



Er. H.P. Singh  
Executive Engineer

ਪੰਜਾਬ ਟੈਕਨੀਕਲ ਯੂਨੀਵਰਸਿਟੀ ਜਲੰਧਰ

**PTU** PUNJAB  
TECHNICAL  
UNIVERSITY

Estd. Under Punjab Technical University Act, 1996  
(Punjab Act No. 1 of 1997)

Ref. No.

PTU/TE/1887

Dated

14.12.11

**The Director,**  
Department of Technical Education and  
Industrial Training, Punjab,  
Plot No. 1, Sector-36A, Chandigarh.

**Sh. S.L. Kaushal,**  
Chief Architect, Punjab (Retd),  
2865, Sector 42-C,  
Chandigarh.

**Sh. Amrit Sagar Mittal**  
CMD,  
Sonalika Tractors Ltd, Hoshiarpur.

**Ms. Kamna Raj Agrawal,**  
L-240, Model Town,  
Jalandhar.

**Dr. Nachhattar Singh,**  
Dean (P&D),  
Punjab Technical University, Jalandhar.

**Dr. H. S. Bains,**  
Registrar,  
Punjab Technical University, Jalandhar.

**Dr. Buta Singh (Special Invitee),**  
Dean (Academics),  
Punjab Technical University, Jalandhar.

**Dr. A. P. Singh (Special Invitee),**  
Dean (Student Affairs),  
Punjab Technical University, Jalandhar.

**Sub : Construction of new campuses of Punjab Technical University - 30<sup>th</sup> meeting of the Standing Building Construction Committee.**

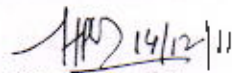
Dear Sir/Madam,

30<sup>th</sup> meeting of the Standing Building Construction Committee shall be held under the Chairmanship of Dr. R. S. Khandpur, Director General, PGSC at 1500 hours on 19.12.2011 in his office at SCO 60-61, Sector 34-A, Chandigarh. Agenda and Agenda note for the meeting are enclosed.

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

Thanking you

Yours Sincerely,

  
(H. P. Singh)

Executive Engineer

- Copy to :
- Dr. R. S. Khandpur, DG, PGSC, SCO 60-61, Sector 34-A, Chandigarh.
  - Sh. Rajiv Aggarwal, M/s Archigroup Architects, A-14, Sector-15, Noida -201301.

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Punjab Technical University Jalandhar

Kapurthala Campus : Jalandhar-Kapurthala Highway, Post Bag No. 01, Kapurthala.  
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# PUNJAB TECHNICAL UNIVERSITY, JALANDHAR

1/12

**Sub : Agenda for the 30<sup>th</sup> meeting of the Standing Building Construction Committee.**

- Item No. 30.1 : To confirm the Minutes of 29th meeting of Standing Building Construction Committee held on 28.10.2011.
- Item No. 30.2 : Action taken on various items discussed during previous meetings of Standing Building Construction Committee.
- Item No. 30.3 : To discuss and approve the requirements (Design briefs) of Mohali campus, PIT Mansa and PITTTR Jalandhar.
- Item No. 30.4 : To review the tendering process of engagement of executing agency for PIT Kapurthala.
- Item No. 30.5 : To discuss and approve the plans of buildings taken over from CAPARO society and finishing schedule of these buildings.
- Item No. 30.6 : To discuss and approve rough cost estimates based upon plinth area rates of CPWD of buildings taken over from CAPARO society.
- Item No. 30.7 : To discuss and approve the design scheme and estimate of boundary wall of PIT Mansa.
- Item No. 30.8 : Construction of camp/site office at PIT Mansa and PIT Nandgarh.
- Item No. 30.9 : Any other point with the permission of the Chair.



# PUNJAB TECHNICAL UNIVERSITY, JALANDHAR

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Agenda Note for the 30<sup>th</sup> meeting of the Standing Building Construction Committee.

**Item No. 30.1 :** To confirm the Minutes of 29<sup>th</sup> meeting of Standing Building Construction Committee held on 28.10.2011.

The minutes of 29<sup>th</sup> meeting of Standing Building Construction Committee held on 28.10.2011 were circulated on 31.10.2011. No observation has been received from any of the members. The minutes circulated are to be confirmed.

**Item No. 30.2 :** Action taken on various items discussed during previous meetings of Standing Building Construction Committee.

Action taken on various items discussed during previous meeting of Standing Building Construction Committee is as under:

- The detailed designing for structure, HVAC, Electrical, Plumbing and Fire Fighting systems of two towers, one library and one seminar hall of proposed PIT at main campus, Kapurthala is in progress.
- Applications for one post of Assistant Executive Engineer and two posts of Assistant Engineer for Construction cell have been received and further action is being taken.
- It was also decided that a survey may be conducted for all categories of the employees to ascertain the requirements of staff quarters proposed to be constructed at main campus of the University. This work will only be planned if there is a sufficient requirement. Necessary action has been taken in this regard and survey is in progress.
- To take up the detailed planning and preparation of design/drawings by the Architect, it was decided that detailed requirements (design briefs) may be prepared by the University in respect of PIT Mansa, Mohali Campus, PITTTTR Jalandhar, PIT Nandgarh. For preparation of the same, committees were constituted. Report by the committees have been submitted for PIT Mansa, Mohali Campus, PITTTTR Jalandhar.
- For preparing planning of PITTTTR Jalandhar, it was decided that a core team from the University will visit similar institutes established by various organizations to study the infrastructure, facilities etc. provided at these institutes so that 'a state of the art' institute can be established by PTU. A team consisting of Dean P&D, Dean Academics, XEN from PTU and Sh. Rajiv Agrawal Architect from Archi Group have visited Wipro's training centre at Bangalore and Infosys's Global Training centre at Mysore.



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**Item No. 30.3 : To discuss and approve the requirements (Design briefs) of Mohali campus, PIT Mansa and PITTTR Jalandhar.**

Committees constituted for preparation of requirements (Design briefs) for Mohali Campus, PIT Mansa, PITTTR Jalandhar have submitted their reports. The requirements (Design briefs) submitted are as under:

**A. Mohali Campus :**

**1. Students Facilitation Centre:**

This will house the following facilities:

- a. Assistant Registrar – 1 No.
- b. 4 counters + 1 counter for reception,
- c. 5 touch screen computer in the hall,
- d. Waiting chairs for 50 students,
- e. Toilets (M & F), drinking water and coffee vending machine.

**2. Incubation Centre:**

This will have the following facilities:

- a. Director - 1 No. + PA + 1 clerk
- b. Dean – 1 No.
- c. Asstt. registrar – 1 No.
- d. Clerks – 2 No.
- e. Incubation centre for 30 students. Each to have a lockable cabin . These cabins to be included in one or more halls with one or two discussion spaces with attached toilets and pantries.
- f. Class rooms for 30
- g. Discussion rooms for 15-20
- h. Discussion room for 10-15
- i. Multipurpose hall for 200 including a lobby which can be used for exhibitions etc.
- j. Supporting toilets and pantries.

**3. Foreign Language Cell:**

This will have the following facilities:

- a. Class rooms 6 Nos. for 20 students each
- b. Total faculty rooms 12 Nos.(including the in-charge who will be an assistant professor)
- c. Related toilets and other facilities.



**4. Training Institute:**

This will have facilities for the following:

**a. Administration and Academic functions:**

- i. Class rooms 4 @ 30 students – 2 classrooms with tiers and 2 classrooms with flat floor;
- ii. 2 small rooms attached to these for group works
- iii. Lobby areas ( maybe be 2 spaces) for tea/coffee
- iv. Computer lab @ 20-25 workstations
- v. Central e-library with computer terminals
- vi. Seminar hall for 60
- vii. Director with PA
- viii. Faculty rooms - 10
- ix. Visting faculty rooms – 2
- x. Administration and accounts

**b. Residential / hostel functions:**

- i. Single room accommodation with attached toilets – 60 Nos.
- ii. Separate rooms for ladies and gents
- iii. 4-5 executive rooms
- iv. Reception with manager's room
- v. 2 VIP suite on ground floor
- vi. 1 gym and yoga room
- vii. Small area for barber and dhobi
- viii. Common room for carom, table tennis, TV, music etc.
- ix. Dining hall to be partition-able
- x. Dormitories for kitchen staff (2-3 no staff) and drivers (6 nos.). These may be provided on terrace.
- xi. 2 room house for warden of hostel
- xii. Outdoor games like badminton etc.
- xiii. Basement to be constructed for parking and services

After making provisions for all the above, the remaining permissible areas will be used for residential/hostel functions.

Following will also be considered while planning of the above :

- a. The library to be easily accessible from all sides,
- a. Plan a walk way around the site
- b. Should consider solar water heating for the hostels.

**B. PITTTR Jalandhar :**

- i) Class rooms of capacity 40 persons - 08 Nos.
- ii) Convention Hall of capacity 300 persons - 01 No.
- iii) Meeting Hall of capacity 50 persons - 01 No.

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- iv) Conference Hall of capacity 30 persons - 01 No.
- v) Board Room of capacity 30 persons - 01 No.
- vi) Director Office and supporting staff - 01 No.
- vii) Faculty Rooms including visiting faculty - 12 Nos.
- viii) Administrative Block for sitting of two Dy. Registrar and supporting staff.
- ix) Hostels with Mess, Indoor Gymnasium, Recreation room, for stay of 300 persons, 250 rooms of single occupancy & 25 rooms of double occupancy may be planned.
- x) Reception
- xi) Library (reference only) for the facilitation of the above strength and central e-library with computer terminals.
- xii) Computer Lab with 20-25 workstations.
- xiii) Parking in the basement Two-Tier parking may be explored.
- xiv) Service Area may be planned in the basement to the extent possible.
- xv) Mess and kitchen for hostels may be kept at the top floor/terrace. Terrace garden may also be planned.

**C. PIT Mansa :**

It has been approved that admission for 270 seats will be made in 10+1 at this Institute as per the following details, every year :-

- Non Medical - 90
- Medical - 60
- Vocational - 60
- Commerce - 60

The total planning of this Institute will be done for all courses for 2620 students.

**Priority 1 :**

- a) Boundary Wall
- b) Junior Science block for housing 10+1 & 10+2 students (540 nos.)
- c) Administrative Block having sitting arrangements for the following officers :-
  - i) Director, one committee room and supporting staff.
  - ii) Dean/ Academics with supporting staff.
  - iii) Dean/ Administration with supporting staff including Finance, Purchase etc.
  - iv) Dean/ R&D and consultancy with supporting staff.
  - v) Dean/Student Welfare

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**Priority II**

Main campus of the Institute with all departments, library cum canteen and common facilities.

**Priority III**

Hostels, faculty accommodations and convention centre.

Standing Building committee may discuss and approve these requirements.

**Item No. 30.4 : To review the tendering process of engagement of executing agency for PIT Kapurthala.**

In 27<sup>th</sup> meeting of the Standing Building Construction Committee held on 13.07.2011, it was decided (under Item No. 27.5) that Open tenders in two packet systems will be invited for engagement of contractors. Since, PIT Kapurthala works are to be executed on top priority and assembly elections are also expected early next year, invitation of pre-qualifications from the intending agencies may be considered. This will save lot of time as appointment of PMC consultant and technical evaluation of the contractors can be taken up simultaneously.

**Item No. 30.5 : To discuss and approve the plans of buildings taken over from CAPARO society and finishing schedule of these buildings.**

In the building taken over from CAPARO society, part academic block with workshop, administrative block, canteen and two hostels have been partially constructed and further works have been abandoned. Architect will be presenting the building plans and finishing schedules of these buildings.

Finishing schedule proposed by the Architect is as under:

**1. COLLEGE BUILDINGS**

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• GRANITE TILES:	All areas except toilets
• KOTA STONE:	Workshops
• VITRIFIED TILES (NON SKID):	Dado in Toilets
• PLASTIC EMULSION WITH PUTTY	All Areas except in Ceilings
• OBD WITH PUTTY	Ceilings in all areas.

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**2. ADMINISTRATION AND LIBRARY**

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• GRANITE TILES:	All areas except toilets
• VITRIFIED TILES (NON SKID):	Toilets
• GLAZED CERAMIC TILES	Dado in Toilets
• PLASTIC EMULSION WITH PUTTY:	All areas except Ceiling
• OBD WITH PUTTY	Ceilings in all areas.

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**3. HOSTELS**

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• VITRIFIED TILES (NON SKID):	Toilets
• GLAZED CERAMIC TILES	Dado in Toilets
• KOTA STONE:	All areas except toilets.
• OBD WITH PUTTY:	All internal areas.
• BLACK GRANITE COUNTERTOP:	Kitchen

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**4. CANTEEN**

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• VITRIFIED TILES (NON SKID):	Toilets
• GLAZED CERAMIC TILES	Dado in Toilets
• KOTA STONE:	All areas except toilets.
• OBD WITH PUTTY:	All internal areas
• BLACK GRANITE COUNTERTOP:	Kitchen

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**5. EXTERNAL FINISH**

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• Washed stone grit plaster	Hostel buildings (as per elevation)
• Weather Exterior paint	All areas except Hostels building

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**6. DOORS AND WINDOWS**

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• WINDOWS	Anodized aluminum with reflective single glass
• STRUCTURAL GLAZING	Anodized aluminum with reflective glass (single/double as required)
• DOORS	Aluminum Frames with laminated board shutters/ flush shutters

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Committee may discuss and approve these plans and finishing schedule.

**Item No. 30.6 : To discuss and approve rough cost estimates based upon plinth area rates of CPWD of buildings taken over from CAPARO society.**

In the building taken over from CAPARO society, part academic block with workshop, administrative block, canteen and two hostels have been partially constructed (foundations have been completed for these buildings) and further works have been abandoned. Architect has prepared rough cost estimate for completion of balance works of these buildings. The rough cost estimate is Rs. 2022.97 Lacs and the covered area is 9258 Sqm. Cost per Sft. works out to be Rs. 2031/- (Details placed below).

Committee may discuss and approve the rough cost estimate.



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**Item No. 30.7 : To discuss and approve the design scheme and estimate of boundary wall of PIT Mansa.**

Recently, an attempt has been made to encroach the land handed over to PTU at Mansa for establishment of Punjab Institute of Technology. The same has been removed with the help of local administration and presently, the total land is in the custody of PTU. To avoid such situations in future, it has been decided by PTU that boundary wall for the total site is constructed on top priority.

By looking at the quality of bricks and water available at Mansa, the Architect has proposed that Pre-cast RCC wall may be provided at this site. The Architect has provided the following options for the same:

S. No.	Proposed scheme	Estimated cost (In lacs of Rs)
1	Convention system	Rs. 295.84
2	Pre-fabricated panels for side Walls and RCC in front wall With grills	Rs. 281.53
3	Pre-fabricated panels for side Walls and hollow concrete blocks in place of bricks in front wall with grills	Rs. 278.12
4	Bricks replaced by hollow concrete blocks	Rs. 305.39
5	Bricks replaced by solid concrete blocks	Rs. 319.57

The details are placed below.

Committee is requested to discuss and approve the scheme and estimate for this work.

**Item No. 30.8 : Construction of camp/site office at PIT Mansa and PIT Nandgarh.**

It has been planned that construction of boundary walls of PIT Mansa and PIT Nandgarh are to taken up on immediate basis. So, it has been decided that PTU should construct on camp/site office at both the locations having covered area of about 1000 Sqft. An amount of Rs. 14.50 lacs including external development for each location has been sanctioned for this work.

This is being brought to the kind notice of the Standing Building Construction Committee.

**Item No. 30.9 : Any other point with the permission of the Chair.**



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PUNJAB INSTITUTE  
OF TECHNOLOGY  
**PRELIMINARY COST ESTIMATE**

**SUMMARY- PRELIMINARY ESTIMATE**

S. No.	Building / Component	Plinth Area (Sqm)	Cost in Rs	Reference
1	2	3	4	5
1	College Building	3,794.50	10,82,04,641.68	Ref. Annexure 1
2	Hostel	4,806.90	7,69,23,403.70	Ref. Annexure 2
3	Adminstration and Library	588.53	1,52,73,412.10	Ref. Annexure 3
4	Canteen	68.11	18,95,326.76	Ref. Annexure 4
5	<b>Grand total</b>	9,258.04	<b>20,22,96,784</b>	

*(Signature)*

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PUNJAB  
INSTITUTE OF TECHNOLOGY  
PRELIMINARY COST ESTIMATE

**College Building**

**Annexure 1**

Type of Building -	College	
Total Plinth Area -	3,794.50	sq.m
Plinth Area On G. Floor -	1,673.90	sq.m
Total covered area-	3,363.60	sq.m
No. of storey-	G + 2	
Floor height(G.F.)-	3.40	m
Floor height-(F.F.)&(S.F.)	3.60	m

Refer Drg No. PTU- III/APIT/PRE/AC/CB

Sr.No.	Description	Unit	Qty	Nos	Rate	Amt	Explanation
1	2	3	4	5	6	7 = (4*5*6)	8
<b>1</b>	<b>R.C.C. FRAMED STRUCTURE</b>						
1.1	RCC framed structure upto six storeys						
1.1.1	Floor height 3.35m						
a.	Floors	sqm	3,794.50	1.0	13,200.00	5,00,87,400.00	
1.2	Extra for						
1.2.1	Every 0.3m additional height of floor above normal floor height of 3.35m.						
1.2.1.1	Ground Floor	sqm	1,673.90	0.17	150.00	41,847.50	
1.2.1.2	First & Second Floor	sqm	2,120.60	0.83	150.00	2,65,075.00	
1.2.3	Larger Module over 35 sqm	sqm	3,794.50	1.0	990.00	37,56,555.00	
1.2.4	Fire fighting						
	With wet riser system	sqm	3,794.50	1.0	300.00	11,38,350.00	
1.2.5	Fire Alarm						
	Automatic fire alarm system	sqm	1,673.90	1.0	300.00	5,02,170.00	
	<b>Total A (1.1.1.a + 1.2.1+1.2.2) =</b>					<b>5,03,94,322.50</b>	
	<b>Total B (1.2.3 to 1.2.5) =</b>					<b>63,97,076.00</b>	
<b>2</b>	<b>SERVICES</b>						
2.1	Internal water supply & sanitary installations	% of A			@ 4%	20,15,772.90	
2.2	External service connections	% of A			@ 5%	25,19,716.13	
2.3	Internal Electrical installations	% of A			@ 12.5%	62,99,290.31	
2.4	Internal Electrical installations for laboratories	% of A			@ 15%	75,59,148.38	
2.5	Extra for						
2.5.1	Power wiring & plugs	% of A			@ 4%	20,15,772.90	
2.5.2	Lightning conductors						
a.	4 storeyed buildings	% of A			@ 0.33%	1,66,301.26	
2.5.3	Telephone conduits	% of A			@ 0.5%	2,51,971.61	
2.5.4	Data network conduits	% of A			@ 0.5%	2,51,971.61	
	<b>Total C =</b>	% of A			@ 42.33%	<b>2,10,79,945.10</b>	
	<b>Sub Total D = A+B+C</b>					<b>7,68,71,342.60</b>	
	<b>Add Cost Index (E = )</b>				@ 49%	<b>3,76,66,957.87</b>	
	<b>TOTAL (F=D+E)</b>					<b>11,45,38,300.48</b>	
2.6	Deductions for existing structure(G=)	sqm	3,363.6	1.0	1883.00*	63,33,658.80	
	<b>Grand Total (H=F-G)</b>					<b>10,82,04,641.68</b>	

\* As advised by the structural engineer

*Handwritten signature*

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**Hostels**

**Annexure 2**

Type of Building - Hostel  
 Total Plinth Area - 2,403.45 sq.m  
 Plinth Area On G. Floor - 781.99 sq.m  
 Total covered area- 2,326.74 sq.m

Refer Drg No. PTU- III/APIT/PRE/AC/HB

No. of storey- G + 2  
 Floor height 3.20 m

Sr.No.	Description	Unit	Qty	Nos	Rate	Amt	Explanation
1	2	3	4	5	6	7 = (4*5*6)	8
<b>1</b>	<b>R.C.C. FRAMED STRUCTURE</b>						
1.1	RCC framed structure upto six storeys						
1.1.1	Floor height 2.90 mt.						
a.	Floors	sqm	2,403.45	1.0	9,100.00	2,18,71,395.00	
1.2	Extra for						
1.2.1	Every 0.3m additional height of floor above normal floor height of 2.90m.	sqm	781.99	1.00	150.00	1,17,298.50	
1.2.2	Fire fighting						
	With wet riser system	sqm	2,403.45	1.0	300.00	7,21,035.00	
1.2.3	Fire Alarm						
	Automatic fire alarm system	sqm	781.99	1.0	300.00	2,34,597.00	
	<b>Total A (1.1.1.a + 1.2.1) =</b>					<b>2,19,88,693.50</b>	
	<b>Total B (1.2.2 to 1.2.3) =</b>					<b>9,65,632.00</b>	
<b>2</b>	<b>SERVICES</b>						
2.1	Internal water supply & sanitary installations	% of A			@10%	21,98,869.35	
2.2	External service connections	% of A			@ 5%	10,90,434.68	
2.3	Internal Electrical installations	% of A			@ 12.5%	27,48,586.69	
2.5	Extra for						
2.5.2	Lightning conductors						
a.	4 storeyed buildings	% of A			@ 0.33%	72,562.69	
2.5.4	Data network conduits	% of A			@ 0.5%	1,09,943.47	
	<b>Total C =</b>	% of A			@ 28.33%	<b>62,29,398.87</b>	
	<b>Sub Total D = A+B+C</b>					<b>2,91,73,722.37</b>	
	<b>Add Cost Index (E = )</b>				@ 49%	<b>1,42,95,123.98</b>	
	<b>Total (D+E) =</b>					<b>4,34,68,846.33</b>	
2.6	<b>Total Cost For 2 Hostel Buildings(F=)</b>					<b>8,69,37,692.66</b>	
2.7	<b>Deductions of existing structures</b>						
2.7.1	Hostel-1 (with existing first floor slab)	sqm	2,326.74	1.0	2421.00*	5633037.54	
2.7.2	Hostel-2 (with existing upto plinth level)	sqm	2,326.74	1.0	1883.00*	4381251.42	
	<b>Total deductions(G=)</b>					<b>10014288.96</b>	
	<b>Grand Total (H=F-G)</b>					<b>7,69,23,403.70</b>	

\* As advised by the structural engineer

*Handwritten signature*