21393.00	
					39566102.00				52566963.00	13000861.00
					1186983.00				1577009.00	390025.00
					40753085.00				54143972.00	13390887.00
	Add 3% contingencies									Total

SL No.	Sub-Head and Item of work	As per Sanctioned Estimate			Revised Estimate			Differences	
		Qty.	Rate	Unit	Amount	Qty.	Rate		Unit
(Electrical Work)									
Building Portion									
Internal Electrical installation									
1	Internal Electrical installation in each Flat	28.00	21400.00	each	599200.00	28.00	12400.00	each	347200.00
2	Extra for copper wiring @20% of Rs. 21400.00	28.00	4280.00	each	119840.00	18504690.00	4%	%	740188.00
3	Telephone conduit & wiring 1 Job/flat	28.00	2500.00	each	719040.00	18504690.00	1%	%	185047.00
4	TV conduit & wiring 1 Job/flat	28.00	2500.00	each	70000.00	18504690.00	1%	%	185047.00
5	Provision for MCB power points 4 Nos. in each flat (2 Nos. for geyser + 2 Nos. for air conditioners.)	112.00	8000.00	each	89600.00	—	—	—	—
6	Extra for service connection	—	—	—	—	18504690.00	1.25%	%	231309.00
7	Extra for lighting conductor	—	—	—	—	18504690.00	.5%	%	92523.00
					948640.00				
					330758.00	Add cost index 8.9%			
					1279398.00				
					38382.00				
Total					1317780.00	Total			
Say Rs.					1318000.00				
Add 3% contingencies									
					3366683.00				
					101900.00				
Total					3467683.00				
Development works									
1	Street lighting with HPSV fitting	1600.00	22.65	sqm	36240.00	6000.00	22.65	sqm	135900.00
2	Extra for U/G cable @50% of above	1600.00	11.33	sqm	18128.00	6000.00	11.33	sqm	67980.00
					54368.00				
					25009.00	Add cost index 8.9%			
					79377.00				
					2381.00				
Total					81758.00	Total			
Say Rs.					81800.00				
					396893.00				

71 Add cost index @46% on Rs. 719040/- (i.e. on item No. 1&2)

Add 3% contingencies

Sl. No.	Sub-Head and Item of work	As per Sanctioned Estimate			Revised Estimate			Differences	
		Qty.	Rate	Unit	Amount	Qty.	Rate		Unit
(Electrical Work)									
Bulk Services									
I Fire Protection services									
A	Wet riser								
a	Electric pump i/c piping accessories	1.00	1000000.00	Job	1000000.00				
b	Diesel pump i/c piping accessories	(a to d)							
c	Electric jokey pump i/c piping accessories	2.00	500000.00	Job	1000000.00	1.00	1500000.00	job	1500000.00 Total as per actual cost
d	Electric control panel i/c cabling etc.	2.00	200000.00	Job	400000.00	1.00	100000.00	job	100000.00 Total as per actual cost
e	Wet riser piping i/c landing valves, control valves air-vessels, tank hose pipe etc.								
B	Manually operated electric fire alarm i/c local control panel, main control panel wiring, manual call boxes, intensity sounder hooter, talk back units PA system, mimic drum etc.								
C	U/C cable system for connecting fire pump house with electric sub-station	1.00	100000.00	Job	100000.00				
D	Exit sign board	2.00	10000.00	Job	20000.00				
2	Lift								No. of lifts
a)	10 Passenger lift with 8 landing control panel etc.	2.00	1000000.00	Job	2000000.00	1.00	2550000.00		2550000.00 decreased from 4 to 2 Nos.
b)	10 Passenger Fire lift with 8 landing control panel etc.	2.00	1000000.00	Job	2000000.00				
c)	Power cabling	2.00	100000.00	Job	200000.00	1.00	350000.00		350000.00
					6720000.00				4500000.00
3	Drinking water pump set-2 Nos. with control panel, piping, accessories etc.	1.00	175000.00	Job	175000.00				
4	Provision for Internal Electrical installation of Pump house.	1.00	20000.00	Job	20000.00				
5	Power Distribution i/c S/C, LT Panel Board.	300.00	5000.00	KV	1500000.00				
					8415000.00				4500000.00 Total as per actual cost
					252450.00				135000.00
	Add 3% contingencies				8667450.00			Total	4635000.00