

# AGENDA FOR 9<sup>th</sup> MEETING OF BUILDING & WORKS COMMITTEE MARCH 17, 2008



NATIONAL INSTITUTE OF TECHNOLOGY KURUKSHETRA-136119

# AGENDA FOR 9<sup>TH</sup> MEETING OF BUILDING & WORKS COMMITTEE

**VENUE: BOARD ROOM** 

NATIONAL INSTITUTE OF TECHNOLOGY

KURUKSHETRA

DAY : MONDAY

DATE: 17.03.2008

TIME : 11.00 AM

## NATIONAL INSTITUTE OF TECHNOLOGY KURUKSHETRA

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#### CONSTITUTION OF BUILDING AND WORKS COMMITTEE

1. Dr. M.N. Bandyopadhyay, Chairperson

Director.

National Institute of Technology,

Kurukshetra

Sh. Madan Mohan, 2.

Member

Director (NITs),

Ministry of Human Resource Development,

Deptt. of Higher Education,

Shastri Bhawan,

New Delhi-110001

3. Dr. R.P. Singh, Member

Council Member,

AICTE, Retd. Executive Director,

A-1, Chattarsal Nagar, Phase-I, JK Road,

BHEL, Bhopal

Dr. S.P. Jain,

Member

Dean (Planning & Development) National Institute of Technology,

Kurukshetra

5. Er. M.P. Gupta, Member

Director, Technical Education Haryana, SCO No. 38-39, Sector 17-A,

Chandigarh

6. Er. Niranjan Singh, Member

Superintending Engineer (Civil), Chandigarh Central Circle, CPWD,

Chandigarh

7. Er. S. Khan, Member

Executive Engineer,

Superintending Engineer (Electrical), Chandigarh Electrical Central Circle, CPWD,

Chandigarh

Dr. S.K. Sharma,

Special Invitee

Dean (E, EM & C), National Institute of Technology,

Kurukshetra

Sh. Anil Kumar, 9.

Special Invitee

Professor, Deptt. of Architecture, Deen Bandhu Sir Chhotu Ram Univ. of Science & Technology,

Murthal

10. Dr. S.M. Gupta, Special Invitee

Prof. In-charge (Estate & Construction), National Institute of Technology,

Kurukshetra

11. Er. B.M. Sharma,
Executive Engineer,
Construction Cell,
National Institute of Technology,
Kurukshetra

Special Invitee

'12. Sh. D.K. Kaushik,
Assistant Engineer (Elect.)
National Institute of Technology,
Kurukshetra

Special Invitee

13. Sh. S.N. Kaushik,
Assistant Engineer (Civil),
National Institute of Technology,
Kurukshetra

**Special Invitee** 

14. Sh. R.P.S. Lohchab,
Registrar,
National Institute of Technology,
Kurukshetra

Member-Secretary

## Item No.9.1 To confirm the minutes of 8<sup>th</sup> Meeting of Building & Works Committee held on 28.05.2007.

The minutes of 8<sup>th</sup> meeting of Building & Works Committee held on 28-05-2007 were circulated amongst the members vide letter No. NIT/8<sup>th</sup> BWC/4524-34 dated 12-06-2007. Some comments regarding Agenda item No. 8.3 were received from Dr. R.P. Singh, member of the BWC vide his latter dated 19-06-2007 (copy enclosed as Annexure-I, pages 2-3). A detailed reply was sent to him vide letter No. EO/8<sup>th</sup> BWC/3190/6549 dated 02-08-2007 (copy enclosed as Annexure-II, pages 4-6). No further comments were received from him.

The minutes may be confirmed.

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Date: 19/06/2007

To,

Shri R.P.S.Lochab
Registrar and Member Secretary
BWL, NIT, Kurukshetra

N.I.T. KURUKSHETRA

Dy. No. A.F. H.G. Date 2 J. M. S.

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MOM of 8th BWC Meeting PE CCN

Received the MOM of 8<sup>th</sup> BWC Meeting held on 28<sup>th</sup> May 2007. My few observations are mentioned below:

Itam No- 8.3-Construction of 350 Seals Boys Hostel

- i) The cost estimate of above item varies from Rs 593.38 Lacs to Rs.903.78 lacs to Rs.793.87 lacs and finally the contract was awarded at Rs.939.08 lacs. As discussed in the meeting, kindly mention the dates (period) of above estimates. This is required to avoid any doubt and also any audit objection at later dates. A line of justification for such variation in cost estimate is needed.
- ii) The earlier contract was awarded to the contractor on open tender basis at Rs.887.77 lacs. Why the contractor abandoned the work. Correspondence in this regard, seizure of earnest money etc. with the contractor are to be kept in record. This is needed because ultimately the contract was awarded to another contractor at much higher price of Rs.939.08 lacs. In this connection, it is worth knowing the bid price of 2<sup>nd</sup> lowest eligible contractor of the open tender which was cancelled later on. Was it lower than the present bid price?
- iii) It is mentioned that the work was ultimately ALLOTTED to new contractor at an ESTIMATED COST of Rs.939.08 lacs. It is not clear whether the work was allotted (awarded) at estimated cost or at bid price by the new contractor. Also whether the present contractor participated in earlier open tender or not, and if so what was his bid.
- iv) Hope that the final tender was also an open press tender and not the limited or single tender. Kindly mention this specifically.

I feel that all above details are worth mentioning to make the situation clear because the ultimate award is much higher than the earlier one and that too when post facto approval is sought.

(R.P.Singh) Member, BOG

CC: Chairman, NIT, Kurukshetra

- for kind information.

By speed post 190

#### NATIONAL INSTITUTE OF TECHNOLOGY KURUKSHETRA-136 119

No.EO/8th B&WC/3190/ 6549

Dated: 2/8/07

Dr. R P Singh, Council Member, AICTE, Retd. Executive Director, A-1, Chattarsal Nagar, Phase-I, J K Road, BHEL, Bhopal.

Sir,

Kindly refer to your letter dated 19.6.2007 sending observations on the minutes of the 8<sup>th</sup> Building and Works Committee held on 28<sup>th</sup> May,2007 on the agendà item 8.3. The comments being furnished will be placed before the Building and Works Committee in its next meeting for consideration.

Yours Faithfully,

for Director

#### NATIONAL INSTITUE OF TECHNOLOGY KURUKSHETRA.

#### Comments to the observations made by Dr. R P Singh member of the Board of Governors as well as the Finance Committee.

Dr. R P Singh member of the Board of Governors as well as the Finance Committee sent his observations on the minutes of the 8<sup>th</sup> Building & Works Committee meeting held on 28<sup>th</sup> May,2007 (agenda item 8.3 relating to construction of 350 Seaters Boys Hostel) vide his letter dated 19.06.2007. The comments of the Institute are as under:

The proposal for the construction of 350 seaters Boys Hostel at NIT, Kurukshetra (i) was approved by the Building & Works Committee in its 1st meeting held on 08-11-2002 vide item No. 1.4 at an estimated cost of Rs. 593.38 lacs. Due to non availability of funds, the work could not be taken in hand at that time. A Review Committee meeting held on 06-07-2006 to review the works approved by the Building & Works Committee decided to get this work executed on priority basis. Accordingly administrative approval was conveyed to National Building Construction Corporation vide letter No. EO/3567/634 dated 24-07-2006 for the construction of 350 seaters Boys Hostel at NIT, Kurukshetra. The NBCC submitted the revised cost estimates amounting to Rs.903.78 lacs which includes NBCC charges @ 10% and the Hon'ble Chairman BOG accorded approval for the revised estimates on 10-11-2006. Consequently upon withdrawing of the work National Building Construction Corporation w.e.f. March, 2007 the Institute introduced its own Construction Cell w.e.f. 24-11-2006 M/s Saakaar Foundation, Chandigarh appointed architect consultant for this work was requested to send the detailed cost estimates for this work which were received as per details given below:

(a)	Civil work	6,95,65,650.00
(b)	P.H. work	43,06,744.00
(c)	E.I. work	55,14,930.00
	Total	7,93,87,324.00

In view of the above the Director approved the detailed cost estimates amounting to Rs. 793.87 lacs on 20-12-2006 and open tenders for this work were floated in the press for Rs. 8.00 crore to be received on 03-01-2007 in the 1<sup>st</sup> instance which was extended to 15-01-2007 due to administrative reasons.

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On the basis of tenders received on 15-01-2007, the work was allotted to M/s Krishan Kumar Goyal, Contractor, 2/9-A, Model Town, Ambala City vide letter No. D/1030 dated 25-01-2007 for an app. cost of Rs.887.77 lacs being lowest bidder as per comparative statement.

(ii) Sh. Krishan Kumar Govt. Contractor who was allotted this work amounting to Rs. 887.77 lacs abandoned the work as he was asked to remove inferior quality of material bought by him for use at site. He was also asked to use Ordinary Portland Cement (OPC) 43 grade and steel of Standard Brand in the construction but the contractor refused to follow instructions of the Engineer-in-Charge and expressed his inability to carry out work verbally. Accordingly action was taken against him vide letter No. CC/ 2217 dated 20-03-2007 under Clause-2 & 3 of the contract agreement and a compensation of Rs. 88.77 lacs was imposed upon him besides forfeiting his earnest money amounting to Rs. 16.00 lacs by the Institute. As per terms & conditions of the contract agreement his contract was also rescinded and the work was put to re-tender at his risk & cost by openly re-advertising it in the press vide advertisement No. 3/2007 and letter No. GA/2423 dated 23-03-2007.

The tenders in the first instance were called on 15.1.2007 and the bid of 2<sup>nd</sup> lowest tenderer i.e. M/S Allied Engineers, G T Road, Gharaunda was for Rs.935.61 lacs. When the tenders were re-invited openly for the 2<sup>nd</sup> time at the risk and cost of Shri Krishan Kumar, Contractor (who was the lowest in the 1st instance), M/S Allied Engineers, G T Road, Gharaunda were the lowest with a bid of Rs.939.08 lacs which is higher by about Rs.4.00 lacs only.

- (iii) The work has been allotted to the new contractor M/s Allied Engineers, G. T. Road, Gharaunda with a lowest bid of Rs.939.08 lacs who was the second lowest in the 1<sup>st</sup> instance. The present contractor had also participated in the first open tender and his price bid was for Rs. 935.61 lacs being 2<sup>nd</sup> lowest tender.
- (iv) The final tender was advertised in the open press vide this office letter No. GA/ 2423 dated 23-03-2007 in the following Newspapers.
  - 1. The Tribune, Chandigarh
- 2. Times of India, New Delhi

3. Dainik Jagran

4. Punjab Kesri (National)

5. Hindustan Time

It is noteworthy to mention that final tender was an open tender and it was neither limited nor single tender.

EXECUTIVE ENC

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Item No. 9.2 To report the action taken on the minutes of 8th meeting of Building & Works Committee held on 28.05.2007.

Item No.	Subject	Decision taken	Action taken	
8.1	To consider the minutes of the 8 <sup>th</sup> meeting of BWC held on 28-05-2007.	Minutes confirmed	No action is required.	
8.2	To report the action taken on the minutes of the 8 <sup>th</sup> meeting of BWC held on 28-05-2007.	The Committee noted the action taken on various decisions taken by BWC.		
		Item (14.3) & (15.2). The Chief Engineer, PWD (B&R) may again be requested to take up installation of tubewell for PWD Colony on priority basis	Action is being taken by the PWD (B&R), Govt. of Haryana	
		Item (19.10) & (8.20) B&WC approved the R.R.C.E. amounting to Rs.37,90,875/- for Renovation of Existing Reflection Tank.	Work completed and taken over.	
		Item(20.13) BWC approved auctioning of existing Gas Plant and to convert it into Canteen/any other purposes	Work completed	
		Item No. (2.23) & (8.20) The BWC approved the RCE amounting to Rs.5.00 lacs for Prov. of Green Room etc. at Open Air Theatre.	Work completed and taken over.	
		Item No. (2.25) & (6.3) The BWC approved the RRCE amounting to Rs.366.81 lacs for Const. of Adm. Block in lieu of class rooms.	The CPWD have invited tenders & the work is likely to be started by the end of March 2008. Separate Item is placed vide item No.12 on pages 39 to 44.	
		Item No.(2.37) & (8.20) The BWC approved the RCE amounting to Rs.20.03 lacs for Renovation of electrical fittings in workshop	Work completed and taken over.	
		Item No. (2.41) & (4.17) The BWC approved the RCE amounting to Rs.302.00 lacs for installation of HT/LT sub station.	Work allotted to CPWD. Separate Item is placed vide item No.13 on pages 45 to 46.	

	7. (4.0) 0 (0.00) TI DIVO	777 1 1.4.11
	Item No. (4.9) & (8.20) The BWC	Work completed and
	approved the RCE amounting to	taken over.
	Rs. 21.97 lacs for Renovation of	
	Old Library Building at NIT KKR	
	out of funds from TEQIP.	
	Item No. (4.13) The BWC	Expenditure to be met
	approved Rs. 15.00 lacs for	from the "Institute
	carrying out modifications,	Development Fund".
	alterations and renovations of	-
	existing laboratories.	
	Item No. (4.15) The BWC decided	NBCC has completed its
	that for the time being, the present	ongoing works. Institute
	arrangement of getting the work	has started own
	done from the NBCC may be	Construction Cell. Further,
	continued. The performance of	
	both the agencies i.e. NBCC and the	allotted to CPWD.
	State PWD (B&R) may be	
	reviewed.	
	Item No. (5.3)& (8.20) The BWC	Work completed and
	approved the RCE amounting to	taken over.
	Rs.22.47 lacs for providing	macon over.
	facilities viz. false ceiling, air-	✓
	conditioning etc. Computing &	
	Networking Centre, NIT Kkr	
	alongwith NBCC charges 8% i.e.	
	Rs. 1.80 lac to be met from Institute	
	Development Fund.	
	Item No. (5.5) & (8.20) The	Work completed and
	BWC approved the RCE	taken over.
	amounting to Rs.14.79 lacs for	taken over.
	(	/
	Special repair of water channel at	
	roof in Workshop alongwith	
	NBCC charges 8% i.e. Rs. 1.18	
	lac to be met from Institute	
	Development Fund.	
	Item No. (5.6) & (8.20) The	Work completed and
	BWC approved the RCE	taken over.
	amounting to Rs.2.83 lacs for	
	Renovation of Electrical Lab.&	1
	Conference Room (one no.)	
	alongwith NBCC charges 8% i.e.	
	Rs. 0.23 lac to be met from	
	Institute Development Fund.	
	Item (7.3) The Building & Works	Work is in progress
	Committee approved the RRCE	WOLK IS III PROGRESS
1	amounting to Rs.281.72 lacs for the Provision of Class Rooms,	, *
	<b>,</b>	
	Laboratories and office rooms on	
	the Ist Floor of New Equipment	
<b>)</b>		
	Shop at Workshop as per details furnishes in agenda item	

	<u>/</u>	
	Item (7.4) The Building & Works Committee approved the RRCE	Work is in progress
	amounting of Rs.18.63 lacs for	- Comment of the comment
	extension of Director's Residence.	
	The cost estimate may be	
	reviewed.	
	Item (7.5 & 6.8) The Building &	Work completed
	works committee approved the	. ~
	RCE amounting to Rs. 13.22 lacs	
	for Premix Carpeting at NIT,	
	Kurukshetra.	
	Item (19.4) BWC approved the	Funds are yet to be
	RCE amounting to Rs.	allocated.
	221.80 lacs for Construction of a	
	Gymnasium Hall in the Institute.	
	Item (19.15) BWC approved the	Funds are yet to be
	RCE amounting to Rs.18.39 lacs.	allocated.
	for the Construction of Training &	
	Placement Department building in	
	the Institute.	
	Item (17.16, 20.12 & 1.9) BWC	Funds are yet to be
·	approved the RRCE amounting to	allocated.
	Rs. 64.15 lacs for Const. of	
	Community Centre in Institute.	
	Item No. (2.40) The BWC	Funds are yet to be
	approved the RCE amounting to	allocated.
	Rs. 8.00 lacs for Provision of	
	geysers and exhaust fans in hostel	
	toilets. BWC in its 7th meeting,	
	however, decided that the institute	1
	may opt for Solar Heaters instead	
	of geysers and advantage of Govt.	
	subsidy on Solar Heaters may be	
	taken for the purpose.	
	Item No. (2.42 & 4.17) The BWC	Funds are yet to be
	approved the RCE amounting to	allocated.
	Rs.154.00 lacs for installation of	
	DG sets.	
	Item No. (4.3) The BWC	Funds are yet to be
	approved the RCE amounting to	allocated.
	Rs. 85.44 lacs for glazed tiles in	
	Hostels, Guest House, Residences	
	(Toilets and kitchens) and	
	Instructional Building Toilets.	T 1
	Item No. (4.11) The BWC	Funds are yet to be
	approved the RCE amounting to	allocated.
	Rs. 27.99 lacs for reconstruction	•
	of damaged/cracked/tilted	
	compound walls in G type Houses	
<b>!</b>	of the campus.	

	and the state of t	
	Item No. (4.12 & 6.16) The BWC	Funds are yet to be
	approved the RRCE amounting to	allocated. However, work
	Rs. 240.76 lacs for Construction	allocated to CPWD.
	of Swimming Pool at NIT, KKR	
	Item No. (6.5) The Building &	Funds are yet to be
	works Committee approved the	allocated.
	RRCE amounting to Rs. 15.62	
	lacs for Provision of Community	
	Scooter Stand for E&F type	
	houses at NIT Kurukshetra.	
	Item No. (6.6) The Building &	Funds are yet to be
	works committee approved the	allocated.
	RCE amounting to Rs. 28.48 lacs	anocated.
	for Construction of Stores in G-	
	type houses at NIT Kurukshetra	
	Item No. (6.7) The Building &	Funds are yet to be
	Works Committee approved the	allocated.
	RCE of Rs. 5.00 lacs for	1
	Renovation /special repair of Old	
	Health Centre Building.	
	Item No. (6.10) The Building &	Funds are yet to be
	Works Committee approved the	allocated.
	RCE amounting to Rs. 26.95 lacs	•
	for provision of two nos.	
	Institute Main Gates.	· ·
	Item No. (6.11) The Building &	Funds are yet to be
	Works Committee approved the	allocated.
	- , )	anocated.
	RCE amounting to Rs. 40.02 lacs	
}	for provision of Badminton Hall	
	in the Institute.	
	Item No. (6.12) The Building &	Funds are yet to be
	Works Committee approved the	allocated.
	RCE amounting to Rs. 46.55 lacs	
	for Construction of 4 nos. mess	
	staff bearers barracks.	
	Item No. (6.13) The Building &	Funds are yet to be
·	Works Committee approved the	allocated.
	RCE amounting to Rs. 30.57 lacs	
	for Provision of Stores in Hostels.	
	Item NO. (6.14) The Building &	Funds are yet to be
<b>\</b>	Works Committee approved the	allocated.
	RCE amounting to Rs. 52.07 lacs	anocated.
	for Renovation of offices of	
	faculty and other officers.	
	Item No (6.15) The Building &	Funds are yet to be
	Works Committee approved the	allocated. However, work
	RCE amounting to Rs. 49.29 lacs	allocated to CPWD
	for Provision of graded seating	
1	arrangement for 2000 persons in	•
	OAT.	1

			_
8.3	To consider & approve RRCE amounting to Rs.939.08 Lacs for the construction of 350 Seaters Boys Hostel at NIT,	Item No. (1.4) the Building & Works Committee approved the RRCE amounting to Rs.939.08 to the construction of 350 Seaters Boys Hostel at NIT, Kurukshetra.	Work is in progress & likely to be completed in May 2008. (Separate item enclosed)
	Kurukshetra.		
8.4	To consider and approve cost estimate for Construction of 12 Nos. Lecture Halls at NITK	The B&WC vide item 8.4 approved the RCE amounting to Rs.148.00 lacs for the Construction of 12 Nos. Lecture Halls at NITK.	Work will be taken in hand after Empanelment of Architect /Consultant.
8.5	To consider and approve construction of Extension of existing Lecture Theaters (03 Nos.) in Computer Engg. Block at NITK	The B&WC approved the RCE amounting to Rs.32.00 Lacs vide item No.8.5 for the existing lecture theaters (3 Nos.) at NITK	Work will be taken in hand after Empanelment of Architect/Consultant.
8.6	To consider and approve cost estimate for the construction of Mega Boys Hostel of 1000 capacity at NIT, Kurukshetra	The B&WC approved the RCE amounting to Rs.2500 Lacs for the construction of Mega Boys Hostel of 1000 capacity at NIT, Kurukshetra	Funds are awaited.
8.7	To consider and approve cost estimate for the construction of additional office Rooms for faculty/staff at NIT, Kurukshetra.	The B&WC approved the RCE amounting to Rs.103.00 Lacs for the construction of additional office Rooms for faculty/ staff at NIT, Kurukshetra.	Work will be taken in hand after Empanelment of Architect/Consultant.
8.8	To consider and approve the cost estimate for the construction of additional Girls Hostel (300 capacity) at NIT, Kurukshetra	The B&WC approved the RCE amounting to Rs.810 Lacs for the construction of additional Girls Hostel (300 capacity) at NIT, Kurukshetra	Funds are awaited.
8.9	To consider and approve construction of Convocation Hall of 3000 capacity at NIT, Kurukshetra	_ = =	Funds are awaited.
8.10	To consider and approve cost estimate for the construction of Institute Faculty Guest House at NIT, Kurukshetra	The B&WC approved the RCE amounting to Rs.67.4 Lacs for the construction of Institute Faculty Guest House at NIT, Kurukshetra	Work will be taken in hand after Empanelment of Architect/Consultant.
8.11	To consider and approve cost estimate for the construction of additional block of health Centre at NIT, Kurukshetra.	The B&WC approved the RCE amounting to Rs.68.8 Lacs for the construction of additional block of health Centre at NIT, Kurukshetra	Funds are awaited.
8.12	To consider and approve cost estimate for the construction of new PG Hostel of 350 capacity at NIT, Kurukshetra.	The B&WC approved the RCE amounting to Rs.933 Lacs for the construction of new PG Hostel of 350 capacity at NIT, Kurukshetra	Work is in progress.

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8.13	To consider and approve cost estimate for	The B&WC approved the RCE amounting to Rs.220 Lacs for the	Work will be taken in hand after Empanelment
	construction of 10 Nos.	construction of 10 Nos. Professors	of Architect/Consultant.
	Professors Houses at NIT,	•	or memices constitute.
	Kurukshetra	Troubes at 1417, Italaksiiona	
8.14	To consider and approve	The B&WC approved the RCE	Work will be taken in
	cost estimate for	amounting to Rs.167 Lacs for the	hand after Empanelment
	construction of 10 Nos.	construction of 10 Nos. Assistant	of Architect/Consultant.
	Assistant Professors Houses	Professors Houses at NIT,	
	at NIT, Kurukshetra	Kurukshetra	
8.15	To consider and approve		Work is in progress.
	cost estimate for the	amounting to Rs.37.00 Lacs for	
	extension of existing road	the extension of existing road	·
	between Tubewell No.5 and	between Tubewell No.5 and	
	Students Activity Centre	Students Activity Centre upto 350	
	upto 350 seaters Boys	seaters Boys Hostel at NIT, Kurukshetra.	
8.16	Hostel at NIT, Kurukshetra.	The B&WC approved the RCE	Congrete item etteched
8.10	To consider and approve cost estimate for the special	amounting to Rs.100 Lacs for the	Separate item attached.
	reapir, renovation and	special reapir, renovation and	
	miscellaneous works at NIT,	misc. works at NIT, Kurukshetra.	
	Kurukshetra.	misc. Works at 1411, Rulukshella.	
8.17	To consider and approve	The B&WC approved the RCE	Work will be taken in
	cost estimate for	amounting to Rs.186.22 Lacs for	hand after Empanelment
	construction of 24 Nos. E-	the construction of 24 Nos. E-	of Architect/Consultant.
	type houses at NIT,	type houses at NIT, Kurukshetra.	
	Kurukshetra.		
8.18	To consider and approve	The B&WC approved the RCE	Funds are awaited.
	cost estimate for	amounting to Rs.111.70 Lacs for	
	construction of 20 F-type	the construction of 20 Nos. F-	
	Houses at NIT, Kurukshetra	type houses at NIT, KKR	
8.19	To consider and approve	The B&WC approved the RCE	Work will be taken in
	cost estimate for the	amounting to Ks.6./4 Lacs for the	nand after Empaneiment
	construction of New	construction of New Boundary	of Architect/Consultant.
	Boundary Wall around the	Wall around the lawn of	
	lawn of Director's residence	Director's residence at NIT,	
0.20	at NIT, Kurukshetra.	Kurukshetra.	M-4
8.20	To consider and approve the	The B&WC approved the RCE	Matter settled.
	final settlement of Liabilities	amounting to Rs.19,72,882 Lacs	$\checkmark$
	of the works completed by	for final settlement of Liabilities	-
	NBCC Ltd., New Delhi.	of the works completed by NBCC	
	1	Ltd., New Delhi.	

# Item No 9.3 To consider and approve the cost estimate for construction of 350 Seater Boys Hostel for Under-Graduate Students at National Institute of Technology, Kurukshetra.

Presently, there are 5 numbers UG and one number PG hostel having a capacity of about 1350 seats available for boys. The construction of one 350 seater boys hostel is at the advanced stage of completion. One 350 seater PG hostel is also under-construction. The Govt. of India in the year 2006-07, however, has increased intake to 540 and 314 (including 60 students in self financing MBA & MCA course) at UG and PG levels respectively.

Now there is also proposal for OBC reservation for which Govt. of India have recently allocated some plan funds. Due to this, intake of students will increase considerably. Hence, to cope up the increased strength, an additional Boys Hostel of 350 seater capacity for under-graduate students is proposed to be constructed during the year 2008-09. The proposed Hostel is to be constructed as per designs & drawings already supplied by M/S Saakaar Foundation Chandigarh for the construction of 350 Seaters Boys Hostel which is already under construction and near completion. For the construction of another 350 Seaters Boys Hostel for the Under Graduate Students as proposed above, the fee etc. for adopting the design & drawing of M/S Saakaar Foundation Chandigarh will be decided by the Director & Chairman Building & Works Committee in consultation with M/S Saakaar Foundation Chandigarh. The Architect/Consultant submitted cost estimate for this work costing Rs. 12.60 crore (approx.).

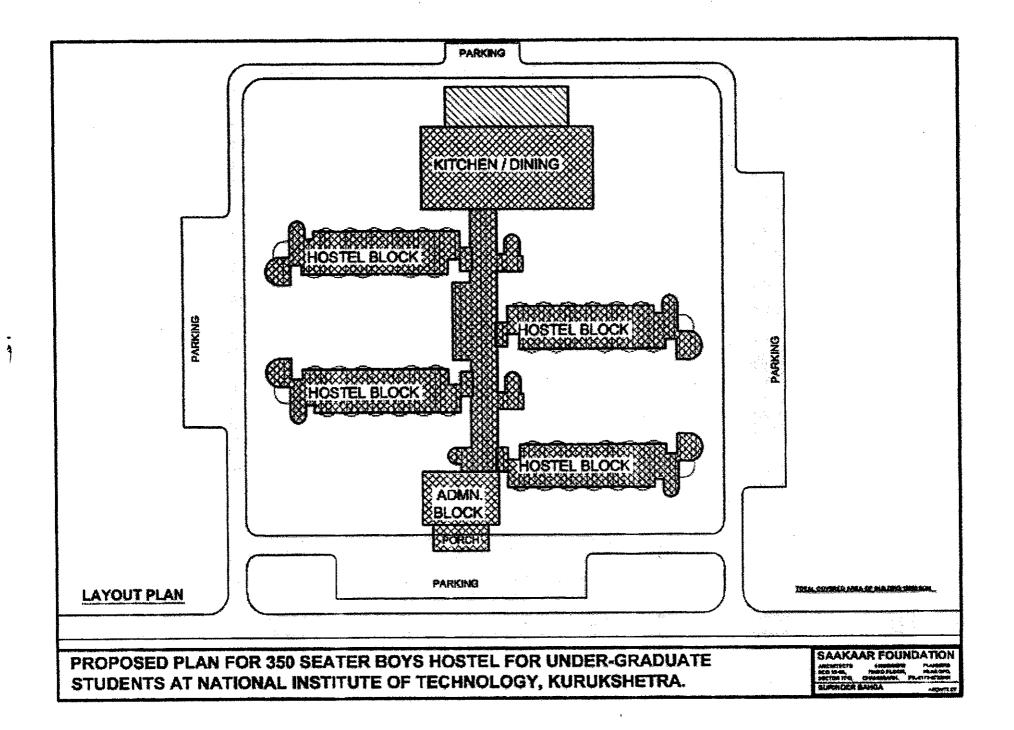
In view of the position explained above, it is proposed that the BWC may consider & approve for construction of an additional 350 seater boys hostel for under-graduate students at National Institute of Technology, Kurukshetra with an estimated cost of Rs. 12.60 crore (approx.) to accommodate additional students who may be admitted in future on account of OBC reservation.

# COST ESTIMATE FOR CONSTRUCTION OF 350 SEATER BOYS HOSTEL FOR UNDER-GRADUATE STUDENTS AT NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA

Sr. No.	Description	Qty.	Unit	Rate	Amount (In Rs.)
1.	Building portion (Ground + 3 storey)	12000.00	Sqm.	6035/-	72420000.00
	Extra for additional storey	3000.00	Sqm.	2x700/~	4200000.00
	Extra for raft foundation	3000.00	Sqm.	2x1050/-	6300000.00
	Total (A)		ĺ		82920000.00
	SERVICES				
2.	Provision of internal water supply & PH services @ 15% of building cost i.e. on amount-A				12438000.00
3.	Provision of internal E.I. services	12000.00	Sqm.	500/-	6000000.00
4.	Provision of external services @ 5% of building cost i.e. on amount-A		-		4146000.00
5.	Extra for water proofing				1200000.00
6.	Extra for anti-termite	3000.00	Sqm.	400/-	1200000.00
7.	Provision for Furniture				3500000.00
	Total (B)				111404000.00
8.	Add for electrical work @ 10% of building cost i.e. on amount -B				11140400.00
	Add contingencies & petty establishment charge @ 3% on 'B'				3342120.00
	Grand Total				125886520.00
	Cost per Sqm. = Rs. 10491/-		<u> </u>		
	Cost per Sq. ft. = Rs. 975/-				·

Sd/-

Executive Engineer, Construction Cell, NIT, Kurukshetra



Item No.9.4. To consider and approve the cost estimate for construction of MBA & MCA, Block- A Two Storey Framed Structure Building at National Institute of Technology, Kurukshetra.

This Institute has recently introduced self financing MBA & MCA Courses with an intake of 60 students in each discipline. This intake of students in above courses may increase in the coming sessions. There is no separate teaching block for MBA & MCA Students in the Institute. There is, therefore, immediate necessity of construction of MBA & MCA Block in the Institute. As the above courses are under self-finance schemes, the funds for the construction of this work will be provided by the respective department. The Architect/Consultant submitted the cost estimate for this block costing Rs. 299.09 lacs (approx.).

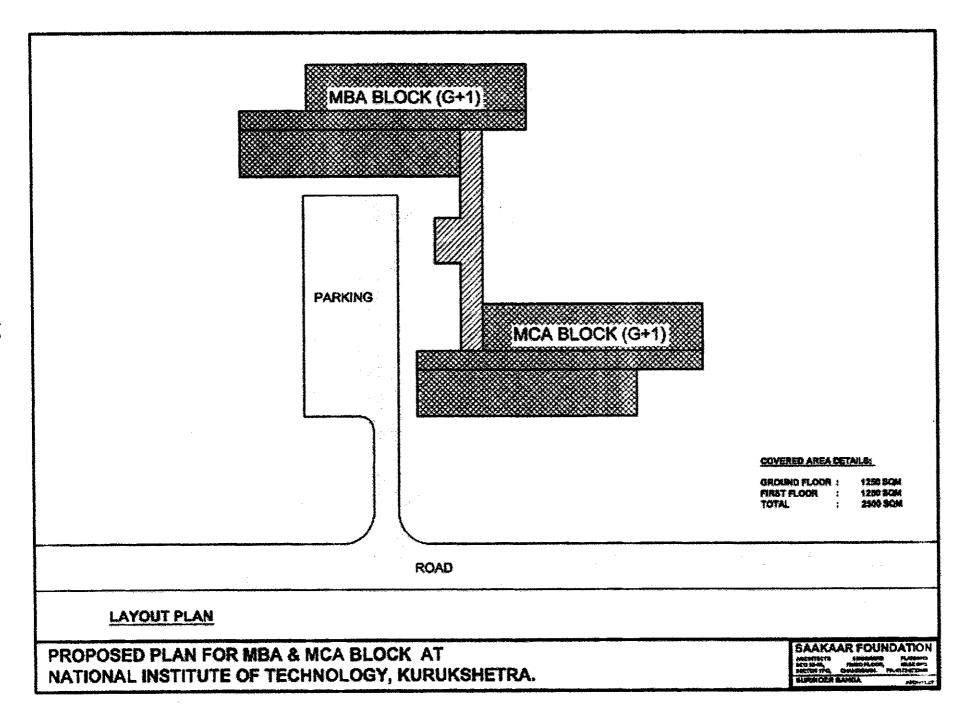
In view of the position explained above, it is proposed that the BWC may consider & accord approval for the construction of MBA & MCA Block in this Institute at an estimated cost of Rs. 299.09 lacs (approx.).

# COST ESTIMATE FOR CONSTRUCTION OF MBA & MCA BLOCK- A TWO STORIED FRAMED STRUCTURED BUILDING AT NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA

Sr.	Description	Qty.	Unit	Rate	Amount (In Rs.)
No.	Duilding mention (Consum Grant First	2500	9	7000.00	1750000000
1.	Building portion (Ground floor + First Floor): (Full building is RCC)	2500	Sqm.	7000.00	17500000.00
	Due to additional height & raft etc.	1250	Sam	1400.00	1750000.00
	Connecting passage	1230	Sqm.	L.S.	50000.00
	Connecting passage			L.S.	300000.00
	Total (A)				19750000.00
	SERVICES	i			
2.	Provision of internal water supply & PH services @ 7 ½% of building cost i.e. on amount-A				1481250.00
3.	Provision of internal E.I. services	2500	Sqm	500.00	1250000.00
4.	Provision of external services @ 5% of building cost i.e. on amount-A		-		987500.00
5.	Provision of Anti Termite Treatment (L.S.)	1250	Sqm.	400	500000.00
6.	Extra for water proofing				500000.00
7,	Provision for Furniture			· · · · · · · · · · · · · · · · · · ·	2000000.00
	Total (B)			·	26468750.00
8.	Add for electrical work @ 10% of building cost i.e. on amount -B				2646875.00
<u></u>	Add contingencies & petty establishment charge @ 3% on 'B'			· · · · · · · · · · · · · · · · · · ·	794063.00
	Grand Total				29909688.00
	Cost per Sqm. = Rs. 11,964/				
	Cost per Sq. ft. = Rs. 1,112/-				

Sd/-

Executive Engineer, Construction Cell, NIT, Kurukshetra



Item No.9.5. To consider and approve the cost estimate for construction of Additional Block for Central Workshop at National Institute of Technology, Kurukshetra.

Since the inception of this Institute 40-45 years back, the Central Workshop Building was not given any facility so far. Due to increase in intake of Undergraduate/Postgraduate Students, the existing space with different shops of workshop has been found to be inadequate. Some conventional machines have also been installed in the Central Workshop Building. One additional block for fitting shop, welding shop & Heat treatment shop beside a Lecture room for students for instruction proposed is urgently required for the Central Workshop of the Institute. The Architect/Consultant submitted cost estimate for this block costing Rs. 37.50 lacs (approx.).

In view of the position explained above, it is requested that BWC may consider & accord approval amounting to Rs. 37.50 lacs (approx.) for the construction of additional block for central workshop in the Institute.

## COST ESTIMATE FOR CONSTRUCTION OF ADDITIONAL BLOCK FOR CENTRAL WORKSHOP AT NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA

Sr. No.	Description	Qty.	Unit	Rate	Amount (In Rs.)
1.	Building portion (Ground floor ):	250.00	Sqm.	7000/-	1750000.00
	Due to Additional height & raft etc.	250.00	Sqm	1400/-	350000.00
	Connecting passage			L.S.	200000.00
	Total (A)				2300000.00
	SERVICES				
2.	Provision of internal water supply & PH services @ 7½% of building cost i.e. on amount-A				172500.00
3.	Provision of internal E.I. services	250.00	Sqm	500/-	125000.00
4.	Provision of external services @ 5% of building cost i.e. on amount-A				115000.00
5.	Provision of Anti Termite Treatment (L.S.)	250.00	Sqm.	400/-	100000.00
6.	Extra for water proofing				100000.00
7.	Provision for Furniture				400000.00
7.4.2	Total (B)		-		3312500.00
8.	Add for electrical work @ 10% of building cost i.c. on amount -B				331250.00
	Add contingencies & petty establishment charge @ 3% on 'B'				99375.00
	Grand Total				3743125.00
	Cost per Sqm. = Rs. 14973/-				
:	Cost per Sq. ft. = Rs. 1391/-				

Sd/-

Executive Engineer, Construction Cell, NIT, Kurukshetra

# Item No.9.6 To consider and approve the cost estimate for construction of Additional Floor on the existing Examination Hall at National Institute of Technology, Kurukshetra.

Presently there is one Examination Hall of two storeycd R.C.C. framed structures building with approx. covered area of 1600 Sqm. However, Govt. of India has increased the intake of students to 540 in many new courses at UG/PG level started during the academic year 2006-07. Further, because of the expected increase in intake due to introduction of new UG and PG courses, there is an immediate requirement of additional floor on the existing Examination Hall. It is pertinent to mention here that the existing Examination Hall is already designed for three storeys. The controller of Examination has also requested for the additional floor. The Architect/Consultant M/S Saakaar Foundation Chandigarh submitted cost estimate amounting to Rs. 92.66 lacs (approx.) for the construction additional floor on the existing Examination Hall in the Institute.

It is, therefore, requested that BWC may consider and accord approval amounting to Rs. 92.66 lacs (approx.) for the construction of additional floor on the existing Examination Hall in the Institute.

# COST ESTIMATE FOR CONSTRUCTION OF ADDITIONAL FLOOR ON THE EXISTING EXAMINATION HALL AT NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA

Sr. No.	Description	Qty.	Unit	Rate	Amount (In Rs.)
1.	Building portion (2 <sup>nd</sup> floor):	800.00	Sqm.	7000/-	5600000.00
	Total (A)				5600000.00
2.	Provision of internal water supply & PH services @ 7½% of building cost i.e. on amount-A				420000.00
3.	Provision of internal E.I. services	800.00	Sqm	500/-	400000.00
4.	Provision of external services @ 5% of building cost i.e. on amount-A				280000.00
5.	Extra for water proofing				300000.00
7.	Provision for Furniture				1200000.00
	Total (B)			1	8200000.00
8.	Add for electrical work @ 10% of building cost i.e. on amount –B				820000.00
	Add contingencies & petty establishment charge @ 3% on 'B'				246000.00
	Grand Total		<u> </u>		9266000.00
	Cost per Sqm. = Rs. 11583/				
	Cost per Sq. ft. = Rs. 1076/-				

Sd/-

Executive Engineer, Construction Cell, NIT, Kurukshetra

PROPOSED PLAN FOR ADDITIONAL FLOOR FOR EXAMINATION

BLOCK AT NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA.

COVERED AREA FOR SECOND FLDOR: 800 SOM

LAYOUT PLAN

Item No.9.7 To consider and approve the cost estimate for providing & fixing of Wash Basin & Looking Glass alongwith necessary accessories in G-Type Houses at National Institute of Technology, Kurukshetra.

Presently there are about 100 G-Type Houses which are occupied mostly by class –IV & some by class-III employees of the Institute. Since the construction of these houses, no wash basin & looking glass has been provided. The residents of these houses are facing great difficulties due to non provision of these basic amenities in the houses. Considering the hardships being faced by these employees, it has been proposed to provide at least one wash basin and one looking glass along with necessary accessories in each G-Type house. The Architect/Consultant submitted cost estimate for these items of work costing Rs. 6.00 Lacs (approx.).

It is, therefore, requested that BWC may consider & accord approval amounting to Rs. 6.00 lacs (approx.) for the provision of wash basin & looking glass etc. in the G-Type houses of the Institute.

## COST ESTIMATE FOR PROVIDING & FIXING OF WASH BASIN & LOOKING GLASS ALONGWITH NECESSARY ACCESSORIES IN G-TYPE HOUSES AT NIT, KURUKSHETRA

Sr. No.	Description	Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
1.	Providing & fixing in position best Indian make (Ordinary) Lavatory Suites consisting of Lavatory in Vitreous Chinaware size as given below (to the approval of the Engineer-in-charge) including china plug for tap hole where necessary;				:
	R.S. or C.I. Brackets for building into wall including painting; 32mm C.P. Brass Waste with C.P. brass chain and rubber plug;				
	15mm C.P. Brass Screw Down Pillar Tap with jam nuts or coupling best design (as approved by the Engineer-in-charge) All Fitting Best Indian Make and; to the approval of the Engineer-in-charge. All Brass work chromium plated and Complete in all respect i/c cutting &			-	
	making good the walls floors and painting of fittings etc.  WHITE				
	(i) Size 450mmx300mm with one no. tap	30	Nos.	1400/-	42000/-
	(iii) Size 510mmx400mm with one no. tap	60	Nos.	1300/-	78000/-
2.	Providing & fixing in position best Indian make Towel Rails fixed in with rawl plugs embedded in walls with C.P. Brass screws. Complete in all respect i/c cutting & making good the walls etc.  [c] 25mm Dia Aluminium  600mm long	90	Nos.	200/-	18000/-
3.	Providing & fixing in position Glass Shelf fixed in with Rawl Plugs with C.P. Brass screws complete i/c cutting & making goods the walls etc.  (b) With Aluminium Brackets and Guard Rail 600mmx125mm	90	Nos.	250/-	22500/-
4.	Providing & fixing in position best Indian make Bevelled Edge 5.5nm thick Mirror mounted on Asbestos sheet Ground fixed in position by means of 4nos. Chromium Plated Brass Screws and Washers over rubber washers and	90	Nos.	550/-	49500/-
	rawl plug embedded in the wall or chromium plated brass clamps with C.P. Brass screws (as required by the Engineer-in-charge) Complete i/c cutting & making good the walls etc.  (a) Indian Make  (i) 600mmx450mm				
5.	Providing and fixing in position C.P. Brass stop cocks (as approved by the Engineer-in-charge)  (a) 15mm stop cock  (i) Stop cock male and female end	90	Nos.	450/-	40500/-
6.	Providing Lead Caulked Joints to H.C.I. Pipes and special conforming to I.S.I. specification of E.L.C. manufacture or any other reputed firm, i/c cost of lead yarn, fuel and tools etc.  (b) 75mm internal diameter (0.91 kg)	250	Nos.	130/-	32500/-
7.	Providing & fixing H.C.I. Floor Traps I.S.I. Marked of the self cleaning design with C.P. Brass Hinged grating with frame with or without vent arm	60	Pcs.	450/-	27000/-
	and i/c cement concrete 1:2:4 under and around the floor trap where required upto floor level Complete in all respect i/c cutting & making good the walls and floors etc., minimum depth of water should be 150mm with a minimum seal of 50mm (b) With 75mm i/d outlet.				
8.	P/F in position HCI soil, waste, vent pipes to ISI specification or any other reputed firm including cutting & wastage etc. & cutting holes in walls, roofs or floor etc. and making good the floor & wall but excluding cost of lead jointing. (b) For 75mm i/d pipes.	250	Mtr.	425/-	106250/-

				Say Rs.6.00 Lacs		
				Total	599350/~	
13	Providing & fixing of PVC connection 15mmx450mm of good quality	90	Pcs.	45/- each	4050/-	
12.	Providing & fixing of PVC waste pipe 32mm of good quality	90	Pcs.	50/- each	4500/-	
	40mm i/d	30	Pcs.	250/- each	7500/-	
11.	Extra for providing, fixing & jointing union couplings to G.I. pipe lines including cost of union complete  15mm i/d	90	Pcs.	75/- each	6750/-	
	40mm i/d	100	Mtr.	400/-	40000/-	
	as Tee, elbow, bends, sockets etc. inside the building and testing etc. complete i/c cutting & threading  (b) including cost of specials  15mm i/d			per mtr.		
9.	P/F in position HCI specials for soil waste vent pipes to ISI specification including cutting holes in walls & making good but excluding cost of lead joints (b) For 75mm internal diameter pipes (xviii) Collars  Providing, laying, jointing, fixing & testing G.I. pipe line and specials such	450	Nos.	130/-	7800/-	

Sd/-Executive Engineer, Construction Cell, NIT, Kurukshetra

## Item No.9.8 To consider and approve the cost estimate for providing & installation of 2 Nos. tubewells in National Institute of Technology, Kurukshetra.

The work of 350 seaters Boys Hostel and 350 seaters New P.G. Hostel is under construction. The work of 350 seaters Boys hostel is about to complete. Further, it is likely that other construction activities will increase in near future adjoining the Newly Constructed Hostel area. There are 4 Nos. tubewells in operation in the Institute. The existing tubewells for water supply are inadequate due to increase in intake of the student's strength. To cater the need of water for Boys Hostel/P.G. Hostel and taking into account the requirement of water for other construction activities likely to be started in near future, it has been felt essential to install 2 Nos. new tubewells in the vicinity at the Boys Hostel/ P.G. Hostel.

In view of the position explained above, it is proposed that the BWC may consider and approve the cost estimate for providing & installation of 2 Nos. tubewells at National Institute of Technology, Kurukshetra with an estimated cost of Rs.19.75 lacs (approx.).

## COST ESTIMATE FOR PROVIDING AND INSTALLATION OF 2 NO. TUBEWELL FOR NIT KURUKSHETRA.

#### FINAL ABSTRACT OF COST

1 Sub Work No. 1 Head Works Rs.1255000.00
2. Sub Work No. 2 Pumping Machinery Rs. 427500.00

Add 3% contingency & P.E. Charges Rs. 50475.00

Add 14% PWD Charges Rs. 242617.00

Rs. 1975592.00

Say Rs. 19.75 Lacs.

Sd/-

Executive Engineer, Construction Cell, NIT, Kurukshetra

## COST ESTIMATE FOR PROVIDING AND INSTALLATION OF 2 NO. TUBEWELL FOR NIT KURUKSHETRA.

	SUB WORK NO. I	HEAD WORKS
1.	Provision for providing & installing tubewell of size	
	250 x 200mm i/d upto a depth of about 120 M	
	below ground level complete in all respects.	
	2 No. © Rs. 400000/- Each	Rs. 800000.00
2.	Provision for construction of brick masonry tubewell	
	chamber of size 365 M x 3.05 M inside dimensions	
	complete in all respects.	
	2 No. © Rs. 125000/- Each	Rs. 250000.00
3.	Provision for providing & installing electro magnetic	
	dosing system complete in all respects.	
	2 No. © Rs. 20000/- Each	Rs. 40000.00
4.	Provision for providing laying, jointing, cutting and	
	testing Cl/AC Rising main/connecting main including	
	cost of specials and excavation etc. complete in all respects.	
	150mm i/d Cl Pipe	
	2X50 = 100 M © Rs. 1500/- P. Mtr.	Rs. 150000.00
5.	Provision for providing and fixing Cl. Slucie valve	
	complete with brick masonry chamber.	
	150mm i/d 2 Nos. © Rs. 5000/- Each	Rs. 10000.00
6.	Provision for carriage of material from Public Health	
	Store to site of work. L.S	Rs 5000.00
		Rs. 1255000.00

# COST ESTIMATE FOR PROVIDING AND INSTALLATION OF 2 NO. TUBEWELL FOR NIT KURUKSHETRA.

Sub. W	ork No. 2			Pumping Machinery			
) Provisio	Provision for Providing and installing						
electric	electric driven submersible pumping						
· machine	machinery of following duties						
Dischar	ge 800 LPM	}					
Head	80 M	} 2 No. © Rs.	75000/- E	Rs. 150000.00			
BHP	20.00	}					
Providin	Providing & fixing automatic duel mode 15 to						
20 HP st	20 HP star delta starter with ML3 complete						
in all res	spects.						
2 No. ©	Rs. 20000/- Each			Rs. 40000.00			
Provisio	Provision for providing & fixing 2 No.						
girder of	girder of size © 6"x 3" of 6' length						
each inc	each including cost of base plate.						
2 Job ©	I 5000/- Each	Rs. 10000.00					
Provisio	Provision for Providing and fixing 100mm i/d						
G.I. Pipe	G.I. Pipe lowering including cost of flanges etc.						
complete	complete in all respects.						
2X 45 =	90 M © Rs. 750/-	Rs. 67500.00					
Provisio	Provision for C.T. Electric meter complete						
2 No. ©	IRs. 20000/- Eacl	Rs. 40000.00					
Provisio	Provision for pipes, v and specials inside the						
the pum	the pump chamber.						
2 Job ©	IRs 25000/- Each	Rs. 50000.00					
Provisio	Provision for electric fitting and service connection						
from Ne	from Nearest pole.						
2 Job ©	Rs. 30000/- Each	Rs. 60000.00					
Extra pr	Extra provision for carriage of material from Public						
Health S	tore to site of wat	er works.	L.S	Rs. 10000.00			
			Total	Rs. 427500.00			

Item No.9.9 To consider and approve the cost estimate for Replacement of A.C.C. Sheets with Zincalume Sheets & Renovation of Water Channel in Central/Old Workshop at National Institute of Technology, Kurukshetra.

Central Workshop Building is a brick-masonry structure with trusses and A.C.C. sheet roofing over it constructed about 40 years back. There are costly equipments/machinery etc. lying in the central workshop. There is a R.C.C. water channel (Gutter/water channel) to accommodate the rain-water coming out of sheeting.

With the passage of time, A.C.C. sheeting has deteriorated at various locations. Also R.C.C. gutter/water channel is leaking from different locations due to deterioration of cement concrete, reinforcement etc. on the supporting structure. Some years back, some sheets were replaced & portion of gutter/water channel was renovated. But there is leakage from different places from the roof & gutter/water channel. As such replacement of some sheets is not serving the purpose. It is likely that costly equipments/ machinery may damage due to the leakage of water from A.C.C. Sheets. The matter was discussed in detail in the High Power Committee meeting. It has been decided to replace the A.C.C. sheets with Zincalume Sheets & to repair/renovate the existing gutter/water channel to save the Institute's valuable asset for further deterioration. Accordingly an estimate has been prepared amounting to Rs. 67.053 lacs (approx.).

It is, therefore, requested that BWC may consider & accord approval amounting to Rs. 67.053 lacs(approx.) for the replacement of A.C.C. sheets with Zincalume sheets & also for repair/renovation of water gutter/water channels.

### COST ESTIMATE FOR REPLACEMENT OF A.C.C. SHEETS WITH ZINCALUME SHEETS & RENOVATION OF WATER CHANNEL IN CENTRAL WORKSHOP AT NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA

Sr. No.	Description	Qty.	Unit	Rate	Amount (In Rs.)
1.	Preparing of shop drawings, supply & installation of high tensile 550 Mpa yield strength, colorbond (XRW, Super Polyster Paint System) zincalume Trapezoidal steel Sheet of BHP make or equivalent with grade Az 150 in 0.50mm (TCT) thickness with minimum profile depth of 41mm. The distance between the crest should not exceed 240mm c/c with two small ribs in the wide pan, in sheet length as per site requirements (up to maximum of 12 mtr. Single length). The profile should have sealant groove for proper side lap. The sheet should be fixed using Concealed Clip System & No penetration of screws from the top.	5800.00	Sqm.	950/-	5510000,00
2.	Repair & water proofing of existing water channel.			L.S.	10,00000/-
	Total (A)				6510000.00
	Add contingencies & petty establishment charge @ 3% on 'A'				195300.00
	Grand Total				6705300.00

Sd/-

Executive Engineer, Construction Cell, NIT, Kurukshetra Item No.9.10 To consider and approve the cost estimate for the Replacement of old C.1./A.C. Water Supply Lines With Centrifugally Cast (spun) Iron Pipes (class) L.A. in the Residences, Hostels & Instructional Buildings at National Institute of Technology, Kurukshetra.

This Institute was established about 45 years back. The water supply lines of C.I. /A.C. were laid at that time to cater to the needs to the students, employees & residents of the campus. With the passage of time the intake of students increased many fold & also with the increase in the resident in the campus. Two residential colonies (PWD, B&R & UHBVNH) beside the residential block of NIT also came up in this campus where the water is supplied by the Institute. The water supply lines laid about 45 years back have worn out and leaking frequently at many places. Some times big chunk of water pipe is broken due to its wear and tear rendering it un-repairable. Most of the time massive repairs have to be carried out to put the pipe lines in order which costs more than the new pipes besides causing inconvenience to the residents. Due to frequent damage to these pipe lines muddy water is coming out of these pipe lines which is dangerous to the health of the residents of the Institute. In order to rectify these faults a proposal has been mooted to replace old supply line with centrifugally Cast (spun) Iron Pipes (class) L.A. in the Residences, Hostels & Instructions Buildings. The Architect/Consultant submitted cost estimate for this block costing Rs. 1.75 crore (approx.).

In view of the facts above, it is proposed that the BWC may consider & approve the replacement of about 45 years old C.I./A.C. water supply pipe line with centrifugally cast (spun) iron pipes (class) L.A. in the Residences, Hostels & Instructions Buildings at National Institute of Technology, Kurukshetra with an estimated cost of Rs. 1.75 crore (approx.).

# COST ESTIMATE FOR THE REPLACEMENT OF ABOUT 45 YEARS OLD C.I./A.C. WATER SUPPLY LINES WITH CENTRIFUGALLY CAST (SPUN) IRON PIPES (CLASS) L.A. IN THE RESIDENCES, HOSTELS & INSTRUCTIONAL BUILDINGS IN THE INSTITUTE

#### (BASED ON HSR-1988 & LATEST SANCTIONED PREMIUM W.E.F. 04-03-2006)

Sr.	HCD	Description	Qty.	Unit	Rate	Rate C.P. Total An		
No.	No.	bescription	QLY.	Unit	(in Rs.)	C.F.	Rate	Amount (in Rs.)
					(		(Rs.)	(111 (101)
		EXTERNAL WATER SUPPLY					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
1	6.8	EXCAVATION FOR PIPELINES RUNNNING						
		UNDER PRESSURE IN TRENCHES AND						
ļ		PITS, IN OPEN AREAS, WHERE						
ľ	1	DISPOSAL OF SURPLUS EARTH IS DONE						
		ALONGWITH THE ALIGNMENT including						
		tumming & dressing sides, levelling of						
		beds of trenches to correct grade, cutting						
	-	joint holes, cutting tres and bushes, etc.,						
		refilling consolidation and watering of						
		refill in 15 cm layers AND RESTORATION						
		OF UNMETALLED OR UNPAVED SURFACE						
		TO ITS ORIGINAL CONDITION, including						
		the cost of dewatering of rain water,						
		diversion of traffic, night signals, fixing						
		caution boards, watching fencing etc.,						•
	-	and outside the town in ORDINARY SOIL.:		,				
	а	Without timbering and shoring upto 1.5	11332	100	1030.00	250%	3605.00	408519
		meters depth		cum				
2	NSR	Providing and stringing S & S						
		centrifugally cast (spun) iron pipes (Class		İ				
		LA) with CI specials, bends, tees ,						
		required fittings , lead and yarn etc			!			
·		complete in trenches to the approval of						
		Engineer-in-charge.			Ì	İ		
		80 mm dia Pipes	3437	mtr	760.00		760.00	2612120
		100 mm dia Pipes	2077		975.00		975.00	2025075
		150 mm dia Pipies	5201		1550.00		1550.00	8061550
		200 mm dia Pipes	1876	mtr	1670.00		1670.00	3132920
3		Supplying and fixing ISI marked C.I.						İ
		sluice valve(with cap) complete with						
		bolts, nuts, rubber insertions etc. (the tail	,					
	_	pices if required will be paid separately)						i i
		double flanged with brass spindle					1	ļ
		complete in all respect to the approval of						
		Engineer-in-charge	40	each	3500.00		3500.00	140000
	-	80 mm diameter 100 mm diameter		each	4450.00		4450.00	102350
<del></del>		150 mm diameter		each	12050.00		12050.00	421750
		200 mm diameter		each	18500.00		18500.00	203500
		200 mm diameter	11	ייייי	TONOUND		20200.00	202200

Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
4	NSR	Supplying and fixing ISI marked C.I. Scouring valve (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pices if required will be paid separately) double flanged with brass spindle complete in all respect to the approval of Engineer-in-charge.		each	3500.00		3500.00	24500
5	NSR	Supplying and fixing ISI marked C.I. fire hydrant (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pices if required will be paid separately) double flanged with brass spindle complete in all respect to the approval of Engineer-in-charge.						
		80 mm diameter	7	each	3500.00		3500.00	24500
6	NSR	Const. of sluice valve haudi 1m x 1m x 1m x 1m with brick work 1:5 cement sand mortar finished with 12.5mm cement plaster 1:4 including RCC 1:2:4 slab with reinforcement, surface box complete in all respect to the approval of Engineer-in charge.		each	2650.00		2650.00	318000
		TOTAL						17474784

Sd/-Executive Engineer Construction Cell NIT, Kurukshetra Item No.9.11 To consider and approve the cost estimate for providing Distempering Instead of White Washing in various Residences at National Institute of Technology, Kurukshetra.

There are about 400 residences for Teaching & Non-teaching employees in this Institute. These houses are about 30-40 years old. Annual maintenance of these houses by giving a single coat of white wash, paint besides minor repair work is carried out as per as per Haryana PWD B & R norms. More than 150-200 houses are occupied by class-IV employees of the Institute. The single coat of white wash does not give a good look to these houses. There are some other houses which are occupied by teaching staff of the Institute which are partly distempered. This situation sometimes cause heart burning among class-IV employees of the institute. A proposal has now been made to provide distemper in all residences by first getting the surface scrapped properly for giving it a plastered smooth surface. The Architect/Consultant submitted cost estimate for this work costing Rs. 78.75 lacs approx. The above work will be carried out in different stages to meet all the annual maintenance expenditure. The work of distempering will be carried out as per PWD norms i.e. once in three years.

In view of the above facts, it is proposed that the BWC may consider & approve for providing distempering instead of white washing in various residences at National Institute of Technology, Kurukshetra with an estimated cost of Rs. 78.75 lacs approx.

# COST ESTIMATE FOR PROVIDING DISTEMPERING INSTEAD OF WHITE WASHING IN VARIOUS RESIDENCES AT NIT, KURUKSHETRA

Sr. No.	HSR Item	Description	Unit	Qty.	Rate	Amount
1	8.32 (a)	Scraping White wash and colour wash	1,55,000	Sqm	0.45	69,750.00
					CP @ 390%	2,72,025.00
2	16.25	Applying priming coat with cement primer in all shades on newly plastered or concrete exterior surface.	1,55,000	Sqm	4.15	6,43,250.00
					CP @ 125%	8,04,062.50
3	16.52	Preparation of plastered surface for oil bound distemper including sand papering the surface, applying one coat of linseed oil, and filling with approved quality filler, consisting of white lead, linseed oil, varnish and chalk mitti including finishing the surface to the required finish complete.	1,55,000	Sqm	11.15	17,28,250.00
					CP @ 125%	21,60,312.50
4	16.57	Distempering with washable oil bound distemper ( of approved manufacture) two coats excluding priming coat on new work	1,55,000	Sqm	6.30	9,76,500.00
					CP @ 125%	12,20,625.00
				<u>.</u>	TOTAL	78,74,775.00

Sd/-Executive Engineer, Construction Cell, NIT, Kurukshetra

### Item No.9.12 To consider and approve the cost estimate for Construction of Administrative Block in National Institute of Technology, Kurukshetra.

The proposal for construction of New Administrative Block was approved by the Building and Works Committee in its 2<sup>nd</sup> meeting held on 27-08-2004 vide item No. 2.25 at an the estimated cost of Rs. 121.80 lacs for area of building as 2030 sqm. which was also approved by chairman BOG. This estimate was prepared about 2 ½ years back at the time when NBCC was doing all the construction work of the Institute. The NBCC later on submitted the cost estimate for Rs.366.81 lacs for this work taking the area of this building to be 3,000 sqm. This cost estimate was placed before the Building and Works Committee in its 6<sup>th</sup> meeting held on 24-04-2006 vide item No.6.3. The Building and Works Committee approved the cost estimate amounting to Rs.366.81 lacs and the approval was conveyed to be NBCC. However, because of the decision of the Institute to ask NBCC to complete on going works only by March 31, 2007, the work of construction of Administrative Block was not taken up by the NBCC.

The BOG in its 12<sup>th</sup> meeting held on 25-04-2007 vide item No. 12.34 decided to engage CPWD for carrying out construction work in the Institute. Accordingly this work was assigned to CPWD \ for execution.

As the above work was assigned to the CPWD, they were asked to submit the cost estimate of New Administrative Block on priority basis as the work is to be taken in hand immediately. The Executive Engineer (Planning), Office of Chief Engineer CPWD, Sector-9A, Chandigarh submitted the cost estimate of this work amounting to Rs.6,59,06,000/- (enclosed) taking area of building as 3925 sqm. against the approval of the Building and Works Committee amounting to Rs.366.81 lacs. The enhancement in the cost estimate submitted by CPWD is primarily due to;

- i) Increase in the area of the Administrative Block from 3,000 sqm to 3925 sqm.
- ii) Escalation in the cost of labour and material since April, 2006.
- iii) Provision of Air Conditioning in all rooms of the building.
- iv) Change in architectural concept and drawing of the building.
- v) Change in specifications for materials, fastenings etc.
- vi) Provision of two nos. lifts, rain water harvesting, filtered water supply, horticulture operations etc. in new architectural concept plan.

In view of the position explained above, it is proposed that the BWC may consider and approve the RCE for the construction of Administrative Block at National Institute of Technology, Kurukshetra with an estimated cost of Rs.6.59 Crore approx.

### GENERAL ABSTRACT

Sr.No.	Discription of work	Civil work	Electrical work	Total Amount	Remarks
1	Main Building	45165108.00	7013963.00	52179071.00	Annex-I
2	Development works				
(A)	Civil	1582402.00	9250000.00	10832402.00	Annex-II
B)	Horticulture	341348.00		341348.00	Annex-II
				63352821.00	
	Add Cess 1%			633528.00	
			Total	63986349.00	
		Add 3% Co	ntingencies	1919590.00	
19		GRAND	TOTAL	65905939.00	
		S	00/-		
			and the second of the second o	Committee of the Commit	•

jör. N	D. Item of works	Qty	Unit	Rate	Amount	Remarks
A	<u>Civil</u>					
1	RCC Framed structure upto 6 storeys.		·			
.1.1	Floor height 3,35 mtr. (office/college/hospital)	3925	mpe	2920	11461000.00	1.1.1 12360492
	Extra for every 0.30 additional height of floor above normal floor ht. of 3.35 m. 125 X0.55/0.30=229.17	3925	sqm	229.17	899492.00 J	12300492
x	EXTRA FOR					
31	Every 0.3 mtr higher plinth over normal plinth height of 0.6 mtr.( on ground floor area only)	1575	sqm	125	196875.00	1.2.8
4	Resisting earth quake forces.	3925	sqm	250	981250.00	1.2.12
ليًا	Larger modules over 35 sq.mtrs.	1279.33	sqm	220	281453.00	1.2.13
	Termite proof treatment (on Ground Floor area)	1575	sqm	75	118125.00	1.2.14
	Internal water supply & sanitary installations. (Office/College)	12300492	%	4%	494420.00	3.2
Å	External services connections.	12360492	%	3.75% _ Total	463518.00 14896133.00	<b>-</b>
	Add Cost Index 134% (approved Cost Index for Kurukshetra 234 as on 30.06.06 over PAR-92 with base-100) on all items	14896133	%	134%	19960818.00	
[]Н:	Extra Provision	· .	ι	Tota!	34856951.00	<del>-</del>
1	P/F Glass mosaic tiles.	126	sqm	1600	201600.00	A/R
	Extra for providing vitrified tiles in lieu of ordinary flooring	1078	sąm	1116.85	1203964.00	A/R
	Extra for providing granite stone flooring in lieu of ordinary flooring.	264	sqm	2333.80	616123.00	A/R A/R
	Extra for providing aluminium door & windows instead of steel section windows.	1828	kg	165.80	303082.00	- A/R
· · ·     · ·       · ·       · ·       · ·       · ·         · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·         · ·         · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·         · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·         · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·       · ·         · ·       · ·       · ·       · ·       · ·       · ·       ·	Extra for earth filling in ground floor due to raised plinth	1510	cum	139.64	210856.00	A/R
	Extra for water proofing of terrace gardens instead of mudphaska.	460	sqm	269.10	123786.00	A/R
7	Extra for providing aluminium grill instead of M.S. grill.	2352	kg	250.00	588000.00	A/R

Sr. No	D. Item of works	Qty	Unit	Rate	Amount	Remarks
В	Extra for sandtex matt finish on outer surface of building instead of water proofing cement paint.	1025	sqm	56.90	58323.00	A/R
9	Extra for provision of clay tiles on outer surface of building instead of snowcem.	512	sqm	350.20	179302,00	A/R
10	Extra for providing stainless steel railing for staircase.	307	kg	270.85	83151.00	* A/R
11	Extra for providing track deck sheets for top dome.	153	sqm	4937	755361.00	* A/R
12	Extra for laying Trimix concrete with sub-base course of 1:5:10 outside the main building.	4674	sqm	564.87	2640202.00	A/R
13	Extra for boundary wall 4' height.	291	mtr	992.23	288739.00	
14	Extra for provision of steel gate.	450	kg	29.15	13118.00	
15	Extra for provision of truss in slantig from ground level to top of terrace.	7890	kg	24.30	191727.00	
16	Extra for factory made kerb stone	300	meter	200.10	60030.00	
17	Extra for brick work toe-wall	180	meter	217,30	39114.00	
				Total	7556478.00	
	Add Cost Index 40.96% on Extra Provisions except marked *	6717966	%	40.96%	2751679.00	<u>.</u>
		Grand Total		Total	10308157.00 45165108.00	<b>-</b>
В	Electrical	Grand Total			43103100.00	
1	Providing Internal Electrical Installations.	12360492	%	12.50%	1545062.00	
2	Providing External service connection.	12360492	%	1.25%	154506.00	
3	Extra provision for power wiring and power plugs	12360492	%	4.00%	494420.00	
4	Exra provision for telephone conduit and wiring	12360492	%	2.00%	247210.00	
5	Extra for lightening conductor.	12360492	%	1.00%	123605.00	
6	Extra for LAN & Fire Alarm conduit.	12360492	%	1.00%	123605.00	
7	Extra for Energy Saving Fittings.	12360492	%	2.50%	309012.00 2997420.00	_
	Add Cost Index 134% (approved Cost Index for Kurukshetra 234 as on 30.06.06 over PAR-92	2997420	%	134%	4016543.00	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	with base-100) on all items.			•••	7013963.00	- ` <del>`</del>

Sr. No.	Item of works	Qty	Unit	Rate	Amount	Remarks
	DEVELOPMENT WORK					
А	<u>Civil</u>			÷		·
1	Over Head Tank without independent staging.	10000	Litres	4.75	47500.00	4.1
2	Sewer	5600	sqm	24.45	136920.00	5.3
3	Water supply		•		·	
' <b>i</b>	Filtered water supply distribution lines 100 mm dia & below.	5600	sqm	17.90	100240.00	5.4.1
ii	Unfiltered water supply distribution lines	5600	sqm	10.20	57120.00	5.4.1
4	Storm water drains	5600	sqm	29.20	163520.00	5,5
5	Rain water harvesting.		L.S.	•	200000.00	<del>_</del>
	Add Cost Index 134% (approved Cost 5 Index for Kurukshetra 234 as on 30.06.06 over PAR-92 with base-100) on all items except item No. 5.	05300.00	%	134%	<b>705300.00</b> 677102.00	
}	except hem No. o.				1582402.00	<del></del>
B	<u> Horticulture</u>					
1	Horticulture operations.	5600	sqm	18.25	102200.00	5.6
	Add Cost Index 134% (approved Cost 1 Index for Kurukshetra 234 as on 30.06.06 over PAR-92 with base-100).	02200.00	%	134%	102200.00 136948.00	<b>-</b>
				-	341348.00	

### **ABSTRACT OF COST**

Annexure-

Sr. No.	Item of works	Unit	Amount	Remark
	DEVELOPMENT WORK (ELECT.)			
1	Provision for Feeder pillars, Essential & Non- Essential Panels + LT Cables	L.S.	10,00,000.00	
2	Provision for compound lighting including cables, poles and fittings etc.	L.S.	500,000.00	
3	Provision for Fire Alarm System.	L.S.	10,00,000.00	
4	Provision for Acs 150 ton capacity @ Rs. 25,000/- per ton including stabilizers.	L.Ś.	37,50,000.00	
5	Provision for 2 Nos. 13 passengers lift.	L.S.	3900,000.00	,
		Total	9250000.00	
			•	

### Item No.9.13 To consider and approve the Revised Rough Cost Estimate for the installation of HT/LT Sub-Station.

The building and works committee vide item No. 2.41 dated 27.08.2004 approved the rough cost estimate of Rs 302.00 lacs for the installations of HT/LT Sub-Station in NIT Kurukshetra and suggested that the Sub-Station should have the capacity to include entire campus including residential sector and revised cost for the Sub-Station covering the entire campus be worked out which was approved by the Board vide item No. 6.30 dated 16/11/2004. Further UHBVN ltd. has also refused to supply the residential area through individual L.T. connections to each resident and directed the Institute to supply power to each residence through Institute distribution system. As per rules, UHBVN Ltd. will only release one Bulk Supply connection for all the residences of the Institute. A consultant M/S V.S. Kukreja & Associated Pvt. Ltd. Delhi was appointed for the consultancy services for the Installation of HT/LT Sub-Station and the work was allotted to CPWD.

After the detailed discussion by NIT, Kurukshetra & CPWD with the consultant, the consultant submitted the revised rough cost estimate amounting to Rs. 582.00 lacs (approx.) covering the entire campus including residential sector as suggested by BWC. The revised cost estimated for the entire work is enclosed.

In view of the position explained above, it is proposed that the BWC may consider and approve the RCE amounting to Rs. 582.00 lacs (approx.) for the installation of HT/LT Sub-Station in the Institute.

### **UDGETORY ESTIMATE**

The work HT/LT substation work is likely to cost as under

a) Electrical Substation work 11485 kva @ 4000.00 per kva = 4,59,00,000.00

b) H.T.Cable 4000 m @ 1250 per m = 50,00,000.00

c) Street Lighting 100 poles @ 20000 per pole = 20,00,000.00

TOTAL 5,29,00,000.00

Add Contingencies @ 10% ( UMBV N Charges ) 52,90,000.00

5,81,90,000.00

Or say Rs. 5,82,00,000.00 only (Rs. Five Crore Eighty Two Lacs only)

### **SCOPE**

This budgetary estimate caters to the provision of the following:

11 KV switching station cum main sub station..

11 kv/0.433 kv compact(unitized) substations.

All associated 11 kv and 1.1, kv cables.

All associated feeder pillers.

Augmentation of Street Lighting.

Cable trays, steel supports.

Earthing (looping).

etc. etc..

### Item No.9.14 To consider & approve RCE (revised cost estimate) amounting to Rs. 12.50 crore for the construction of 350 Seaters Boys Hostel at National Institute of Technology, Kurukshetra.

The work of construction of 350 Seaters Boys Hostel was allotted to M/S Allied Engineers, G.T. Road, Gharaunda (Karnal) through open tender at an approx. cost of Rs. 939.08 lacs. The Building & Works Committee in its 8<sup>th</sup> meeting vide item No. 8.3 held on 28-05-2007 approved the cost estimate amounting to Rs. 939.08 lacs which is near completion. In large civil works, minor additions and alternations are always done keeping in view the functional utility and specific requirement of user which could not be foreseen at the beginning of planning. In the present case the overall cost will increase slightly necessitating the enhancement of the estimated cost as per actual site requirement i.e. (Estate Services) for the provision of external water supply & sewerage system and campus lighting etc. are also essentially required to make the Hostel functional. Accordingly the revised cost estimate of 350 seaters Boys Hostel includes (Civil works including internal Public Health & Electrical Services, Road Pavement, Parking Areas & Landscaping etc.) and cost estimate for the provision of External Water Supply & Sewerage System and Campus Lighting etc.

During the execution of the construction of 350 seater Boys Hostel, as per actual execution according to the drawings supplied by the Architect/Consultant, the quantities of some of the items have increased as per actual requirement at site, which will cost about Rs. 1147.00 Lacs against the approved cost estimate amounting to Rs. 939.08 lacs.

Besides the above the following items of the work as detailed below are also required to be carried out for the completion of this building.

- (i) Landscaping @ 2% of the building cost i.e. Rs. 21.00 Lacs approximately.
- (ii) The provision of external water supply & sewerage system to connect the proposed hostels with the existing lines was not made in the original estimate. A cost estimate amounting to Rs. 56.94 lacs has been framed and tenders have been received for the above works which are under process.
- (iii) Also the provision of electrical poles lighting surrounding the proposed hostels was not made. A cost estimate amounting to Rs 25.01 lacs has been framed. Four tenders have been received for the above works which are under process.

As such Architect/Consultant M/S Saakaar Foundation Chandigarh submitted the above revised cost estimate amounting to Rs. 12.50 Crores for the construction of 350 seaters Boys Hostel (Civil works including internal Public Health & Electrical Services, Road Pavement, Parking Areas & Landscaping etc.) and cost estimate for the provision of External Water Supply & Sewerage System and Campus Lighting etc.

It is, therefore, requested that BWC may consider and accord approval amounting to Rs. 12.50 Crores for the construction of 350 Seaters Boys Hostel in the Institute.

## ABSTRACT OF REVISED COST ESTIMATE FOR THE WORK OF CONSTRUCTION OF 350 SEATERS BOYS HOSTEL AT NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA.

Sr. No.	Description of work	Estimated Cost (HSR+CP)				
1	SUB PART-I: INTERNAL CIVIL WORKS (SCHEDULE ITEMS)	99223454.20				
·	SUB PART-I: INTERNAL CIVIL WORKS (NON-SCHEDULE ITEMS)	5782950.00				
	Total	105006404.26				
	Add Land Development @ 2% of Civil work	2100128.09				
	Total -A	107106532.35				
2	SUB PART-II: INTERNAL PH SERVICES (SCHEDULE ITEMS)	2471929.00				
<del></del>	SUB PART-II: INTERNAL PH SERVICES (NON-SCHEDULE ITEMS)	2291940.00				
	Total -B	4763869.00				
3	SUB PART-III: INTERNAL ELECTRICAL SERVICES (SCHEDULE ITEMS)	2343699.00				
	SUB PART-III: INTERNAL ELECTRICAL SERVICES (NON-SCHEDULE ITEMS)	2593300.00				
	Total-C	4936999.00				
4	Outer Lighting arrangement	2500696.00				
	Outer P.H. Installation	5694067.00				
	Total-D	8194763.00				
	Grand Total (A+B+C+D)	125002163.35				

sd/-EXECUTIVE ENGINEER CONSTRUCTION CELL NIT, KURUKSHETRA

## REVISED COST ESTIMATE OF CIVIL WORKS FOR CONSTRUCTION OF 350 SEATERS BOYS HOSTEL AT NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA (BASED ON HSR-1988 & LATEST SANCTIONED PREMIUM W.E.F. 04-03-2006)

Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
		SUB PART-I: INTERNAL CIVIL WORKS (SCHEDULE ITE	MS)		. <u></u> !		<u>                                     </u>	
1	6.27	Clearing grass and removal of the rubbish upto distance of 50m outside the periphery of the area cleared	9194	100 Sqm	21.45	250%	75.08	6902.40
2	6.6-6.13	Earth work in excavation in foundation, trenches etc. in all kind of soils, not exceeding 2 mtrs. depth including dressing of bottom and sides of trenches, stacking the excavated soil, clear from the edge of excavation and subsequent filling around masonry in 15 cm layers with compaction, including disposal of all surplus soil as directed within a lead of 30 mtrs.		100 Cum	3230.50	0%	3230.50	167986.00
3	6.2 c (ii)	Earth work in excavation in ordinary soil exclusive of compensation of earth						
		Overall Lead 120 mtrs	5200	100 Cum	166.00	300%	664.00	34528.00
4	10.39	Cement concrete 1:4:8 with stone aggregate 40mm nominal size in foundation and plinth (upto 1.5m depth)						
		For Foundation	404	Cum	403.10	230%	1330.23	537412.92
		For Paved Area	450	Cum	403.10	230%	1330.23	598603.50
5	10.39+ Note (v) 2	Cement concrete 1:4:8 with stone aggregate 40mm nominal size in foundation and plinth (upto 2m depth)	66	Cum	405.65	230%	1338.65	88350.57

Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
6	1	Cement concrete 1:4:8 with stone aggregate 20mm nominal size in first storey ypto 4 metres above plinth level						
,		Third Storey	6	Cum	431.35	230%	1423.46	8540.73
		Fifth storey	41	Cum	436.45	230%	1440.29	59051.69
7	9.9 + note II (a)	Centring & shuttering for columns ( square or rectangular or polygonal in plan)						
		Third Storey	40	Sqm	50.65	175%	139.29	5571.50
		Fifth storey	450	Sqm	51.85	175%	142.59	64164.38
8	10.90 + 10.95 (a)	Cement concrete 1:1.5:3 with stone aggregate 20mm nominal size for reinforced concrete work in footings, strips, foundations, beams, rafts, pedestal and approach slabs of bridges etc. excluding steel reinforcement but including centering and shuttering laid in position complete in all respects (for works upto 1.5m below grounds level)		Cum	774.00	230%	2554.20	4597560.00
9	10.86+ 10.95 (a)	Cement concrete 1:1.5:3 with stone aggregate 20mm nominal size for reinforced concrete work for walls exceeding 20cm thickness (straight and curved) beams, girders, stairs, columns (square or rectangular) battens and lintels etc. excluding steel reinforcement but including centering and shuttering laid in position, complete in all respects.						
	10.86+ 10.95 (a)	-do- (first storey)	850	Cum	1188.75	230%	3922.88	3334443.75
	10.86+ 10.95 (a)+ note(v)(b)	-do- (second storey)	598	Cum	1196.05	230%	3946.97	2360285.07

Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
	10.86+ 10.95 (a)+ note(v)(b)	-do- (third storey)	360	Cum	1203.35	230%	3971.06	1429579.80
	10.86+ 10.95 (a)+ note(v)(b)	-do- (forth storey)	320	Cum	1210.65	230%	3995.15	1278446.40
	10.86+ 10.95 (a)+ note(v)(b)	-do- (fifth storey)	8	Cum	1217.95	230%	4019.24	32153.88
10	10.87+ 10.95 (a)	Cement concrete 1:1.5:3 with stone aggregate 20mm nominal size for reinforced concrete work for walls (10cm to 20 cm thickness) straight and curved excluding steel reinforcement but including centring and shuttering, laid in position, complete in all respects.						
	10.87+ 10.95 (a)	-do- (first storey)	14	Cum	1486.90	230%	4906.77	68694.78
	10.87+ 10.95 (a)	-do- (second storey)	8	Cum	1494.20	230%	4930.86	39446.88
	10.87+ 10.95 (a)	-do- (third storey)	8	Cum	1501.50	230%	4954.95	39639.60
	10.87+ 10.95 (a)	-do- (forth storey)	8	Cum	1508.80	230%	4979.04	39832.32
	10.87+ 10.95 (a)	-do- (fifth storey)	2	Cum	1516.10	230%	5003.13	10006.26

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Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
11	10.88 + 10.95 (a)	Cement concrete 1:1:5:3 with stone aggregate 20mm nominal size for reinforced concrete work circular or curved columns excluding steel reinforcement but including centering and shuttering laid in position complete in all respects.						
		-do- (first storey)	5	Cum	1352.95	230%	4464.74	22323.68
	10.88 + 10.95 (a) + note(v)(b)	-do- (second storey)	3	Cum	1360.25	230%	4488.83	13466.48
12	10.81	Cement concrete 1:2:4 with stone aggregate 20mm nominal size for reinforced concrete work in shelves excluding steel reinforcement but including centering and shuttering laid in position complete in all respects.						
<del></del>	10.81 + note (v)(b)	-do- (first storey)	17	Cum	947.70	230%	3127.41	53165.97
	10.81 + note (v)(b)	-do- (second storey)	12	Cum	955.00	230%	3151.50	37818.00
	10.81 + note (v)(b)	-do- (third storey)	10	Cum	962.30	230%	3175.59	31755.90
	10.81 + note (v)(b)	-do- (forth storey)	10	Cum	969.60	230%	3199.68	31996.80

Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
13	10.82 + 10.95 (a)	Cement concrete 1:1:5:3 with stone aggregate 20mm nominal size for reinforced concrete work in slab with inclination not exceeding 25 degree with horizontal, excluding steel reinforcement but including centering and shuttering laid in position complete in all respects.				<b>.</b>		1,443
	10.82 + 10.95 (a)+note(v)(b)	-do- (first storey)	405	Cum	1084.80	230%	3579.84	1449835.20
	10.82 + 10.95 (a)+note(v)(b)	-do- (second storey)	390	Cum	1092.10	230%	3603.93	1405532.70
	10.82 + 10.95 (a)+note(v)(b)	-do- (third storey)	340	Cum	1099.40	230%	3628.02	1233526.80
	10.82 + 10.95 (a)+note(v)(b)	-do- (forth storey)	315	Cum	1106.70	230%	3652.11	1150414.65
	10.82 + 10.95 (a)+note(v)(b)	-do- (fifth storey)	6	Cum	1114,00	230%	3676.20	22057.20
14	10.89 + 10.95 (a)	Cement concrete 1:1:5:3 with stone aggregate 20mm nominal size for reinforced concrete work in fascias, parapet and other thin vertical sections, not covered by items nos. 10.82, 10.86-10.88 not exceeding 10 cm excluding steel reinforcement but including centering and shuttering laid in position complete in all respects.						
	10.89 + 10.95 (a)	-do- (first storey)	10	Cum	1708.95	230%	` 5639.54	56395.35
	10.89 + 10.95 (a)+note(v)(b)	-do- (second storey)	10		1716.25	230%		56636.25
	10.89 + 10.95 (a)+note(v)(b)	-do- (third storey)	10		1723.55			56877.15
	10.89 + 10.95 (a)+note(v)(b)	-do- (forth storey)	10	Cum	1730.85	230%	5711.81	57118.05
	10.89 + 10.95 (a)+note(v)(b)	-do- (fifth storey)	1	Cum	1738.15	230%	5735.90	5735.90

Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
15	18.22	Cold twisted deformed (ribbed/tor steel) bars for R.C.C. works where not included in the complete rate of R.C.C. including bending, binding and placing in position complete.	7013	QtI	917.05	225%	2980.41	20901632.86
16	10.114	Damp proof course 40mm thick of cement concrete 1:2:4 using stone aggregate 20mm nominal size with 2 coats of bitumen 20/30 penetration at 1.65kg per sqm. laid hot and sanded.		Sqm	35.05	230%	115.67	23133.00
17	10.132	Cement concrete 1:2:4 with stone aggregate 20mm nominal size in pavement, roads, taxi-tracks and run ways, laid to required slope and camber, i/c consolidation, finishing and tamping complete.		Cum	642.40	230%	2119.92	1356748.80
18	11.2	First class brickwork laid in cement sand mortar 1:6 in foundation and plinth.	600	Cum	393.45	250%	1377.08	826245.00
19	11.7	First class brickwork laid in cement sand mortar 1:6 in first storey upto 4 meter above plinth level.	:					
		-do- (first storey)	545	Cum	414.45	250%	1450.58	790563.38
	11.7+11.41 (i)	-do- (second storey)	520	Cum	422.70	250%	1479.45	769314.00
	11.7+11.41 (i)	-do- (third storey)	452	Cum	430.95	250%	1508.33	681762.90
	11.7+11.41 (i)	-do- (forth storey)	452	Cum	439.20	250%	1537.20	694814.40
	11.7+11.41 (i)	-do- (fifth storey)	300	Cum	<del>44</del> 7.45	250%	1566.08	469822.50
	11.7+11.41 (i)	-do- (Sixth storey)	14	Cum	455.70	250%	1594.95	22329.30
20	11.42	Extra for brick work in Square or rectangular pillars in buildings	90	Cum	12.40	250%	43.40	3906.00

Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
21	11.45 c	Extra for brick work curved on plan up to a mean radius not exceeding 6 metres	90	Cum	47.80	250%	167.30	15057.00
22	11.47	11.43 cm thick brick wall laid in cement sand mortar 1:4 without reinforcement in foundation & plinth	420	Sqm	52.70	250%	184.45	77459.00
23	11.48 (a)	11.43 cm thick brick wall laid in cement sand mortar 1:4 in superstructure in first storey				<u></u> -		-
		-do- (first storey)	2000	Sqm	55.10	250%	192.85	385700.00
	11.48 (a) + note (iv)(a)	-do- (second storey)	2100	Sqm	56.05	250%	<del></del>	411967.50
	11.48 (a) + note (iv)(a)	-do- (third storey)	1800	Sqm	57.00	250%	199.50	359100.00
	11.48 (a) + note (iv)(a)	-do- (forth storey)	1800	Sqm	57.95	250%	202.83	365085.00
	11.48 (a) + note (iv)(a)	-do- (fifth storey)	100	Sqm	58.90	250%	206.15	20615.00
	11.48 (a) + note (iv)(a)	do- (Sixth storey)	50	Sqm	59.85	250%	209.48	10473.75
24	11.81	Dressing, chamfering of bricks to require shape in masonry work	8000	100 Each	73.75	250%	258.13	20650.00
25	13.43	Providing & embedding 100mm dia HCI rain water without ears ISI mark pipe in cement mortar during masonry work	1160	Mtr.	93.35	200%	280.05	324858.00
26	13.46 (a)	Extra over rate of item No.13.43 and 13.45 (a) in case lead joints are used instead of cement joints	, , , , , , , , , , , , , , , , , , , ,					N. 1
		100 mm diameter pipe	710	Each	24.30	200%	72.90	51759.00

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Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
27	13.49	Providing & fixing CI plain bends in position with gutter etc.						
	(a)	For 100mm diameter pipe	144	Each	57.45	200%	172.35	24818.40
28	13.50	Top Khurra 0.6 m x 0.6 m for rain water pipe in 25mm thick cement concrete 1:2:4 over 50mm thick cement concrete 1:8:16.	70	Each	12.30	150%	30.75	2152.50
29	13.55	Supplying & fixing in position GI pipe class 'B' Spouts in chajjas and cantilevers.						
	(c)	25 mm internal dia. G.I. pipe	45	Mtr.	40.45	150%	101.13	4550.63
	(d)	40 mm internal dia. G.I. pipe	45	Mtr.	59.00	150%	147.50	6637.50
30	13.57	Bottom Khurra on ground 1.2m x 0.6m consisting of brick-on edge laid in cement mortar 1:3 over 75 mm cement concrete 1:8:16 including 12mm thick cement plaster 1:3.	142	each	64.30	150%	160.75	22826.50
31	13.64	Cement concrete 1:2:4 gola 10cmx10cm quadrant along junction of roof with parapet wall finished smooth where specially specified.	1011	Mtr.	5.35	150%	13.38	13522.13
32	13.66	Providing and laying cinder concrete in cement 1:15 (1 cement: 15 cinder) on terraced roofs, aid to slope, including consolidating the same.						
	13.66+ note (III)	-do- (second storey)	62	Cum	216.65	150%	541.63	33580.75
	13.66+ note (III)	-do- (third storey)	49	Cum	219.65	150%	549.13	26907.13
	13.66+ note (III)	-do- (forth storey)	49	Cum	222.65	150%	556.63	27274.63
33	14.1-10.26 Based derived rate	Sand filling under floor i/c laying consolidation, compaction & watering etc.	7000	Cum	69.30	230%	228.69	1600830.00

FOR THE PARTY

Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
34	14.1	Base course of floor consisting of 100mm thick cement concrete 1:8:16 and 100mm sand or stone filling	3453	Sqm.	36.95	230%	121.94	421041.56
35	14.4	Screed of 50mm thick concrete 1:8:16 to be laid below the topping.						
	14.4+ note (I)	-do- (second storey)	2621	Sqm	15.65	230%	51.65	135361.55
	14.4+ note (I)	-do- (third storey)	2193	Sqm	15.95	230%	52.64	115428.56
	14.4+ note (I)	-do- (forth storey)	2193	Sqm	16.25	230%	53.63	117599.63
	14.4+ note (I)	-do- (fifth storey)	180	Sqm	16.55	230%	54.62	9830.70
36	14.3	Floating coat of 1.50mm thick neat cement laid in one operation to the topping.		Sqm	3.70	230%	12.21	
37	14.8	Conglomerate floor 25mm thick cement concrete topping 1:2:4				_		
	14.8 + note	-do- (first storey)	160	Sqm	22.40	230%	73.92	11827.20
	14.8 + note	-do- (second storey)	130	Sqm	22.70	230%	74.91	9738.30
	14.8 + note	-do- (third storey)	130	Sqm	23.00	230%	75.90	9867.00
	14.8 + note	-do- (fourth storey)	130	Sqm	76.89	230%	253.74	32985.81
38	14.45	Precast colour chequered tiles of 20 mm thickness in oridinary grey cement without chips laid on 20 mm thick bed of cement coarse sand mortar 1:3 with neat cement slurry between joints and over the base in floors, treads of steps and landings	<i>,</i>					
		First story	66	Sqm	111.49	230%	367,92	24282.52

Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
	14.45 + note I	-do- (second storey)	66	Sqm	111.79	230%	368.91	24347.86
	14.45 + note I	-do- (third storey)	66	Sqm	112.09	230%	369.90	24413.20
39	14.49	Marble stone flooring 20 mm to 25 mm hick slab including macthing grains of marble laid in any pattern as specified over base of 12 mm thick cement couse sand morter 1:3 and jointed with white cement slurry mixed with pigment to match the shade of marble including rubbing and polishing (using he marble stone slab of size more than 0.38 sqm each)						
	a	White marble	· · · · · · · · · · · · · · · · · · ·					
		(i) White makrana marbl (1 st Quality) -do- (first storey)	900	Sam	782.20	0%	782.20	703980.00
	14.49 + note (i)	-do- (second storey)	490	Sqm	782.50			383425.00
	14.49 + note (i)	-do- (thired storey)	25	Sqm	782.50	0%	782.50	19562.50
	14.49 + note (i)	-do- (forth storey)	25	Sqm	783.10	0%	783.10	19577.50
40	14.50	Extra for nosing in marble stone for treads	98	mtr	19.00	50%	28.50	2793.00
41	14.51	Extra for marble stone flooring in treads of step not exceeding 30 cm in width.	50	Sqm	21.80	50%	32.70	1635.00

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Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
42	14.52 (a)	Marble stone 20mm to 25 mm thick in risers of step, skirting, dado, pillars and wall lining including matching the grains of marble slab in any pattern as specified laid on 12mm thick cement coarsed sand mortar 1:3 and jointed with white cement slurry mixed with pigment to match the shade of marble including rubbing and polishing, including labour for fixing cramps, pins and dowels etc. (using size of marble slab above 0.38 sqm. each)						
	a	White marble			<u> </u>		<u> </u>	
_		(i) White makrana marbl (1 st Quality)	450		222.22		000.00	124500.00
		-do- (first storey)	150		830.00	0%		124500.00
	14.52 (a) + note I	-do- (second storey)	100	Sqm	830.30	0%	830.30	83030.00
	14.52 (a) + note (i)	-do- (thired storey)	25	Sqm	830.60	0%	830.60	20765.00
	14.52 (a) + note (i)	-do- (forth storey)	25	Sqm	830.90	0%	830.90	20772.50
43	14.62	Kotah stone flooring 34 mm to 40 mm thick in any pattern as specified over 12 mm thick base of cement coarse sand mortar 1:3 laid and jointed with neat cement slurry mixed with pigment to match the shade of stone including rubbing and polishing						
		-do- (first_storey)	2300		201.95	100%	<del> </del>	928970.00
	14.62+note (i)	-do- (second storey)	1900	Sqm	202.25	100%	404.50	768550.00
	14.62+note (i)	-do- (third storey)	1900	Sqm	202.55	100%	405.10	769690.00
	14.62+note (i)	-do- (fourth storey)	1500	Sqm	202.85	100%	405.70	608550.00
•	14.62+note	-do- (fifth storey)	180	Sqm	203.15	100%	406.30	73134.00

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Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
44	14.64	Extra for Kotah stone flooring in treads of steps not exceeding 30 cm in width	350	sqm	1.15	100%	2.30	805.00
45	14.65	Extra for nosing in treads of steps of Kotah stone slab	1400	mtr	6.10	100%	12.20	17080.00
46	14.66	Kotah stone 20 mm thick in skirting, risers of steps, dados and wall facing (lining) and pillars laid on 12 mm thick cement coarse sand mortar 1:3 laid and jointed with neat cement slurry mixed with pigment to match the shade of stone including rubbing and polishing including labour for fixing clamps, dowls and pins etc.						
		-do- (first storey)	325	Sqm	237.00	100%	474.00	154050.00
	14.66 +note (i)	-do- (second storey)	294	Sqm	237.30	100%		139532.40
	14.66 +note (i)	-do- (third storey)	273	Sqm	237.60	100%	475.20	129729.60
	14.66 +note (i)	-do- (fourth storey)	273	Sqm	237.90	100%	475.80	129893.40
	14.66 +note (i)	-do- (fifth storey)	7	Sqm	238.20	100%	476.40	3334.80
47	15.7	12mm thick cement plaster 1:6 on wall						
		-do- (first storey)	3682	Sqm	10.65	250%	37.28	137246.55
	15.7+note 1	-do- (second storey)	3240	Sqm	10.83	250%	37.91	122812.20
	15.7+note 1	-do- (third storey)	2900	Sqm	11.01	250%	38,54	111751.50
	15.7+note 1	-do- (forth storey)	2981	Sqm	11.19	250%	39.17	116750.87
	15.7+note 1	-do- (fifth storey)	2500	Sqm	11.37	250%	39.80	99487.50
	15.7+note 1	-do- (Sixth storey)	10	Sqm	11.55	250%	40.43	404.25
48	15.10	15mm thick cement plaster 1:4 on the rough side of singe or half brick						
		-do- (first storey)	1200	Sqm	15.65	250%	54.78	65730.00
		-do- (second storey)	1200	Sqm	15.83	250%	55.41	66486.00
	15.10+note (1)	-do- (third storey)	900	Sqm	16.01	250%	56.04	50431.50

Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
	15.10+note (1)	-do- (forth storey)	900	Sgm	16.19	250%	56.66	50995.35
		-do- (fifth storey)	800	Sqm	16.37	250%	57.30	45836.00
49	15.12	15mm thick cement plaster 1:6 on the rough side of singe or half brick						
		-do- (first storey)	3682	Sqm	13.10	250%	45.85	168819.70
	15.12 +note	-do- (second storey)	3240	Sqm	13.28	250%	46.48	150595.20
	15.12 +note	-do- (third storey)	2900	Sqm	13.46	250%	47.11	136619.00
	15.12 +note	-do- (forth storey)	2981	Sgm	13.64	250%	47.74	142312.94
	15.12 +note	-do- (fifth storey)	500		13.82	250%	<del></del>	24185.00
	15.12 +note	-do- (Sixth storey) Pebble dash exterior plaster on walls with a mixture of	10	Sam	14.00	250%		490,00
		washed peddle or crushed stone graded from 6mm to 12mm nominal size dashed over and including fresh cement plaster in 2 coats first coat 10mm thick cement plaster 1:4 (1 cement: 4 sand) and finishing coat 10mm cement plaster 1:e mixed with 10% finely ground hydrated lime by volume of cement including arises, chamfers and/or rounded angles not exceeding 80mm in girth.						,
		-do- (first storey)	3206	Sqm	35.10	250%	122.85	393857.10
	15.19 + note (I)	-do- (second storey)	2837	Sqm _	35.28	250%	123.48	350312.76
	15.19 + note (I)	-do- (third storey)	2517	Sqm	35.46	250%	124.11	312384.87
	15.19 + note (I)	-do- (forth storey)	2168	Sqm	35.64	250%	124.74	270436.32
	15.19 + note (I)	-do- (fifh storey)	2168	Sqm	35.82	250%	125.37	271802.16
	15.19 + note (I)	-do- (Sixth storey)	25	Sqm	36.00	250%	126.00	3150.00

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Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
51	15.51	10 mm thick cement plaster 1:3 on underside of ceiling						
		-do- (first storey)	∠3 <del>5</del> 0	Sqm	14.55	250%	50.93	221523.75
	15.51 + Note (1)	-do- (second storey)	4400	Sqm	14.73	250%	51.56	226842.00
•	15.51 + Note (1)	-do- (third storey)	3200	Sqm	14.91	250%	52.19	156992.00
	15.51 + Note (1)	-do- (fourth storey)	3150	Sqm	15.09	250%	52.82	156367.25
	15.51 + Note (1)	-do- (fifth storey)	200	Sqm	15.27	250%	53.45	10689.00
52	15.77	20mm thick cement plaster damp proof course 1:3 with 2 coats of bitumen at 1.65 Kg. per sqm laid hot and sanded:-						
	(a)	Vertical						
		-do- (second storey)	100	Sqm	30.70	250%	107.45	10745.00
		-do- (third storey)	70	Sqm	30.88	250%	108.08	7565.60
		-do- (forth storey)	70	Sqm	31.06	250%	108.71	7609.70
	(b)	horizontal						
	15.77 + Note (1)	-do- (second storey)	230	Sqm	28.95	250%	101.33	23304.75
	15.77 + Note (1)	-do- (third storey)	150	Sqm	29.13	250%	101.96	15293.25
		-do-(forth storey)	150	Sqm	29.31	250%	102.59	15387.75
54	15.79	20mm thick raised or sunk cement mortar band/drip course in cement mortar 1:4 (3 cm width)	2000	m/cm width	0.45	250%	1.58	3150.00

Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
55	15.80	Extra for lining out rough cast/pebble/cement plaster and terrazzo finished surfaces on walls to imitate stone or concrete block lining	12050	Sqm	3.30	250%	11.55	139177.50
56	15.81	Extra for plastering on circular work not exacting 6 metres in radius:-in two coats	68	Sqm	2.20	250%	7.70	523.60
57	17.69 (b)	P/F wooden hardrail of required shape and design with necessary screws, including labour, for rounding, vertical and horizontal bends and curves complete fixed in position:Commercial hard wood, such as hollock, champ, chikrassy etc. (Non-ciniferous timber other than teak conforming to I.S. specification No. 1003 klin seasoned)		Cum	10238.00	150%	25595.00	76785.00
58	17.90 (a)- note-1 of 17.18	Factory manufactured panelled door or glazed window shutter of commercial hard wood such as hollock, champ, chikrassy and chaplash etc. (non-confireous timber other than teak conforming to I.S. specification no. 1003 kiln seasoned) with 100mm vide vertical styles, 150mm vide lock rail, 200mm vide bottom rail & 100mm vide others rail with panelles of 15mm thick, tongued and grooved of commercial hard wood i./c the cost of iron hinges, screws, chocks/cleats, stops, nails etc. complete fixed in position excluding the cost of any fittings other tham specified above but including the labour for fixing the same in possition						
		For Glazed windows (30mm thick)	479	Sqm	398.15	150%	995.38	476784.63

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Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
59	17.92 -note- 1 of 17.18	Factory manufactured wire glaze door and window shutter of Wire Gauge Commercial hard wood such as hollock, champ, chikrassy and chaplash (non-confireous timber other than teak conforming to I.S. specification no. 1003 kiln seasoned) with 100mm vide vertical styles, 150mm vide lock rail, 200mm vide bottom rail & wire gauze of 140G or 120G designation i./c the cost of iron hinges, screws, chocks/cleats, stops, nails etc. complete fixed in position excluding the cost of any fittings other tham specified above but including the labour for fixing the same in possition						
	(i)	30mm thick (Window shutters)	464	Sqm	310.40	150%	776.00	360064.00
	(ii)	35mm thick (Doors)	1049	Sqm	335.70	150%	839.25	880373.25
60	17.93(a)- note (i) of 17.18	Factory manufactured solid flush door shutters with black board, core as per I.S .No. 1659-1969 bounded with water proof type phenol formaldehyde synthetic resin, hot pressed, conforming to I.S.2202 part I and II, fixed in position i/c iron hinges, screws, chocks/cleats and stops, etc. excluding the cost of any fittings other than specified above, but i/c labour for fixing the same in position						
	(a)	Commercial veenering with vertical grains or cross bands and face vener on both sides commercial facing its laminated core and lipped edges.						
	(iii)	35mm thick	1900	Sqm	436.15	150%	1090.38	2071712.50
	(i)	25mm thick	900	Sqm	387.15	150%	967.88	871087.50

Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
61	17.71	Cost of Iron fittings complete for doors and windows, such as tower bolts, handles etc., and screws for these fittings (excluding sliding bolt)						
	(a)	For single leaf shutter	3300	Sqm	6.40	150%	16.00	52800.00
	(b)	For double leaf shutter	1066	Sqm	10.15	150%	25.38	27055.00
62	17.78 [c]	Providing & fixing 150mm hasps and staples with necessary screws, etc., complete						
		Iron	790	Each	4.30	150%	10.75	8492.50
63	17.81(b)	Providing & fixing M.S. double acting spring hinges with necessary screws, etc. complete-125mm	10	Each	31.60	150%	79.00	790.00
64	17.79 (b)	Providing & fixing helical door spring 150mm (superior quality), including necessary screw, complete		·				
		Iron	400	Each	23.85	150%	59.63	23850.00

Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
65	17.83 [c]	Providing and fixing sliding bolt with nuts and screws, etc. complete						
	(C)	Iron						
	(i)	Size 300 x 16mm	73	Each	17.45	150%	43.63	3184.63
	(ii)	Size 250mm x 16mm	940	Each	16.35	150%	40.88	38422.50
66	17.87	Providing and fixing 0.50 mm thick aluminium sheet, including cost of necessary screws etc., complete	96	Sqm	90.55	150%	226.38	21732.00
67	18.12	Wrought iron and mild steel (using angles, flats, square bars, tees and channels) ladders grills, grating frames, window guard iron doors openable of fixed staircase of parapet or any other type of railing, gates and tree guards etc. including cost of screws and welding rods or bolts and nuts complete fixed in position.	363	Qtl.	1040.35	250%	3641.23	1321764.68
68	18.30	S/F glass panes including special metal sash putty of approved make						
	(a)	Glass panes 3mm thick upto 40 sq.dm.area	1210	Sqm	97.50	250%	341.25	412912.50
ļ —	(b)	Glass panes 4mm thick, exceeding 40 sq.dm.area	1424	Sqm	115.40	250%	403.90	575153.60
69	Top note (v) of chapter 17	Extra for providing and fixing frosted glass instead of ordinary glass	96	Sqm	11.50	150%	28.75	2760.00



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Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
70	18.34	Pressed steel sheet frames (chowkhats), consisting of 2mm thick steel sheet of the specified section, including iron lugs (hold fasts), iron hinges, conforming to P.W.D. specifications including bolts for fixing stops, lock notch provision for receiving tower bolts and finished with one coat of ready mixed paint red lead non-setting primer of approved quality fixed in position including the cost of cement concrete 1:3:5 for filling in the frame and cement concrete 1:3:6 for lugs complete:-						
	(a)	Size 89mm x 50mm x 40mm wide single rebate	4647	Mtr.	71.55	250%	250.43	1163724.98
	(b)	Size76mm x 38mm x 35mm wide single rebate	3418	. Mtr.	58.60	250%	205.10	701031.80
	(c)	Size 127mm x 50mm x 40mm wide dobule rebate	9010	Mtr.	76.80	250%	268.80	2421888.00
71	16.1	Preparation of plywood surface for painting including sand papering the surface and applying with approved quality filler consisting of white lead, linseed oil, varnish and chalk mitti including finishing the surface to required finish complete (with first quality paint)	9810	Sqm.	4.60	110%	9.66	94764.60
72	16.2	Applying pink primer or aluminium priming coat on wood work including preparation of surface knotting and stopping etc.	9810	Sqm.	3.75	110%	7.88	77253.75
73	16.3	Applying two coats excluding priming coat with synthetic enamel paint in all shades on new woodwork or metallic or plastered or concrete surfaces to give an even shade (with first quality paint)	17446	Sqm.	9.40	110%	19.74	344384.04
74	16.9	Applying priming coat with metal primer on new steel or iron work including preparation of surface with first quality paint)	7636	Sqm.	2.95	110%	6.20	47305.02

Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
75	16.25	Applying priming coat with cement primer in all shades on newly plastered or concrete exterior surface	12166	Sqm	4.15	110%	8.72	106026.69
76	16.52	Preparation of plastered surfaces for oil bound distemper including sand papering the surface, applying 1 coat of linseed oil and filling with approved quality filler consisting of white led, linseed oil, warnish and chalk mitti including finishing the surface to the required finish complete.		Sqm.	11.15	110%	23.42	665220.15
77	16.58	Distempering with washable oil bound distemper (of approved manufacture) two coats over one priming coat on new work.		Sqm.	9.10	110%	19.11	542915.10
78	16.61	Finishing walls with exterior decorative cement based paints such as snowcem, Robbiacem etc. on new work two coats to give an even shade.		Sqm	7.25	110%	15.23	268112.25
79	24.35	Providing and fixing premoulded bituminous joint filler, for expansion joints, including the cost of sealing compound and primer coat.						
		(ii) 25mm wide	42210	Per mtr. per cm depth	3.75	225%	12.19	514434.38
80	30.103	Painting H.C.I. soil, waste, vent and pipes and fitting with ordinary quality synthetic enamel paint in all shades on existing or new work two coats paints including cleaning, rubbing etc.						
	(a)	100mm internal diameter	1600	Mtr.	3.25	150%	8.13	13000.00
	(b)	75mm internal diameter	576	Mtr.	2.35	150%	5.88	3384.00
		Total:						75169283.53
		Add (HSR+CP)+32.00% above						24054170.73
		Grand Total			<u> </u>			99223454.26

Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
	SUB PART-	II: INTERNAL CIVIL WORKS (NON-SCHEDULE ITEMS)			<u>.                                    </u>			
		The rate quoted by the contractor shall be for all heights and levels as per drawings and for all scaffolding work and other connecting operations for below mentioned items.						
1	NS	Providing & laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies terraces etc. consisting of following operations:						
	a	Applying and grouting a slurry coat of neat cement using 2.75 Kg/sqm of cement admixed with proprietary water proofing compound conforming to IS: 2645 over the RCC slab including cleaning the surface before treatment						
	b	Laying cement concrete using broken bricks/ brick bats 25 m to 100 mm size with 50% of cement mortar 1:5 (1 cement: 5 coarse sand) admixed with proprietary water proofing compound conforming to IS 2645 over 20 mm thick layer of cement mortar of mix 1:5 (1 cement: 5 coarse sand) admixed with proprietary water proofing compound conforming to IS 2645 to required slope and treating similarly the adjoining walls up to 300mm height including rounding of junctions of walls and slabs.						
	С	After two days of proper curing applying a second coat of cement slurry admixed with proprietary water proofing compound conforming to IS: 2645						

Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
	d	Finishing the surface with 20mm thick joint less cement mortar of mix 1:4 (1 cement:4 coarse sand) admixed with proprietary water proofing compound confirming to IS 2645 and finally finishing the surface with trowel with neat cement slurry and making of 300mmx300mm square.						
	е	The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-Charge.						
	f	With average thickness of 120 mm and minimum thickness at khurra as 65mm	3980	sqm	400.00		400.00	1592000.C0
2	NS	Supplying chemical emulsion, Diluting and injecting chemical emulsion for PRE-CONSTRUCTIONAL ANTI-termite treatment and creating a continuous chemical barrier under and alround the column pits, wall trenches, basement excavation, top surface of plinth filling, junction of wall and floor, along the external perimeter of building, expansion joints, over the top surface of consolidated earth on which apron is to be laid, surroundings of pipes and conduits etc. complete as per following specifications (Plinth area of the building at ground floor only shall be measured for payment) Chlorpyriphos emulsifiable concentrate 20% with 1% concentration.	4636	Sqm	100.00		100.00	463600.00
	a	Treating the bottom and sides of excavation at the rate of 5 litres of emulsion per square metre of surface area.						

Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
	b	Treating the backfill in contact with foundation at the rate of 7.5 litres of emulsion per square metre of vertical surface						
	С	Treating the top surface of filled earth at the rate of 5 litres of emulsion per square metre of surface.						
	d	Treating the soil under plinth protection at the rate of 5 litres of emulsion per square metre of surface area.						
	e	Treating the soil along with external perimeter of building at the rate of 2.25 litre of emulsion per metre of the perimeter wall	·					
3	NS	Providing and fixing 18 mm thick mirror polished, machine cut for Kitchen plateforms, vanity counters facias and similar locations of required size of approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 with joints treated with white cement mixed with matching pigment, epoxy touchups, including rubbing, curing etc.and making opening of required size and shape for wash basins/ sinks etc. complete at all levels						
		Granite stone	92	sqm	2500.00		2500.00	230000.00
4	NS	Extra for providing edge moulding to granite stone counters including machine polishing to edge to give high gloss finish etc Complete in all respects	,	Mtr.	100.00		100.00	10100.00
5	NS	Making khurras 45 $\times$ 45 cm with average minimum thickness of 5cm cement concrete 1:2:4 (1 : cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size ) over P.V.C. sheet 1m $\times$ 1m $\times$ 400 micron, finished with 12 mm cement plaster 1:3 (1 cement		Each	300.00		300.00	21000.00

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Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
6	NS	Providing and fixing first class plain coloured glazed tiles (of Orient/Somany make) of size 300x200 mm with minimum thickness 5mm in skirting and dado on 12mm thick cement plaster 1:3 (1 cement:3 coarse sand) the back of the tiles to be buttered with grey cement slurry and edges with white cement slurry and to be set in bedding mortar of 1:3 (1 cement: 3 find sand) and jointed with white cement slurry mixed with pigment to match with the colour of the tiles.		Sqm.	550.00		550.00	1171500.00
7	N S	Providing and Fixing 150 mm wide sheet covering over expansion joints with rawl plugs and iron screws as per design to match the colour/shade of wall treatment with 3.15 mm thick aluminium fluted strips.		Meter	300.00		300.00	360000.00
8	NS	Providing Dr. Fixit pidiseal PS 41G (Gun grade), 42P (Pouring grade) or equivalent for horizontal and vertical expansion joint complete in all respects as per manufacturer detail to the satisfaction of EIC on all the floors.						
		40mm wide and 20mm deep	115	Mtr.	200.00	<u> </u>	200.00	23000.00
9	N.S.	Providing expansion joints in roof slab, terrace joints filled with bitumen filler or impregnated fiber board etc. all complete as per building specifications and directions of the Engineer-in-charge.						
		40mm wide and 20mm deep	1600	Mtr.	200.00	· · · · · · · · · · · · · · · · · · ·	200.00	320000.00

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Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
10		Providing, Fabrication and fixing of GE lexan Multiwall, polycarbonate sheet skylight system made out of 2"x2" MS pipe, 2"x1" MS pipe, Aluminium fixing profile system with EPDM rubber gaskets, silicon sealant, required screws nut bolts. Rowl pluge and fi	20	Sqm.	3300.00		3300.00	66000.00
11	N.S.	Making plinth protection 50 mm thick of cement concrete 1:3:6 over 75 mm bed of drey brick ballast 40 mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth	650	Sqm.	150.00		150.00	97500.00
12	N.S.	Providing precast CC jali 1:2:4 reinforced with 1:6 mm dia mild steel wire including centering & shuttering, roughening, cleaning, fixing and finishing in CM 1:3 etc. complete excluding plastering of the joints stills and soffits, 50 mm thick	194	Sqm.	1000.00		1000.00	194000.00
13	NS	Providing and fixing partly paneled and partly glazed aluminium doors/windows made of aluminium natural anodized extruded sections of various sizes as given below. Both sides prelaminated board 12mm thick shall be fixed in doors and 5mm thick clear plain  114 x 44 x 2mm : All bottom horizontal members of partitions / doors	98	Sqm.	3000.00		3000.00	294000.00
		101 x 44 x 2mm : All other horizontal and vertical members of partitions except those for single window operator's cabins.						
-		83 x 44 x 2mm : Door members				_		
14	NS	Providing and fixing in position 50mm x 50mm Hollow sq. Pipe for perapet railing or any type of railing including cost of welding roads etc. complete with one coat of primer.	2500	kg	62.00		62.00	155000.00

Sr. No.	HSR No.	Description	Qty.	Unit	Rate (in Rs.)	C.P.	Total Rate (Rs.)	Amount (in Rs.)
15	NS .	Providing and laying in floor plain coloured matt finish ceramic tiles of Orient/Kajaria make, size 3C0mm x 300mm (thickness as per manufacture) without warpage, laid on 20mm thick cement mortar 1:3 (1 cement: 3 coarse sand) including grouting the joints with tile grouts with matching pigment etc. complete in all respects at all heights and levels to the entire satisfaction of the Engineer-in-charge. 25mm thick CC 1:2:4 will be laid before laying the mortar. (First quality anti-skid tiles to be used)	700	700 Sqm			710.00	<del>4</del> 97000.00
16	NS	Providing & Fixing 25mm CP fancing rod in Cupboard complete with all necessary fittings	600	mtr.	95.00	· <del>"</del>	95.00	57000.00
17	NS	Providing and laying 300mm dia NP-2 pipe complete with sockets as per satisfaction of the Engineer-in-charge	200	mtr.	1100.00		1100.00	220000.00
18	NS	Providing and fixing chiken wiremesh complete with screwes and labours as per satisfaction of the Engineer-in-charge	150	Sqm	75.00		75.00	11250.00
		Total:						5782950.00
<u> </u>		SUB PART-I: INTERNAL CIVIL WORKS (SCHEDULE ITER	MS)		<u> </u>			99223454.26
		SUB HEAD-II: INTERNAL CIVIL WORKS (NON SCHEDU		45)	<u>.</u> .	<del></del>	<del></del>	5782950.00
<del></del>		Grand Total Civil Works ( Scheduled & Non-Scheduled )			-			105006404.26

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Sr. No.	HSR No.	Description	Qty.	Unit	ALLIED.(E	NGRS.)
				1	(HSR+	
						<del></del>
		SUB PART-III: INTERNAL PH SERVICES (NON-SCHEDULE ITEMS)		L	RATE	AMOUNT
41	NSR	P/F in position C.P. jet connection of EWC complete including C.P. plate for jet & PVC connection for jet point complete in all respects.	27	Each	300.00	8100.0
42	NSR (based on 30.53)	Providing and fixing in position best quality stainless steel sinks with complete fittings as fully described in item No.30.51 above.				
		(a) 800 mm x 450 mm x 200 mm	. 1	Each	5000.C0	5000.0
43	NSR (based on 30.59)	Providing and fixing in position best quality stainless steel sink built in draining board of siz 600 mm x 450 mm complete as described in item no. 30.53 and 30.58 above				0.0
		(a) Sink size 600 x 450 x 200 mm	4	Each	7000.C0	28000.0
44	NSR	Providing, laying, jointing glazed stoneware pipes grade A' with stiff mixture of cement mortar in the proportion of 1:1 (1 cement, 1 fine sand) including testing of joints etc. complete.				0.0
		150mm i/d	380	Mtr.	200.00	76000.0
	(b)	200mm i/d	200	Mtr.	255,C0	51000.0
45	NS	Providing and fixing of G.M. Peat valves heavy patterns with hand wheels ISI marked to GI pipe lines.				0,0
	(a)	25mm i/d	52	Each	350.C0	18200.0
- 1	(b)	40mmi/d	32	Each	≄50.C0	14400.
	(c)	B0mmi/d	6	Each	1600.C0	9600.0
46	NSR	Providing, testing and fixing G.I. pipe 'B' class medium duty including cost of specials such as Tee, elbow, bends etc. and threading inside the building				0.0
		15mm i/d	1600	Mtr.	125.C0	200000.0
		20mm i/d	250	Mtr.	190.CO	47500.0
		25mm i/d	800	Mtr.	210,C0	168000.
		49mm i/d	400	Mtr.	300.00	120000,0
47	NSR	Providing, testing and fixing in position G.I. pipe 'B'class medium duty in ground including cost of specials such as elbow, bend, tees etc. cutting, threading complete in all respect to the satisfication of Engineer-in-charge.				0.0
		25 mm i/d	23	Mtr.	160.CO	3680.0
		40 mm i/d	12	Mtr.	210.CO	2520.0
		80 mm l/d	420	Mtr.	600.00	252000.0
48	NSR	Extra for providing and fixing union coupling to G.I. pipe lines including cost of union complete	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		300100	0.
		15mm i/d	15	each	100.CO	1500.
		20mm i/d	7	each	120.00	_840.
		25mm i/d	20	each	150,C0	3000.
		40mm Vd	30	each	200.00	6000.
		80mm Vd	6	each	500.C0	3000,
49		Providing and stringing S & S centrifugally cast (spun) iron pipes (Class LA) complete in trenches to the approval of Engineer-in-charge.		1	ļ <u></u>	0,0
		80mm i/d	200	Mtr.	580.C0	116000.
50		Supplying and fixing ISI marked sluice valve double flanged with brass spindle complete in all respect to the approval of Engineer-in-charge. 80 mm	1	Each	2000.00	2000.
51		Const. of sluice valve haudi 1m x 1m x 1m with brick work 1:5 cement sand mortar finished with 12.5mm cement plaster 1:4 including RCC 1:2:4 slab with reinforcement, surface box complete in all respect to the approval of Engineer-in-charge.	1	Each	4000.CO	4000.

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	·							444	Resists.		

52		Providing and fixing in position H.D.P.E. water tanks complete with inlet, cutlet, scour and overflow flanges including masonry based underneath as approved by the Engineer-in-charge of different capacity tanks complete in all respect.				0.00
	<u> </u>	Capacity upto 2000 litres	44000	Ltrs.	7.40	325600.00
53		Construction brick masonry manhole in cement mortar 1:4 (1cement : 4 coarse sand) R.C.C. top slab with 1:2:4 mix (1cement:2coarse sand: 4 graded stone aggregate 20mm nominal size), foundation concrete 1:4:8mix (1cement:4coarse sand :8 graded stone aggregate)				
		Inside Size 120x90cm and 90 cm deep including SFRC Cover with frame (Heavy duty) 580mm internal diameter				
<del></del>		With Sewer bricks	15	Each	7500,00	112500.00
54	NSR	Extra for depth for manholes				0.00
		Size 120x90cm		1		0.00
		With Sewer bricks	99	Mtr.	1500.00	13500 00
55	NSR	Making sewer connection with the existing sewer line	1	Each	2000.00	2000 00
56	NSR	Providing M.S. foot rests including fixing in manholes with 20x20x10cm cement concrete blocks 1:3:6 (1cement: 3 coarse sand: 6 graded stone aggregate 20mm nominal size) as per standard design:	<u>-</u>			0.00
		With 20x20mm square bar	70	Each _	200.00	14000.00
57	NSR	Providing and fixing water cooler of approved brand of 80 ftrs storage capacity and 40 ftrs nominal capacity through drop ltrs / hrs with 2 push cocks. The cooler shall have reciprocating compressor. The rate shall include cost of all the necessary fitt	18	Each	30000.00	540000.00
58	NSR	Providing and fixing Water Purifier of Eureba forbes or Equavalent approved make having 3 stage filtration cum-purification system.  The minimum and maximum pressure shall be 0.3 Kg/Sq.Cm. And 2.0 Kg./Sq.Cm. The water outlet capacity should be minimum 1 L	18	each	8000.00	14408C.00
		Sub Head Part-II of Public Health Total:				2291940.00
		Sub Head Part-I of Public Health Total:				2471929.12
		Sub Head Part-II of Public Health Total:				2291940.00
		Grand Total Phublic Health Works (Sub Head Part-I & Sub Head Part-II)	·			4763889.12

