



Dr. V. K. Arora  
Registrar

**PTU** PUNJAB  
TECHNICAL  
UNIVERSITY

ਪੰਜਾਬ ਟੈਕਨੀਕਲ ਯੂਨੀਵਰਸਿਟੀ ਜਲੰਧਰ

Ref. No. *PTU/Reg-16757*

Date : *25.4.07*

- (i) Sh. N. S. Kalsi, IAS, Secretary (Employment Generation), Room No. 419, 4<sup>th</sup> Floor, Mini Secretariat, Sector-9, Chandigarh.
- (ii) Dr. R. S. Khandpur, DG, Pushpa Gujral Science City, SCO 60-61, 3<sup>rd</sup> Floor, Sector-34, Chandigarh.
- (iii) Sh. Chandra Mohan, #202, Sector 36-A, Chandigarh.
- (iv) Sh. S. L. Kaushal, Advisor (Architecture), 2865, Sector 42-C, Chandigarh
- (v) ✓ Sh. A. N. Chaudhry, Chief Engineer (Construction), PTU, Jalandhar.

**SUBJECT :** Construction of New Campus of Punjab Technical University – 14<sup>th</sup> meeting of the Standing Building Construction Committee.

Dear Sir

14<sup>th</sup> Meeting of the Standing Building Construction Committee shall be held under the Chairmanship of Sh. P. Ram, IAS, Principal Secretary Technical Education, Punjab at 1100 hrs. on **03.05.2007** in his office in Mini Secretariat, Punjab, Sector-9, Chandigarh. Agenda and Agenda note for the meeting is enclosed.

You are requested to kindly make it convenient to attend the meeting.

Thanking you

Yours sincerely

*[Signature]*  
REGISTRAR

CC :

- (i) PS to Principal Secretary, Technical Education, Govt. of Punjab for the kind information of the Principal Secretary please.
- (ii) Sh. Rajiv Aggarwal of M/s Archigroup Architects, 5/304, Sikka Complex, Preet Vihar Community Centre, Vikas Marg, Delhi.
- (iii) Sh. N. S. Bhatti, Advisor Electrical, H. No. 3040, Sector 19-D, Chandigarh.
- (iv) Sh. M. S. Rao, General Manager, M/s IVRCL I&P Ltd., P2, 1<sup>st</sup> Floor, Green Park Extension, New Delhi-110 016.

They are requested to attend the meeting.

**PUNJAB TECHNICAL UNIVERSITY, JALANDHAR**

**Subject:-** Agenda for the 14<sup>th</sup> meeting of the Standing Building Construction Committee.

- Item 14.1** To review the finishes
- Item 14.2** To approve the concept of Amphi -theatre, Student and VC entry pavement and open Air Theatre (Canteen)
- Item 14.3** Approval of the estimate and tender document of Roads, Parking and Footpaths around Administration Building costing Rs.1.18 crores
- Item 14.4** Approval of revised design of the Compound Wall
- Item 14.5** To review the status of construction
- Item 14.6** Any other points with the permission of the Chair

**PUNJAB TECHNICAL UNIVESITY, JALANDHAR**

**Subject : Agenda note for 14<sup>th</sup> meeting of the Standing Building Construction Committee.**

**Agenda Item 14.1 : To review the Finishes**

**14.1.1: Exterior Finish**

Cladding of 5" x 22" Red Stone Tiles fixed with Gun Metal Cramps as per CPWD specifications stands provided in the BOQ. Sub Committee for Architecture approved this finish in order to provide maintenance free exterior.

M/s IVRCL suggested in Feb, 2007 that since Gun Metal Cramps being not readily available be replaced with Stain Steel Cramps which are widely used now. Architects recommended the use of Stainless Steel cramps. On enquiry by the University it was found that Gun Metal Cramps are available on order but stainless steel cramps are being preferred due to economy (marginal) and theft of Gun Metal Cramps at the very stage of construction due to scrap value of the metal, thus endangering safety of the cladding. Cost of Cramps is Rs. 63.83 lacs approximately. Since it would have become N.S. Item, it was decided to use Gun Metal Cramps. M/s IVRCL then suggested that size of tiles be changed to 11" x 22" to reduce the number of tiles, thus reducing the cost of labour, time of construction and reducing the number of cramps, fasteners and copper pins. As worked out by them (Annexure 'A') there shall be a saving of Rs. 54.67 lacs over total cost of Rs. 198.27 lacs. But the rate of the item of Red Stone Tiles costing Rs. 90.02 lacs becomes N.S. item.

Committee may decide if Red Stone Tiles cladding be provided or some other cheaper material be used and if Red Stone Tiles are to be provided, what specifications be adopted.

**14.1.2: False Ceiling**

False Ceiling has been provided in the areas to be air conditioned. Pattern of Arm Strong with a border of Gypboard has been proposed by the Architects. Difference in cost of Arm Strong Ceiling and Gypboard is Rs. 194/- per sq m. If Arm Strong Ceiling is replaced with Gypboard Ceiling, there shall be a saving of Rs 9.21 lacs.



**14.1.3: Gypboard Partitions**

Gyp Board Partitions, 97 mm thick with area of 862 Sq mt costing Rs 7.32 lacs have been provided in the BOQ. This thickness is inadequate for the height of the room as per recommendation of the Company, which has been brought to the notice of the Architects. If thickness is increased, the item become N.S. Secondly it is thought that Gyp Board may not be enough strong material, and some alternate material be used.

**14.1.4: Terrace specifications of Front Block**

Sub Committee is of the view that Terrace of Front Block should look nice from the Rear Block and may be used for meetings etc. Architect has proposed Kotah Stone with combination of Antiskid tiles over Brick Coba.

During structural design of the Building , slopes in Beams and slabs have not been allowed due to seismic considerations with the result, sufficient slope for drainage is not available. Secondly Kotah Stone Slabs are likely to prop up due to expansion as the area is large and joints may open up. On the terrace of Porches, anti skid tiles have been proposed which are not proper for disposal of rain water as in the gooves fungus may grow up. The Architects have been requested to suggest alternative specifications

**14.1.5: Specifications of Floor of the Ramp.**

On the Ramp Antiskid tiles have been proposed. Since hand carts loaded with Answer Sheets are likely to ply, harder material needs to be provided.

**Agenda Item 14.2 : To approve the concept of Amphi -Theatre, Student and V.C entry pavement and Open Air Theatre (Canteen)**

**14.2.1 : Amphitheatre**

An Amphitheatre at the Front using Dholpur, Kotah, Granite and yellow Jaisalmer Stone have been proposed by the Architects. Concept may be considered and approved by the Committee.

**14.2.2 : Student Entry Pavement**

In the student, Entry Pavement, Kotah Stone with strips of Granite have been proposed by the Architects. Committee may consider use of Paver Blocks at Cheaper cost instead of Kotah Stone with Granite strips.

**14.2.3 : V.C Entry**

On the V.C. entry side Kota Stone with Granite Strips has been used beyond the metalled road. Access has been provided with the same material to Seminar Hall. Here also use of Paver Blocks may be considered.

**Agenda Item 14.3 : Approval of the Estimate and Tender Documents of Roads, Parking and Footpaths around Administration Building costing Rs. 1.19 crores.**

During discussion of this issue with Architects at final stage in February-2007, it transpired that their consultant was preparing the estimate on DSR which appeared to be un-workable as the estimate was required to be prepared on the basis of quarry rates and location of Hot Mix Plants around site of work in the state of Punjab. Similarly rates of Paver Blocks available in Punjab around the site of work, need to be provided. Tender documents as per Pb., PWD B & R procedure were required to be prepared. Consultant of the Architects expressed his inability to prepare documents as mentioned above. Since the work was getting delayed, detailed estimate and the documents have been prepared at University level and break up of cost is as under:-

i)	Cost of Road work including parking with three layers of stone metal (10" thickness) upto first coat of surfacing	Rs. 41.01 Lacs
ii)	Cost of footpaths with Paver Blocks	Rs. 29.71 Lacs
iii)	Cost of 3" thick Bitumen Om Macadam finished with pre-mix carpet using Paver and Hot Mix Plant	Rs. 44.38 Lacs
Total		Rs.115.10 Lacs

The work is proposed to be split in two groups for tendering as the work of Hot Mix Plant shall be carried out by an Agency who has set up the plant. Cost shall be as under:

Group I [ (i) +(ii)]	-	Rs. 70.72 Lacs
Group II (iii)	-	Rs. 44.38 Lacs



The standing building construction committee is requested to approve the revised design so that estimate and tender documents are finalized and tenders invited.

**Agenda Item 14.5 To review the status of construction.**

**Front block-** structurally completed. 90% of Brick Work has been completed. Ducting work by the AC Contractor is in progress. Kota Stone Flooring Sanitary and wiring work is in progress.

**For Rear Block –** Construction is in progress in the 5<sup>th</sup> floor. Flooring, brick work and plastering is in progress in basement ground and first floor.

**Underground Water Tank –** Work has been started.

**Water Supply and Drainage Works-** The contractors are mobilized and the work is being taken in hand.

**External Electrical Works –** Shop drawings have been approved and the contractors have placed orders for the supplies of Generators, Cables, transformers and other materials which are expected to reach the site in the last week of April- 2007.

**Air Conditioning Works –** Shop drawings have been approved. Ducting work is in progress for front and rear block. The contractors has placed the order for the Chillers with M/s Climaveneta Italy and the chillers are expected to reach site by the 3<sup>rd</sup> week of July-2007 for which L.C. amounting to 1,85,000/-Euro is being opened.

**STP-** Tenders are being received on 10.05.07

**Elevators –** Tenders are being received on 02.05.07.

**Electric Connection from PSEB –** Clarification regarding load have been supplied to PSEB and requisite fee deposited. On receipt of approval from the H.O., estimate shall be supplied by PSEB, Kapurthala for deposit of funds and taking up the work.

ANNEXURE 'A'

COST COMPARISON FOR EXTERNAL RED STONE CLADDING											
S.NO	DESCRIPTION	UNIT	AS PER BOQ			SIZE 5.5" X 22"			SIZE 11" X 22"		
			QTY.	RATE	AMOUNT	QTY.	RATE	AMOUNT	QTY.	RATE	AMOUNT
1	P/F RED STONE	SQM.	11172	813.83	9,092,108.76	11172	813.83	9,092,108.76	11172	805.83	9,002,732.76
2	GUN METAL CRAMP	Each	44688	44.62	1,993,978.56	143060	44.62	6,363,337.20	71530	44.47	3,180,939.10
3	DASH FASTNER	Each				42918	24.00	1,030,032.00	21459	24.00	515,016.00
4	COPPER PIN	Each				143060	23.22	3,321,853.20	71530	23.22	1,660,926.60
					11,086,087			19,827,331			14,359,614

SAVING if we use 11"X22" red Stone in Place of 5.5"X22" = Rs 54,67,717/- on the Whole project  
(Rs 19,827,331- Rs 14,359,614)

**Deduction of rate in Red Stone Cladding work**

For sawing of stone	5
For Less consumption of white cement mortar in grove	1
Less for making groove	2
	8
<b>Deduction of rate in P/F Cramp</b>	
Making slot in stone	0.15