

QUEEN MARY'S TECHNICAL INSTITUTE (QMTI), KIRKEE

**NAME OF WORK :-RENNOVATION & MODIFICATION OF DIESEL
MECHANIC WORKSHOP & CLASSROOM AT QUEEN MARY'S
TECHNICAL INSTITUTE (QMTI), KIRKEE.**

**Tender prepared by – P. B. Marathe & Associates (Licensed Engineers &
Architects) PCMC License No. – 0795/2026**

P. B. Marathe & Associates

**TENDER DOCUMENTS
(Contains both Technical & Financial Bid)**

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NOTICE INVITING TENDER

NAME OF WORK: - RENOVATION & MODIFICATION OF DIESEL MECHANIC WORKSHOP & CLASSROOM AT QUEEN MARY'S TECHNICAL INSTITUTE (QMTI), KIRKEE.

1. Tender is invited for construction work at Queen Mary's Technical Institute, Kirkee, Pune.
2. The work is estimated to cost of **Rs.45,00,000/-** (Forty Five Lakh only) / (including 18% GST and Architectural fees 5%). This estimate is however not a guarantee and is merely given as a rough guide and if the work cost more or less, a tenderer will have no claim that account. The work is to be completed on or before 01 Feb 2027 from the date of handing over of site. Which may be on or about Two weeks after the date of Acceptance of tender.
3. The tenderer shall advise to visit site by making prior appointment with the Chief Executive Officer, QMTI in sufficient time.
4. The last date for submission of tender is **13-10-2026 upto 1700 hrs.**
5. Tender Documents will also be issued from QMTI office, during the office hours, on payment of Rs. 2,000/- (Non-refundable) in Cash or in the shape of Demand Draft/Pay Order drawn in favour of QMTI payable at Kirkee.
6. The tender shall be accompanied by earnest money of Rs. 45,000/- (Rupees Forty Five Thousand Only) in the shape of **Demand Draft** drawn in favour of QMTI payable at Kirkee and issued by any Scheduled Bank.
7. The Earnest Money deposited by the successful tenderer in the specified form shall become part of security deposit. The Earnest Money of un-successful tenderers will be refunded within 15 days of opening of Tenders.
8. The description of the work is as follows:
'RENOVATION & MODIFICATION OF DIESEL MECHANIC WORKSHOP & CLASSROOM & CLASSROOM AT QUEEN MARY'S TECHNICAL INSTITUTE (QMTI), KIRKEE'.

The copies of drawings and documents pertaining to the works will be open for inspection by the tenderers at the office of above mentioned officer.

Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, and

in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed

to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and local conditions and other factors having a bearing on the execution of the work.

- 9. The Contractors are required to submit two separate Bids i.e. Technical and Financial, as per prescribed Performa. The two bids should be submitted in two separately sealed envelopes super scribed "Technical Bid" and "Financial Bid". Both sealed envelopes should be put in a third sealed envelope super scribed "TENDER FOR RENNOVATION & MODIFICATION OF DIESEL MECHANIC WORKSHOP & CLASSROOM AT QUEEN MARY'S TECHNICAL INSTITUTE (QMTI), KIRKEE ".**
- 10. The Financial bids of only those Contractors who qualify in technical bid evaluation by the concerned committee shall be opened. The financial bids of all those Contractors who have failed to qualify in the technical bid will not be opened under any circumstances.**
11. For Eligibility criteria for the Tenderer refer Schedule 'A'.
12. Tenders will be received by the Chief Executive Officer, QMTI, Kirkee Pune.
13. The tender for the works shall remain open for acceptance for a period of 12 days from the date of opening of Financial Bid. If any tenderer withdraws his tender before the said period or issue of letter of acceptance (Work Order), whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to QMTI, then QMTI shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further, the tenderer shall not be allowed to participate in the re-tendering process of the work.
14. The accepting officer does not bind himself to accept the lowest or any tender or to give any reason for not doing so.
15. This notice of tender shall form Part of the contract. The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work sign the contract, together with any correspondence leading thereto, consisting of the following :

- Press Notice;
- Notice Inviting Tender;
- Brief Scope of work;
- Information and Instructions to Bidders;
- Information regarding eligibility;
 - Letter of Transmittal;
 - Form 'A': Financial Information;
 - Form 'B' : Form of Banker's Certificate;
 - Form 'C': Details of All Works of Similar Class Completed During The Last Four Years ;
 - Form 'D': Project Under Execution or Awarded;
- Tender, Work Order & Agreement;
- General Rules & Directions;
- Clauses of Contract;
- Special Conditions;
- Additional Conditions;
- Schedules (A);
- Specifications;
- Addenda, if any; &
- Proceedings of Pre-bid Conference, if any.
- Tender Drawings, if any.

Refer Appendix 'A' To Notice Inviting Tender

SIGNATURE OF CONTRACTOR

Chief Executive Officer, QMTI.

APPENDIX 'A' TO NOTICE OF TENDER

NAME OF WORK: - RENNOVATION & MODIFICATION OF DIESEL MECHANIC WORKSHOP & CLASSROOM AT QUEEN MARY'S TECHNICAL INSTITUTE (QMTI), KIRKEE.

1. Estimated Cost :- Rs. 45,00,000 (Rupees Forty Five lakh only)
Including all taxes, and duties and 5% Architectural Fees).
2. Period of Completion :- 01 February 2027
3. Cost of blank tender document : - Rs.2000/-
4. **Date of publishing tender notice in Newspaper :- 10 September 2026**
5. **Last Date of Issue of tender :- 25 Sep 2026 1700h**
6. Earnest Money DD in Favour of : - Rs.45,000
QUEEN MARY'S TECHNICAL INSTITUTE
7. **Pre-Bid Meeting :- 30 Sep 2026 at 1100h at QMTI Khadki**
8. **Last Date of receipt of tenders:- 13 Oct 2026 1700h**
9. **Opening of tender :- Date to be decided Subject to approval by Presiding Officer**

SIGNATURE OF CONTRACTOR
QMTI.

Chief Executive Officer,

ITEM RATE TENDER & CONTRACT FOR WORKS

QMTI,Kirkee

DEPARTMENT : PROJECTS

DIVISION : CIVIL DEPARTMENT

Item Rate Tender & Contract for Works

(A) Tender for the work of : 'RENOVATION & MODIFICATION OF DIESEL MECHANIC WORKSHOP & CLASSROOM AT QUEEN MARY'S TECHNICAL INSTITUTE (QMTI), KIRKEE'.

**Location of the site : Park Road, behind Kirkee Railway Stn, Range Hills Kirkee,
Pune-411020**

- (i) To be submitted by 1700 Hours on 13.10.2026**
- (ii) After evaluation of Technical Bids, the 'Financial Bids' of only the technically qualified and eligible bidders shall be opened at the notified time, date & place in the presence of the eligible tenderer or their representatives in the office of QMTI.**
- (iii) Signature of officer issuing the documents.....**

Designation : Chief Executive Officer, QMTI (Kirkee)

Date of Issue :

TENDER

I/We have read and examined the tender documents comprising of **Technical Bid**: Volume-I: Press Notice: Notice Inviting Tender; Brief Scope of work; Information and Instructions to Bidders; Information regarding eligibility; Letter of Transmittal, Form 'A': Financial Information; Form 'B' : Form of Banker's Certificate; Form 'C': Details of All Works of Similar Class Completed During The Last Four Years ; Form 'D': Project Under Execution or Awarded; **Financial Bid** : Volume-II : Detailed Notice Inviting Tender (NIT); Tender & Contract, Work Order & Agreement; General Rules & Directions, Clauses of Contract, Special Conditions; Additional Conditions; Schedules (A);together with any Addenda thereto and the proceedings of Pre-bid Conference, if any, & other documents and Rules referred in the conditions of contract and all other contents in the tender document for the work .

I/We hereby tender for the execution of the work specified by QMTI within the time specified in Schedule 'A', viz., Schedule of Quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in General Rules and Directions and with such materials as are provided for, by, and in respects in accordance with, such conditions so far as applicable.

We agree to keep the tender open for 12 days from the due date of Financial Bid opening and not to make any modifications in its terms and conditions.

A sum of Rs. 45,000/- has been deposited/is being forwarded in the shape specified as earnest money. If I/we, fail to furnish the prescribed Security Deposit within prescribed period, I/we agree that the QMTI shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/we fail to commence the work specified, I/we agree that QMTI shall without prejudice to any other right or remedy available in the law, be at liberty to forfeit the said earnest money and the Security Deposit absolutely, otherwise the said earnest money shall be retained by QMTI towards security deposit to execute all the works referred to in the Tender Documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered, upto maximum of the percentage mentioned in Schedule 'A' and those in excess of that limit at the rates to be determined by the Clause 12.

Further, I/We agree that in case of forfeiture of earnest money or both Earnest Money & Security Deposit as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

I/we undertake and confirm that eligible similar work(s) has /have been not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of QMTI, then I/we shall be debarred for tendering in QMTI in future forever. Also, if such a violation comes to the notice of QMTI before date of start of work, QMTI shall be free to forfeit the entire amount of Earnest Money Deposit / Security Deposit.

I/We hereby declare that I/we shall treat the tender documents, drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived therefrom to any person other than a person to whom I/we am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Dated.....

Name of the Contractor :

Authorized Signature of Contractor :

Postal Address :

.....

.....

.....

Witness :

Address :

.....

.....

Occupation :

ACCEPTANCE/WORK ORDER

Employer : QUEEN MARY'S TECHNICAL INSTITUTE (QMTI) KIRKEE, PUNE

Address : Park Road, behind Kirkee Railway Stn, Range Hills, Pune-411020

Date of Issue : {Date}.....2026

Contractor :

Address :

Reference : Notice Inviting Tender dated 10-09-2026

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With reference to above, QMTI, KIRKEE is pleased to award the following referred work to

M/s. {Contractor}.....

1. Tendered cost of the work :

Name of the Work	Tendered Cost
RENOVATION & MODIFICATION OF DIESEL MECHANIC WORKSHOP & CLASSROOM AT QUEEN MARY'S TECHNICAL INSTITUTE (QMTI), KIRKEE.	Rs.

(Rupees only)

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The exact value of work will be worked out & paid to you to the extent of work carried out as
assigned & verified by QMTI.

2. Terms & Conditions

a) Following documents will form the part of this Work Order:

- i) Notice Inviting Tender dated -----.2026
- ii) Your Tender dated
- iii) Your letter dated
- iv) Contract Agreement on a non-judicial Stamp Paper of Rs. 500/-
(Rupees Five Hundred only)
- v) Letter of Intent
- vi) This Work Order
- vii)

b) Stipulated time of completion will be 01-Feb-2027 from the 10th day after the date of issue of Work Order or from the date of handing over of the site, whichever is later.

Other Requirements

The Work Order shall be executed in accordance with the terms and conditions stated above and shall be deemed cancelled if any other terms and conditions are stated by the agency in the tender document but not incorporated herein.

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FOR AND ON BEHALF OF

QMTI, KIRKEE

(-----)

PLACE :

DATED :

Acknowledgement copy of the Work Order duly signed, stamped and dated by the contractor shall constitute firm acceptance of order in its entirety.

Accepted by :

Signature :

Dated :

FORM OF AGREEMENT

THIS AGREEMENT is made on theday of2026 between QMTI, KIRKEE, Park Road, behind Kirkee Railway Stn, Range Hills Kirkee, Pune-411020 hereinafter called "the QMTI", of the one Part and(hereinafter called "the Contractor") of the other Part.

WHEREAS the QMTI is desirous that certain works should be executed, viz. **'RENOVATION & MODIFICATION OF DIESEL MECHANIC WORKSHOP & CLASSROOM AT QUEEN MARY'S TECHNICAL INSTITUTE (QMTI), KIRKEE.'** and has, by Work-Order dated {Date of Work Order}.... accepted the tender of the contractor for the execution, completion and maintenance of such Works. NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.
 - i) this Form of Agreement;
 - ii) Technical Bid ;
 - iii) the detailed Notice Inviting Tender (NIT);
 - iv) the Tender along with the Work-Order; there of together with any correspondence leading thereto;
 - v) the General Rules & Directions, the Clauses of Contract, the Special Conditions, Particular Specifications;
 - vi) the Schedules A ;
 - vii) the priced Schedule of Quantities;
 - viii) the General Specifications;
 - ix) the Schedule of approved brand names;
 - x) the Forms;
 - xi) the Addenda, if any;
 - xii) the Proceedings of Pre-bid Conference, if any;
 - xiii) the drawings, if any.

3. The aforesaid documents shall be taken as complementary and mutually explanatory of one another.
4. In consideration of the payment to be made by the QMTI to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the QMTI to execute, complete and maintain the Works in conformity in all respects with the provisions of the Contract.
5. The QMTI hereby covenants to pay the Contractor in consideration of the execution, completion and maintenance of the Works, the accepted tendered value at the times, and in the manner prescribed by the Contract.
6. Any dispute between the parties shall be subject to jurisdiction of Courts in Pune.

IN WITNESS WHEREOF the parties have hereunto set their respective hands and seals, the day and year first above written.

SIGNED, SEALED AND DELIVERED.

By the said

By the said

NAME : _____

On behalf of the Contractor

In the presence of :

NAME : _____

On behalf of the QMTI, KIRKEE.

In the presence of :

NAME : _____

Address _____

NAME : _____

Address _____

Remarks

- i. This form is included in the tender document only for the information of tenderers. Only the successful tenderer will in due course be required to complete this form.
- ii. Stamp Duty of this Agreement will be borne by the successful tenderer.
- iii. The Bond is to be submitted separately by the successful tenderer on a nonjudicial stamp paper of Rs. 500/- (Five Hundred) only.

SCHEDULE 'A' NOTES

NAME OF WORK: - RENNOVATION & MODIFICATION OF DIESEL MECHANIC WORKSHOP & CLASSROOM & CLASSROOM AT QUEEN MARY'S TECHNICAL INSTITUTE (QMTI), KIRKEE.

The description of various items of works in Schedule 'A' is in brief and includes for all materials and labor complete unless otherwise mentioned. These shall be read in conjunction with special conditions, Particular specifications, Drawings including notes there on, specification for material and workmanship contained in PWD DSR and relevant preambles to various trade sections in. Words all as specified and/or shown drawings shall be deemed to be included in all items of Schedule 'A' whether specifically mentioned in Schedule 'A' or not.

1. PERIOD OF COMPLETION:- The entire work under this contract shall be completed in all respects as per tender documents/CA and connected drawings. For Sch 'A' including provisional lump sum on or before 01 Feb 2027
2. UNIT RATE FOR ITEM IN SCHEDULE 'A'
 - 2.1 The unit rate for item in Schedule 'A' shall be deemed to include for entire completion work or as specified and/or shown on drawings including the notes there on.
 - 2.2 The cost of following items shall also be deemed to be included in the unit rate for item of Schedule 'A'
 - I. Cost of cutting, leaving/formatting holes, leaving/forming making chases in the walls, floors ceilings, slab etc. as required and making good to match with the adjoining surfaces required in connection with work included in other parts of Schedule 'A' No price adjustment shall be made for increase/decrease in the work of cutting/forming holes/chases, demolition, cleaning, etc. consequent to variation in quantity of items included in other parts of Schedule 'A'
 - a) Provision of Sink
 - b) Fan hooks/ boxes etc, glazing all as shown on drawings and as specified.
 - c) Anti-termite treatment crumples section etc.
 - d) The mandatory requirement/details such as fittings, shelves, platform. Peg sets, etc.
 - e) Kitchen Platform, Kadappashelving.
 - f) Soap tray, ground sink, nahani trap, towel rail, GI grab bar for handicapped.
 - g) Plinth protection, ramp, railing, crumple joint.
 - h) All excavation and earth work as required.
3. Lump sum price and unit rate quoted by the renderer shall be deemed to include for any minor details of work.

- 3.1 However, some of the minor details/items which shall be deemed to be essential for execution and entire completion of work are detailed as under for guidance
- a) Reinforcement for any RCC member not indicated in the dwgs but is structural requirement.
 - b) Dwarf wall in situations like verandah, passage etc. not indicated in drawings.
 - c) Lintel over doors, windows and openings not shown in drawings.
 - d) Builder's hardware for doors/ windows etc. though not indicated on drawings essential for usage.
4. Layout of building indicated on site plan is tentative. No adjustment in price shall be done on account of minor changes/modification in the final approved layout within the site plan area.
5. All materials to be incorporated in the work shall bear ISI certification mark. If ISI marked material are not available in the market the material shall be confirming to the relevant IS.
6. In absence of any specification either in tender documents or drawings the minimum specification as given in PWD DSR for relevant items and as per slandered Engineering practice shall be considered while quoting the tender.
7. In all the above and similar cases, the details indicated elsewhere in the drawings which are similar or near similar to missed out items are work shall be followed. In the absence of any other similar or near similar details, minimum essential requirement for completion of the work from structural and utility point of view shall be deemed to be included in the lump sum quoted. In the event of any dispute, decision of the Accepting Officer shall be final and binding.
8. Probable distribution of various items of internal/external services is indicated on drawings. These are tentative and likely to be varied where necessary at the direction of Engineer in charge. The contractor shall not be entitled for any claim whatsoever on account of such varied alignment.

9. Eligibility Criteria:

Work Experience: The Intending bidder must have in its name experience of having successfully completed similar works, as a prime contractor, during last **3(Three) assessment** years ending last day of month previous to the one in which bid applications are invited (i.e. eligibility period) should be any of the following :-

- i. One completed work costing not less than equal to Rs.90,00,000/-(Ninety lakh only)
OR
- ii. Two completed works each costing not less than the amount equal to 50,00,000/- (Fifty Lakh only)
OR
- iii. Three completed works each costing not less than the amount equal to 35,00,000/- (Thirty Five Lakh only)

The work experience of only those works shall be considered for evaluation purpose, which are completed on or before the last day of the month previous to one in which Tender has been invited. The experience of incomplete/ ongoing works as on the last date of eligibility period will not be considered for evaluation. If the referred work includes construction as well as maintenance after construction, the experience of such work may be considered as acceptable, if the construction part is completed on last day of eligibility period, even if, maintenance work is going on, and the certificate issued clearly stipulates the same.

While considering the value of completed works, the full value of completed works will be considered whether or not the date of commencement is within the said 3(Three)years period.

The above should be confirmed by a letter certified by CA mentioning the amount of works and period under which the work was executed along with UDIN number.

10. Copies of the following documents should be submitted along with the Technical Bid–

- i. Previous 3 assessment years (2026-27 , 2025-26 , 2024-25) balance sheet.
- ii. List of previous works completed with certificate.
- iii. GST certificate
- iv. Pan Card
- v. List of engineers/ staff
- vi. List of works in hand

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Schedule of Quantities - Renovation & Modification of Diesel Mechanic Workshop & Classroom					
No	Description	Qty	Unit	Final Rate	Total
	DISMANTLING & DEMOLITION WORK				
1	Dismantling of False Ceiling, Wooden Battens, Wall Mounted Boards Display Boards and submitting to store whatever recommended by Architect etc in workshops and classrooms as directed. Detail Description: As directed by the Architect.	1	Job		
	Rate in words:				
2	Demolition of existing walls, on area mentioned in drawings or recommended by Architect etc in workshops and classrooms as directed. Rate to be inclusive of all necessary hardware, fittings, fixtures, adhesives required for the job. Detail Description: As directed by the Architect.	1	Job		
	Rate in words:				
3	Dismantling of Old Ceiling, Fans, Tube lights, Wiring, Distribution boards, Switches, Sockets, boards, Fittings and submitting to store whatever recommended by Architect etc in workshops and classrooms as directed. Detail Description: As directed by the Architect.	1	Job		
	Rate in words:				
4	Removal of all Doors and Windows including frames embedded in Stonewall/Brickwall of any size and making good all disturbed portion of the Stone/Brick wall to its original condition to receive Aluminium Doors or windows as directed. Detail Description: As directed by the Architect.	20	Nos		
	Rate in words:				

5	Demolition of existing any type of floor including removal of Screed any thickness and removal of all material outside Qmti premises. + Kadappa outside. Detail Description: As directed by the Architect.	300	Sq.m		
	Rate in words:				
6	Removal of old Roof in workshop area	1	job		
	Rate in words:				
7	Cleaning old drainage line for washing point along with required excavation wherever required.	1	Job		
	Rate in words:				
8	Shifting all exisitng materials from class room & workshops to designated location as directed by architect/owner, making temporary space for storage using bituminous sheets. Shifitng the material back in place after work completion.	1	Job		
	Rate in words:				
	CONCRETE WORK				
9	PLINTH PROTECTION: Filling in foundation or plinth protection, 100 mm thk PCC bed laid to slope 25mm high (Outward slope, 75mm thk (minumum) sand filling, by fine sand in layers not exceeding 150 mm as directed and consolidating the same by thorough saturation with water, ramming, base earth to be rammed firm before laying sand and PCC complete including the cost of supply of sand, excavation required. Rates to be inclusive of all tools, hardware, fixtures required for the job. Details as directed by the architect.	15	Cu.m		
	Rate in words:				

	PEST CONTROL				
10	Providing preconstructional antitermite treatment as per I.S. 6313 (Part-I) to the soil along the external face of building by punching holes of 1.2 of 1.5 C.M. diameter about 30 -60 cm deep at 15 cm c/c as close to the wall as possible and to inject 0.5 percent of chlorophyrisfos at the rate of 7.5 litres per hole and sealing the same with proper filling. Detail Description: As directed by the Architect.	162	Sq.m		
	Rate in words:				
	Murum Filling				
11	Providing and laying fine murum filling below PCC & in open area of cycle stand wherever required including proper watering, dewatering & compaction. Detail Description: As directed by the Architect.	40	Cu.m		
	Rate in words:				
	BRICK WORK				
12	230MM BRICK WORK: Fly ash cement bricks. The size of the brick should be 230 × 150 × 100 mm. 230mm thick brick wall.. The bricks should have plane rectangular faces with parallel sizes and right angle edges. The brick should not break when dropped from from height of minimum 1 meter. Brick masonry - Providing & constructing of 230MM THK brick masonry wall in 1:6 cement mortar for temple walls. Rates to include scaffolding, curing, at all heights, constructed to true line & plumb, etc., complete as per the Architect's instructions. Note : Rate should be inclusive of Masking for fixtures & wooden frames. Wall to be built till true ceiling. Rate to include cost of mortar, fixing RCC lintel at necessary heights for doors. Curing of blocks to be done till the satisfactory of PM's. At the junction of RCC structure & block walls, hacking and cement slurry to be done on RCC surface. Detail Description: As directed by the Architect.	10	Cu.m		
	Rate in words:				

	GRANITE PLATFORM				
13	Providing and constructing pearl black granite (Rs. 105 / sq.ft) platform including vertical both side polished kadappah stone 25 to 30 mm thick supports with kadappah top 35 to 40 mm thick and polished granite 16 to 20 mm top with chamfer on front side, fascia patti of granite at front and both sides vertical granite of size .75 x .6 m, kadappa laid in middle for storage, including cutting, etc. complete. (Platform top size 5.00 m x 0.60 m and height is 0.75)	15	Rmt.		
	Rate in words:				
	FLOOR WORK				
14	PCC BED: Providing, laying, compacting and laying in situ Plain Cement Concrete in Sub Floors Type 100mm thick in 20mm Graded Aggregate in Line and Level to receive Stone Flooring. Detail Description: As directed by the Architect.	9	Cum		
	Rate in words:				
15	TILE_VITRIFIED 1: Providing and laying vitrified glossy finish double charge tiles (Tile for class room floor) having size 600 mm x 600 mm of 12 mm thickness and confirming to IS.15622- 2006 (groupBla) of approved make, shade and pattern fixed in 15mm 1:4 cement mortar including neat cement float, filling joints, curing and clearing etc. complete. (Base Rate of tile 45 per Sq.ft). Rate to include cost of mortar. Rate to be inclusive of all necessary hardware, fittings, fixtures, adhesives for the job. Detail Description: As directed by the Architect.	35	Sq.m		
	Rate in words:				
16	TILE_VITRIFIED 1 SKIRTING: Vitrified Tile Skirting 100mm thick same as above fixed in Cement as directed. Rate to be inclusive of all necessary hardware, fittings, fixtures, adhesives for the job. Detail Description: As directed by the Architect.	3	Sq.m		
	Rate in words:				

17	STONE_KOTA: Providing and laying of Factory processed machine cut machine polished Natural Kota stone tiles of approved sample, size & pattern as mentioned the drawing / instruction of designer, on an bed of 50mm thick (Included in this item) screed/cement mortar 1:4, with neat cement float, high polished with epoxy grout joints with pigmented additives matching the shade of the stone, inclusive of surface preparation, sealer coat and pre - mirror polishing with necessary compounds to the satisfaction of Designer, protecting the floor with POP sheets till handover to client etc. complete including skirting to all sides 75 mm height fixed in pure cement and finished in 45 degrees with C:M 1:3 along the length of the tile. Rate to include cost of mortar. Rate to be inclusive of all necessary hardware, fittings, fixtures, adhesives for the job. Detail Description: As directed by the Architect.	100	Sq.m		
	Rate in words:				
18	STONE_KOTA SKIRTING: Description and Detail same as Item No 25 above but for Machine Cut Kota Stone Tile Skirting all sides 75 mm height fixed in pure cement and finished in 90 degrees with C:M 1:3 along the length of the tile including all necessary finishing to complete the work. Rate to be inclusive of all necessary hardware, fittings, fixtures, tools, adhesives etc for the job. Detail Description: As directed by the Architect.	6	Sq.m		
	Rate in words:				
19	BLACK KADAPPA STONE FLOORING: Providing and laying Natural Rough / Split-Face Black Kadappa Stone flooring in of approved quality, color, and texture in classroom passages and corridors. The stone slabs shall be 20mm to 25mm thick, hand-chiseled/natural split on the top surface, and Machine Cut (MC) to specified sizes (e.g., 600mm × 600mm or 600mm × 300mm) on all four edges. The scope includes comprehensive surface preparation, laying over a average 20mm to 25mm thick cement mortar bedding of mix 1:4 (1 part cement : 4 parts coarse sand), jointing with matching black or contrasting grey pigment-infused neat cement slurry, neat pointing, curing, and final cleanup as per standard architectural drawings and directions of the Engineer-in-Charge. Minor edge easing or deburring at the joints to prevent child tripping is included in the contractor's scope Detail Description: As directed by the Architect.	100	Sq.m		
	Rate in words:				

20	EPOXY FLOORING : Providing and laying a heavy-duty, seamless, 100% solids industrial-grade self-leveling epoxy flooring system of minimum 2.5 mm to 3.0 mm finished thickness over the existing smooth concrete workshop floor. The rate must be comprehensive and include: Mechanical Surface Preparation: Heavy-duty diamond grinding to achieve a Concrete Surface Profile (CSP) of 2 to 3, complete dust extraction, and removal of all laitance. Crack Repair: Cutting open existing concrete cracks into V-grooves, vacuuming, and filling flush with a two-part 100% solids structural epoxy repair gel. Primer Coat: Applying one coat of low-viscosity, solvent-free epoxy primer with moisture-barrier properties. Screed/Base Coat: Applying a 100% solids self-leveling epoxy base coat, cross-rolled with a spiked roller to eliminate pinholes and air entrapment. Anti-Slip Topcoat: Broadcasting kiln-dried aluminum oxide grit into the wear layer, sealed with a final chemical-resistant polyurethane/epoxy topcoat to achieve an anti-skid finish. Inclusions: All materials (Fosroc/Sika/BASF or approved equivalent), labor, tools, diamond grinder rentals, scaffolding, and curing, complete as per manufacturer specifications and directions of the Engineer-in-Charge.	80	Sq.m		
	Rate in words:				
21	CHECKERED TILES FLOORING : Providing and fixing 1' x 1' precast chequered cement concrete tiles (min. 22mm thick) of approved design and color on outdoor floors over a 20mm thick cement mortar bed (1:4). Joints are to be neatly finished with cement slurry mixed with matching pigment. The rate is fully inclusive of surface preparation, leveling, neat finishing, water curing for 7 days, materials, labor, and tools, , complete as per manufacturer specifications and directions of the Engineer-in-Charge. (Tiles rate approx Rs. 35/ sq.ft)	100	Sq.m		
	Rate in words:				

	ROOF WORK				
22	PVC FALSE CEILING: Supply and fixing PVC False Ceiling consisting of panel width 300mm / 200mm x 3.0m Length, 7mm thick plain embossed PVC sheet of 600 kg/ cum Density manufactured by approved manufacture company as per particular specifications, used as panel insert in a frame work made using anodized aluminium T-section of sizes 25 x 25mm 19 gauge or 1mm thick in square pattern .The aluminium frame work is supported from the ceiling with 'J' hooks and G.I wire /6mm M.S rod of required sizes to maintain proper level etc .The aluminium frame work is supported on side wall with the use of aluminium L-section of size 25x25mm angles etc complete all as specified & directed. Adron or equivalent make as approved by the architect. Rate to be inclusive of all necessary hardware, fittings, adhesives for fixing the assembly. Drawing shall be given during pre- bid meet. Detail Description: As directed by the Architect.	210	Sq.m		
	Rate in words:				
	FINISHING WORK				
23	PLASTER EXTERNAL: Providing and applying in one coat, 25-50 mm thick Sand faced plaster in M- sand on external surfaces of RCC / stone/ brick / block wall around new window openings in cement mortar 1:4, complete to true line & plumb in all levels and locations, ensuring complete coverage of cracks and no leakage, including plaster rendering uneven and honeycombed surfaces (where ever needed). Rate shall include for scaffolding, making grooves, sills, pattas, curing, surface preparation before the application of plaster, providing galvanized chicken mesh to a width of 150 mm at the junctions of masonry and RCC structure (column to wall, wall to beam, lintel to beam, corners of walls/columns etc complete) including tying in position by using suitable nails / clamps / screws and as directed etc. complete at all levels. The contractor shall make good the grooves, pockets etc. after the scaffolding is removed. Repairing of Concrete bed laid for holding workshop's motors in the same specifications. Detail Description: As directed by the Architect.	50	Sq.m		
	Rate in words:				
24	PLASTER INTERNAL: Providing and applying in one coat, 12-15mm thick Sand faced plaster in M- sand on internal surface of RCC / stone/ brick / block wall around new window openings in cement mortar 1:4, complete to true line & plumb in all levels and locations & finished rough to	50	Sq.m		

	take on POP punning including plaster rendering uneven and honeycombed surfaces (where ever needed). Rate shall include for scaffolding, making grooves, sills, pattas, curing, surface preparation before the application of plaster, providing galvanized chicken mesh to a width of 150 mm at the junctions of masonry and RCC structure (column to wall, wall to beam, lintel to beam, corners of walls/columns etc complete) including tying in position by using suitable nails / clamps / screws and as directed etc. complete at all levels. The contractor shall make good the grooves, pockets etc. after the scaffolding is removed. Repairing of Concrete bed laid for holding workshop's motors in the same specifications. Detail Description: As directed by the Architect.				
	Rate in words:				
25	GYPSUM PLASTER: Providing and applying gypsum plaster in plumb level (with Gypsum material of Buildon or equivalent make) with finishing with gypsum material in 15 to 18 millimeter thickness (Thickness may vary) to previously plastered surface / or on newly brick surface (Excluding rough cast plaster) in all position including preparing and Finishing the surface, chicken mesh on joints, scaffolding etc.complete.	50	Sq.m		
	Rate in words:				
26	PAINT_SATIN MATTE: Providing and applying two coats Birla putty finish and two coats Asian water based satin paint with scraping and cleaning of surface after Birla putty. of approved colour and shade to internal plastered surfaces.(Asian Apocolite premium Satin paint) all walls, partitions, panelling, plywood / wood / MDF surfaces etc. No cornices, grooves, pattas shall be measured separately. Only plain surface shall be considered for measurement. All works to be carried out as per manufacturers specification and guide lines. Asian Paint Premium Emulsion or a paint of equivalent make. Cost to include removal of all old paint by scraping rubbing down and removing all loose material followed by 2 coats of touch up putty to be applied before painting. Surface shall be painted with 2 coats of paint as approved by the architect. Rate to be inclusive of all necessary hardware, fitting, accessories, scaffolding and tools required for the job.Detail Description: As directed by the Architect.	300	Sq.m		
	Rate in words:				

27	PAINT_AAPEX: Providing and laying External Apex Asian paint two coats of approved colour with applying one coats of primer., cleaning and preparing the surface . No cornices, grooves, pattas shall be measured separately. Only plain surface shall be considered for measurement. All works to be carried out as per manufacturers specification and guide lines.	550	Sq.m		
	Rate in words:				
28	PAINT_OIL: Providing and Applying of 2 coats of Oil emulsion paint of ASIAN make for new/existing trusses, window grills and electrical rods (on existing ceiling). Rate to be inclusive of all necessary hardware, fittings, fixtures, adhesives for the job. (Area to be considered 1.5 times for grills) Detail Description: As directed by the Architect.	100	Sq.m		
	Rate in words:				
29	PU ENAMEL PAINT: Providing and applying two coats of high-gloss Polyurethane (PU) Enamel paint of approved shade and manufacture to existing steel cupboards. The rate shall include comprehensive surface preparation comprising the scraping of old flaking paint, wire-brushing, and sanding with emery paper to remove all rust, scales, and loose particles. The cleaned and degreased surface shall be treated with one base coat of approved anti-rust metal primer (Zinc Chromate or Red Oxide). Once cured, a minimum of two finishing coats of PU Enamel shall be applied to achieve a uniform, hard-wearing, scratch-resistant finish. Only plain surface shall be considered for measurement.Approved Makes: Asian Paints (PU series), Dulux (e.g., Dulux PU Enamel 12-in-1), or equivalent approved.Rate to be inclusive of all necessary hardware, fittings, fixtures, adhesives for the job. Detail Description: As directed by the Architect.	50	Sq.m		
	Rate in words:				
30	LACKER PAINT: Providing and applying two coats of premium-grade, UV-resistant clear gloss lacquer over stone wall surfaces to enhance shine and protect against weathering. The scope includes rigorous surface preparation via wire brushing or high-pressure water jetting to remove dust, moss, and stains, followed by uniform application using brushes, rollers, or spray equipment. The rate is fully inclusive of all materials, specialized labor, tools, scaffolding, and cleanup.	130	Sq.m		

	Detail Description: As directed by the Architect.				
	Rate in words:				
	ASBESTOS WORK				
31	REPLACEMENT OF ASBESTOS SHEETS: Supply & fixing 6mm thick asbestos cement, corrugated sheets in roofs, walls etc. Fixed with L-type or screws J-type or cranked hook bolts. Rate to be inclusive of all necessary hardware, fittings, fixtures, adhesives required for the job. Detail Description: As directed by the Architect.	50	Sq.m		
	Rate in words:				
	DOOR & WINDOW				
32	GRANITE DOOR & WINDOW FRAME: Supplying and fixing factory mirror polished 16mm-18mm thick steel grey granite Jambs of width approximately 550mm at the door cills and soffits (all round the door opening) with double granite Patti with overlap of 25mm, it should be jointed together with high quality adhesive such as Araldite or equivalent as approved). The granite jambs shall be fixed on the prepared base with base grout of polymer tile adhesive such as Balendura diamond or equivalent and cement in the ratio 2:1 (2 tile adhesive and 1cement) with proper line and slope. Increased gap due to the overlapping of granite jambs shall be filled with cement plaster using CM 1:4 and cement & adhesive grout shall be applied above this plastered surface for fixing the granite. The edge of the granite shall be chamfered/ half moulded and polished matching with the original surface as per the approval of the Consultant. Note: Length of granite will be measured without considering the overlap for payment (i.e. overlapped double granite Patti all round window opening shall be considered as a single unit for measurement and payment). All granites for jambs, soffit and double granite Patti/both side polished 36mm granite Patti vertical support will be measured in running meter. Double granite Patti / both side polished 36mm Granite Patti vertical support will be considered as a single unit (each granite for double granite Patti will not be considered separately, i.e. 1m double granite Patti means 2m single granite, but measurement will be for 1m length) for making payment. Rate to be inclusive of all necessary hardware, fittings, fixtures, adhesives required for the job. Detail Description: As directed by the Architect.	30	Sq.m		

	Rate in words:				
33	ALUMINIUM WINDOW: Providing and fixing in position 18 gauge Aluminium sliding window of three tracks 25x50 section with windowframe, bottom track, top and side track. The shutter should be of bearing bottom, interlocking and handle and top. As per detailed drawings and as directed by Engineer incharge with all necessary Aluminium sections fixtures black powder coated and fastenings such As rollwell roller bearing in nylon casting and selflocking catch starlock fitted in vertical section of shutter including 5 mm thick plain glass saint gobain and aluminium mosquito net shutter with stainless steel jail with all required screws and nuts etc. Detail Description: As directed by the Architect.	40	Sq.m		
	Rate in words:				
34	UPVC DOOR: Providing and fixing factory made uPVC black colour door, made of extruded profiles. Profiles of frames and sash will be mitered cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc. making arrangement for fixing of hardware, EPDM gasket, 1.2+ 0.2.mm thick galvanized steel profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, all complete and as directed, (Glazing, hardware hinges and fitting, EPDM rubber gasket etc. to be paid separately.) The frame shall be made from extruded uPVC section having overall dimensions as indicated and having minimum wall thickness of 2.0mm ±.0.2 mm. Corners of the frames shall be reinforced. Civil Openings- 1200x2400 (4Nos), Rate to be inclusive of all necessary hardware, fittings, fixtures, adhesives for fixing the assembly. Detail Description: As directed by the Architect.	8	Sq.m		
	Rate in words:				

	MILL WORK				
35	CLASSROOM TABLE: Providing and supplying complete student table with integrated seating and backrest, overall size 1250 × 900 mm, comprising minimum 18 mm thick pre-laminated plywood/engineered wood table top, seat and backrest with 2 mm PVC edge banding, rigid M.S. tubular frame fabricated from minimum 25 × 25 × 1.6 mm sections, properly welded and finished with epoxy-polyester powder coating, complete with bracing, supports, floor-protection PVC/rubber caps, all necessary hardware, fabrication, finishing, transportation, assembly and installation, complete as per approved drawing, sample and instructions of Engineer-in-Charge. Detail Description: As directed by the Architect. (Outsource)	12	Nos		
	Rate in words:				
36	TEACHER'S TABLE: Providing, supplying and placing in position a teacher's table of overall size approximately 1200 mm × 600 mm × 750 mm high, comprising 18 mm thick good quality pre-laminated commercial plywood / engineered wood table top with approved shade and 2 mm thick PVC edge banding on all exposed edges. The table shall be supported on a rigid M.S. square tube frame of minimum 25 × 25 × 1.6 mm section, properly welded, ground smooth and finished with approved shade epoxy-polyester powder coating of approximately 50–60 micron thickness. The frame shall be provided with suitable floor-protecting adjustable PVC/rubber leveler feet. The table shall be provided with a rear modesty panel of 18 mm thick pre-laminated board/plywood. One side shall be provided with an integrated three-drawer storage unit, comprising three drawers made from 18 mm thick good-quality board/plywood, fitted with heavy-duty telescopic ball-bearing channels, suitable metal handles and locking arrangement with minimum two keys. All exposed edges of wooden components shall be machine finished with PVC edge banding. The item shall include all necessary screws, bolts, brackets, welding, powder coating, hardware, drawer channels, locks, handles, leveler feet, transportation, assembly, installation and all other accessories required to complete the item in all respects as per approved sample and instructions of the Engineer-in-Charge. Detail Description: As directed by the Architect.	2	Nos		
	Rate in words:				

37	CUPBOARD: Providing and Fixing of cupboards of size 1200 × 2100 mm (600mm depth). Carcas in 19mm Ply + 1mm laminate (Inside and Outside) and shutters in 19mm thk ply as per approved shade, covering all open edged with matching edge band. . Shutter fixed on 150mm Brass hinges 4 per shutter. 1 internal drawers, 2 locks, one hanger rod, with shelves as per drawing. Area- 26 Sq. ft per Unit. Refer Drawing. Rate to be inclusive of all necessary hardware, fittings, fixtures, tools, adhesives etc for the job. Detail Description: As directed by the Architect.	4	Nos		
	Rate in words:				
38	STORAGE SHUTTERS: Providing and fixing openable shutters for under-counter storage below the granite platform. Fabricated using 19mm thick BWP grade plywood (IS:710). Finished with 1.0mm thick decorative laminate on the exterior face and 0.8mm thick balancing laminate on the interior face. All exposed plywood edges to be finished with matching border laminates. The rate is inclusive of all materials, labor, marine-grade adhesive, anti-termite treatment, and all premium hardware (heavy-duty brass soft-close hinges, approved brass handles, magnetic catchers, and rust-proof screws). Complete in all respects, perfectly plumb and level. Detail Description: As directed by the Architect.	13	Sq.mt		
	Rate in words:				
	REPAIR WORK :				
39	Repairing, restoring and refurbishing existing old teakwood table & rack in both workshops including scraping, sanding, carpentry repairs, strengthening, replacement of damaged portions, warsnish polishing/painting, hardware repairs/replacement, display modifications, cleaning, finishing and complete installation as specified. Detail Description: As directed by the Architect.	1	Job		
	Rate in words:				

40	Scraping, repairing, strengthening and complete refurbishment of existing fabricated M.S. engine display stands, including removal of existing loose paint and rust, thorough surface preparation, welding and fabrication repairs, replacement of damaged/corroded M.S. members, provision of stiffeners, brackets, supports and necessary fasteners, repair of engine mounting arrangements, grinding of welds and sharp edges, application of approved anti-corrosive metal primer and minimum two finishing coats of approved industrial/synthetic enamel paint, complete cleaning, shifting, labour, materials, tools and tackles and making the stands structurally sound, stable, safe and aesthetically suitable for display of engine components, complete as per approved sample and instructions of Engineer-in-Charge. Detail Description: As directed by the Architect.	1	Job		
	Rate in words:				
	ELECTRICAL WORK				
41	Providing and fixing concealed electrification work in 1" Diamond PVC pipe (ISI mark) as per specification. Switches of Vinay Aura range or equivalent and Polycab/RR FR wires. Classroom - (Cost to include laying main cable from DB, fixing MCB double pole) 1. Eight (8) light point, two 6Amp socket, three (3) fan point with regulator, one (1) power point for Smart board complete. Workshop 1 - (Cost to include laying main cable from DB, fixing MCB double pole) 1. Sixteen (16) light point, two (2) 6Amp socket, five (5) fan point with regulator, two (2) power point, One three Phase power point for machine, complete. Workshop 2 - (Open wiring in 1" Diamond PVC pipes for ceiling)(Cost to include laying main cable from DB) 1. Three Phase wiring 2. Laying 50 Sq.mm Aluminium Armard cable 4 core (Polycab, Finolex, etc.) from DP to the workshop and fixing 100 Amp Buzzbar with HRC fuse of Bharat Make. Rates to include excavation, backfilling , dwc pipe for laying, complete. 3. Three Phase connections to both workshop lifts & providing a Two (2) 3phase power points. 4. Twelve (12) light point, two (2) 6Amp socket, Three (3) fan point with regulator, two (2) 16 amp power point complete. Water Point - 1. Six (6) light points, three (3) 6 amp plug point, four (4) 16 amp power points.	1	Job		

	(All material should be ISI mark.) (Boards and Switches should be Modular)(Double height of ceilings should be considered for Light & Fan points.				
	Rate in words:				
42	CEILING FAN: Remote Controled white coloured ceiling fans with 1200mm sweep, of Crompton (Crompton Aura 1200 mm) / Bajaj/ Usha/ havells suspended by MS 20mmMS rod from Truss- 2' below Finished false ceiling or as directed by the architect. Rate to be inclusive of all necessary hardware, fittings, fixtures, adhesives for fixing the assembly. Outsource item- (design/ colour / shade / make as approved by architect / client). Detail Description: As directed by the Architect.	11	Nos		
	Rate in words:				
43	TURBO AIR VENTILATOR: Supply, transport, and complete leak-proof installation of 21" (530mm) wind-operated turbo ventilator. • Material: High-rigidity Stainless Steel Grade SS-304 vanes (minimum 0.4–0.5 mm thickness), completely corrosion-proof and resistant to chemical degradation. • Bearings: Double-shielded, permanently lubricated, sealed SS ball bearings for silent operation. • Base Flashing: Matching profile Metal/Galvalume base sheet to fit the existing roof profile (Polycarbonate/FRP sheets explicitly excluded). • Fixing & Sealing: Securely fixed to the roof ridge using self-tapping screws with EPDM washers, and sealed completely with UV-resistant neutral-cure silicone sealant. • Inclusions: Rate must include the ventilator unit, metal base plate, freight/loading/unloading to site, hoisting, height-safety arrangements, and all installation labor.	2	Nos		
	Rate in words:				
44	RECESSED PANEL LIGHTS: Classroom & Workshop Lighting in False Ceiling - 18 Watts PANEL LIGHT LED (design/ colour / shade / make as approved by architect/ client). Philips/ Oriental or equivalent make. Rate to be inclusive of all necessary hardware, fittings, fixtures, adhesives for fixing the assembly. Detail Description: As directed by the Architect.	22	Nos		

	Rate in words:				
45	SUSPENDED PROFILE LIGHT: 40W LED Hanging batten Tube Light, 4-Feet, (neutral white light. Design /shade / make as approved by architect / client)., make Harold, Philips, Adonis or a similar make.Detail Description: As directed by the Architect.	12	Nos		
	Rate in words:				
46	CLASSROOM CAMERA: Supply and installation of HIKVISION Camera for online classes. Rate to be inclusive of all necessary NRV, hard disk setup, hardware, fittings, fixtures, adhesives for fixing the assembly. Design/ colour / shade / make as approved by architect / client. Detail Description: As directed by the Architect.	6	No		
	Rate in words:				
47	INTERACTIVE WHITE BOARDS: Supply and installation of Interactive Display 86" of SenseBoard Pro make. Rate to be inclusive of all necessary hardware, fittings, fixtures, adhesives for fixing the assembly (design/ colour / shade / make as approved by architect / client). Detail Description: As directed by the Architect.	1	Nos		
	Rate in words:				
	FABRICATION				
48	Providing and fixing 9mm mild steel grill work for windows,ventilators, etc. as per drawing including fixtures necessary welding. And redoxidecolouring.(Refer Drawing)	30	Sq.m		
	Rate in words:				
49	Providing and fixing corrugated 0.5 grey Coloured GI sheets for roofing including fastening with galvanised iron screws & bolts, coping with shuttering to existing wooden rafters and purlins, laying new GI 75 mm x 25mm 16 gauge rafters & purlings wherever required, lead &	185	Sq.m		

	bitumen washers as per drawing, ridge capping, etc. as per detailed designs and drawing .				
	Rate in words:				
50	Providing and fixing corrugated 0.5 grey Coloured GI sheets above windows in Workshop 2 including fastening with galvanised iron screws & bolts, laying new GI 50 mm x 50 mm 16 gauge purlings wherever required, lead & bitumen washers as per drawing, ridge capping, etc. as per detailed designs and drawing . Rates should include	85	Sq.m		
	Rate in words:				
51	Providing complete waterproofing treatment of existing Asbestos Cement (AC) corrugated sheet roofs. The treatment includes surface preparation, treating cracks/joints/J-bolts, and applying multi-layered, bitumen-treated hessian-based or glass-fiber-base felt (Tar Sheets) using blown-grade industrial bitumen as a hot-bonding adhesive. Also using PU based waterproofing liquids (Elephant shield, Dr. Fixit Bitufix, etc.) on gaps, j bolts, etc. wherever required.	200	Sq.m		
	Rate in words:				
	MISCELLANEOUS WORK				
52	Disposal of Debris Outside Qmti premises. Detail Description: As directed by the Architect.	1	LS		
	Rate in words:				
53	Chairs Teacher (Refer to Image) Sample to get approved. (Approx cost Rs. 4,500 / Chair) Detail Description: As directed by the Architect.	2	Nos		
	Rate in words:				
54	Metallic stools for Workshop (Refer to Image). Sample to get approved. Detail Description: As directed by the Architect.	12	Nos		

	Rate in words:				
55	Providing a hand wash station in Workshop . Cost to include 18" x 22" SS Sink, PVC tap, PVC Outlet pipe upto connection to drainage, 100 ltr pvc drum with platform fabricated, complete. Detail Description: As directed by the Architect.	1	Job		
	Rate in words:				
56	Providing and fixing non magnetic 6' x 4' white board in workshop including all fittings, fixtures, assembly complete. Detail Description: As directed by the Architect.	1	no		
	Rate in words:				
57	Providing & fixing PVC 5mm Foam Sheet name plates or posters with vinyl print to Classroom , Workshop & display components as per instructions from QMTI. Final data & design to be approved by QMTI. Detail Description: As directed by the Architect.	4	Sq.mtr		
	Rate in words:				
58	FIRE FIGHTING: Fire Extinguisher 6kg and spare cylinder holder- Outsource item- (design/ colour / shade / make as approved by architect / client). Rate to be inclusive of all necessary hardware, fittings, fixtures, adhesives for fixing the assembly. Detail Description: As directed by the Architect.	6	Nos		
	Rate in words:				
59	Roller Blinds- Outsource Item- size 1200x 900 MM, to Windows. Rate to be inclusive of all necessary hardware, fittings, fixtures, adhesives for fixing the assembly (design/ colour / shade / make as approved by architect / client). Detail Description: As directed by the Architect.	18.45	Sq.m		

	Rate in words:				
60	Crutch Holder - Outsources item- (design/ colour / shade / make as approved by architect / client). Rate to be inclusive of all necessary hardware, fittings, fixtures, adhesives for fixing the assembly. Detail Description: As directed by the Architect.	12	Nos		
	Rate in words:				
61	Display Boards - Digital backlet grow sign boards star flex M/s frame powder coating teen sheet ISO led tubelight frame work of SS square pipe, side 2 poll SS round pipe 40 mm x 40 mm inclusive of labour charges and fixing. Detail Description: As directed by the Architect.	5	Nos		
	Rate in words:				
62	First Aid Kit - Providing and fixing Professional First Aid Kit for workshop. Contents of the First Aid Kit as per WHO Guidelines and GMP Certified.	1	Nos		
	Rate in words:				
63	Exhaust System - Providing and fixing high temperature resistant upto 300°C aluminium flexible pipe for Diesel engine model with proper fitting, exhaust cowl for exterior, complete.	1	Nos		
	Rate in words:				

GENERAL SUMMARY OF SCHEDULE OF QUANTITIES

Cost of Construction : _____

GST 18% : _____

Tender Cost: _____

In Words: _____

SIGNATORIES –

Contractor name: _____ Signature: _____

Architect: _____ Signature: _____

Queen Mary's Technical Institute

CEO: _____ Signature: _____

GENERAL RULES & DIRECTIONS

1. All work proposed for execution by contract will be notified in a form of invitation to tender and signed by the officer inviting tender.

This form will state the work to be carried out, as well as the date for submitting and opening tenders and the time allowed for carrying out the work, also the amount of earnest money to be deposited with the Tender, and the amount of the security deposit to be deposited by the successful tenderer and the percentage, if any, to be deducted from bills. Copies of the specifications, designs and drawings and any other documents required in connection with the work signed for the purpose of identification by the officer inviting tender shall also be open for inspection by the contractor at the office of officer inviting tender during office hours.

2. In the event of the tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a Power-of attorney authorizing him/her to do so, such power of attorney to be produced with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act, 1952.
3. Receipts for payment made on account of work, when executed by a firm, must also be signed by all the partners, except where contractors are described in their tender as a firm, in which case the receipts must be signed in the name of the firm by one of the partners, or by some other person having due authority to give effectual receipts for the firm.
4. Any person who submits a tender shall fill up the Schedule of Quantities form, stating at what rate he is willing to undertake each item of the work. Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort, including conditional rebate will be summarily rejected.

The rate(s) must be quoted in decimal coinage. Amounts must be quoted in full rupees by ignoring fifty paise and less and considering more than fifty paise as rupee one.

5. The officer inviting tender or his duly authorized representative, will open tenders in the presence of any intending contractors who may be present at the time, and will enter the amounts of the several tenders in a comparative statement in a suitable form. In the event of a tender being accepted, a receipt for the earnest money forwarded therewith shall thereupon be given to the contractor who shall thereupon for the purpose of identification sign copies of the specifications and other documents mentioned in para of General Rules & Directions. In the event of a tender being rejected, the earnest money forwarded with such unaccepted tender shall thereupon be returned to the contractor remitting the same, without any interest.

6. The officer inviting tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest or any other tender.
7. The receipt for any money paid by the contractor will not be considered as any acknowledgment or payment to the officer inviting tender and the contractors shall be responsible for ensuring that he procures a receipt signed by the authorised representative of the officer inviting tender or a duly authorised Cashier.
8. If a tender document is issued to an intending tenderer without certain blanks of the form having been so filled in and incomplete, he shall request the officer to have this done before he completes and delivers his tender.
9. The tenderers shall sign a declaration under the officials Secret Act 1923, for maintaining secrecy of the tender documents, drawings or other records connected with the work given to them. The unsuccessful tenderers shall return all the drawings given to them.
10. In the case of Item Rate Tenders, only rates quoted shall be considered. Any tender containing percentage below/above the rates quoted is liable to be rejected. Rates quoted by the contractor in tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, if a discrepancy is found, the rates which correspond with the amount worked out by the contractor shall unless otherwise proved be taken as correct. If the amount of an item is not worked out by the contractor or it does not correspond with the rates written either in figures or in words then the rates quoted by the contractor in words shall be taken as correct. Where the rates quoted by the contractor in figures and in words tally but the amount is not worked out correctly, the rates quoted by the contractor will unless otherwise proved be taken as correct and not the amount. In event no rate has been quoted for any item (s), leaving space both in figure(s), word (s) and amount blank, it will be presumed that the contractor has included the cost of this/these item(s) in other items and rate for such item(s) will be considered as zero and work will be required to be executed accordingly.
11. In the case of any tender where unit rate of any item/items appear unrealistic, such tender will be considered as unbalanced and in case the tenderer is unable to provide satisfactory explanation such a tender is liable to be disqualified and rejected.
12. All rates shall be quoted on the Schedule of Quantities form. The amount for each item should be worked out and requisite totals given. Special care should be taken to write the rates in figures as well as in words and the amount in figures only, in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figures, the word 'Rs' should be written before the figure of rupees and word 'P' after the decimal figures, e.g. 'Rs.2.15 P' and in case of words, the word, 'Rupees' should precede and the word 'Paise' should be written at the end. Unless the rate is in whole rupees and followed by the word 'only' it should invariably be upto two decimal places. While quoting the rate in Schedule of Quantities, the word 'only' should be written closely following the amount and it should not be written in the next line.

13. The contractor whose tender is accepted, will also be required to furnish by way of Security Deposit for the fulfillment of his contract, an amount equal to 5% of the tendered value of the work. The Security Deposit will be collected by deductions from the running bills of the contractor at the rates mentioned above as detailed in Schedule-A and the earnest money if deposited in Demand Drafts / Pay Orders/Bank Guarantees at the time of tenders, will be treated as a part of the Security Deposit. The Security amount will also be accepted in the shape of Demand Draft/Pay Order drawn in favour of QMTI payable at KIRKEE and issued by any Scheduled Bank.
14. On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from QMTI shall be communicated in writing to the CEO (QMTI).
15. GST, purchase tax, turnover tax, octroi, state work tax, statutory tax, Royalty or any other tax on materials in respect of this contract shall be payable by the Contractor and QMTI will not entertain any claim whatsoever in respect of the same.
17. The tender for the work shall not be witnessed by a contractor or contractors who himself/themselves has/have tendered or who may and has/have tendered for the same work. Failure to observe this condition would render, tenders of the contractors tendering, as well as witnessing the tender, liable to summary rejection.
18. The contractor shall submit list of works, which are in hand (Progress) in Technical Bid Performa in the following format :

Name of work	Name of client	Value of work Position of works in progress	Remarks

19. Addenda

Amendment to the Tender Documents (Technical & Financial Bids)

- 19.1 At any time prior to the deadline for submission of tenders, QMTI may, for any reason, whether at their own initiative or in response to clarifications requested by prospective tenderers modify the tender document by issuing Addenda.
- 19.2 Such Addenda will be sent in writing to all prospective tenderers who have received the tender documents (from QMTI) and will be binding on them. The tenderers shall duly sign and return the copy of the Addenda along with their tender separately for Technical and Financial Bid which shall form a part of their tender.

19.3 In order to afford prospective tenderers reasonable time in which to take such Addenda into account in preparing their tenders, QMTI may at their discretion extend the deadline for the submission of tenders.

19.4 No alteration whatsoever may be made in the text of the tender form by the tenderer; any remarks or explanations should be set out in a covering letter. The form of agreement is bound up with other documents, so that the tenderer may know what their liabilities and duties are and the entire tender form should be submitted to QMTI while submitting the tender.

20. Pre-bid Conference

20.1 The tenderer or his official representative is advised to attend a pre-bid conference on 30.09.26 at 1100 hrs at the office of QMTI.

20.2 The purpose of this meeting will be to clarify issues and to answer questions on any matters that may be raised at that stage.

20.3 The tenderer is requested to get clarification on any queries during pre-bid conference.

20.4 Queries relevant to the Tender Documents (Technical & Financial) shall be addressed to the CEO, QMTI. Reply to the tenderer's queries will be made by QMTI.

20.5 Proceedings of the pre-bid conference, including copies of the queries raised and responses given, will be furnished expeditiously to all those attending the meeting (and subsequently to all purchasers of the tender documents). Any modification of the tender documents listed in the para 14 of Notice Inviting Tender (NIT) which may become necessary as a result of the pre-bid conference shall be made by QMTI exclusively through the issuance of an Addendum (or Addenda) pursuant to Clause-19 of General Rules and Directions and not through the minutes of the pre-bid conference.

21. The rates for extra (additional) and substituted items will be governed by Clause 12 of Conditions of Contract. The procedure for sanction of extra/substituted items shall be as follows:

21.1 The Contractor shall initiate the process for submission of details of extra items/substituted items likely to occur in the work, along with complete justifications; on receipt of drawings, but prior to execution of work.

21.2 The extra/substituted item shall then be examined for admissibility by Engineer, QMTI & forwarded by him to CEO, QMTI. CEO QMTI will approve or reject execution of such extra items after necessary examinations.

21.3 On receipt of the approval in principle as stated in para 23.2; the execution of items of work (extra/substituted items) shall commence at site and the details of rates of extra/substituted items statements shall be provided by the Contractor to the Engineer, QMTI along with full justifications, vouchers/bills, etc.

21.4 The rate for such items shall be processed & recommended by Engineer, QMTI to CEO, QMTI in accordance with the provisions of Contract.

21.5 On receipt of extra/substituted statements & their rates from the Engineer, QMTI, the extra items/substituted items will then be processed by QMTI's Headquarters. The QMTI will accord their approval to the extra items/substituted items and forward the same to the contractor.

21.6 The rates of the extra items / substituted items shall be governed as follows:

21.6.1 On commencement/execution of items of work (extra items / substituted items), as mentioned under clause 23.3, the Contractor will be paid as follows:

Description	Payable Rate
Extra Items	As per rate analysis according to market rates
Substituted Items	As per rate analysis according to market rates

21.6.2 On approval of rates of the items (extra items / substituted items) by CEO QMTI, the Contractor shall be paid full 100% rates, after adjusting the advance paid on this account.

22. In case of deviations in the quantities of various items included in the Schedule of Quantities of the contract, the following procedure shall be followed :

22.1 In case deviations in quantities the payment of deviation in quantities shall be governed as follows :

22.1.1 The Deviation statement shall be initiated by Contractor and forwarded to Engineer, QMTI in accordance with the provisions of relevant clauses of contract, but prior to execution of work.

22.1.2 On receipt of Deviation statement by CEO, QMTI, the QMTI will approve or reject execution of such extra items after necessary examinations and forward the same to contractor.

22.1.3 On approval of Deviation statement by the QMTI, the execution shall commence at site and the Contractor shall be paid accordingly.

23. In case, the sum of the tendered cost of work & the total amount of extra items, substituted items, deviations in the quantities of various items provided in the Schedule of Quantities of the contract exceeds 10% of the tendered cost, the payments shall be restricted to 10% of the tendered cost and the balance payment shall be released on QMTI's approval for the excess amount/revised cost estimate for the work.

CLAUSES OF CONTRACT

CLAUSE 1

Security Deposit The person / persons whose tender(s) may be accepted (hereinafter called the contractor) shall permit QMTI at the time of making any payment to him for work done under the contract to deduct a sum at the rate of 5% of the gross amount of each running bill till the sum along with the sum already deposited as earnest money, will amount to security deposit of 6% of the tendered value of the work. Such deductions will be made and held by QMTI by way of Security Deposit unless he/ they has /have deposited the amount of Security at the rate mentioned above in the shape of Demand Draft/Pay Order drawn in favour of QMTI payable at KIRKEE and issued by any Scheduled Bank. In case Demand Draft/Pay Order/Bank Guarantee is furnished by the contractor to the QMTI as part of the security deposit and the Bank is unable to make payment against the said Demand Draft/Pay Order/Bank Guarantee, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the QMTI to make good the deficit.

All compensations or the other sums of money payable by the contractor under the terms of this contract may be deducted from, said security deposit or from any sums which may be due to or may become due to the contractor by QMTI on any account whatsoever and in the event of his Security Deposit being reduced by reason of any such deductions, the contractor shall within 10 days make good in the shape of Demand Draft/Pay Order drawn in favour of QMTI payable at KIRKEE and issued by any Scheduled Bank.

- i. The EMD will be released within 30 days of work completion without interest.
- ii. The Security Deposit shall be initially valid upto the stipulated date of completion plus 3 months beyond that. In case the time for completion of work gets delayed, the contractor shall get the validity of Security Deposit extended to cover such delayed time for completion of work.
- iii. Maintenance Clause – 5% of the total cost will be retained as a security deposit while making final payment for a period of 1 year from the date of completion of project. The contractor should sign a bond while receiving the security deposit that the maintainance of

the site will be done by him incase of any defect in the work done, for a period of 3 year for structural damages & 5 years for leakages.

- iv. The Security Deposit shall be returned to the contractor, without any interest.
- v. The QMTI shall not make a claim under the Security Deposit except for amounts to which QMTI is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
 - a) Failure by the contractor to extend the validity of the Security Deposit as described herein above, in which event the QMTI may claim the full amount of the Security Deposit.
 - b) Failure by the contractor to pay QMTI any amount due, either as agreed by the contractor or determined under any of the Clauses/ Conditions of the agreement, within 30 days of the service of notice to this effect by QMTI.
 - v) In the event of the contract being determined or rescinded under provisions of any of the clause/ condition of the agreement, the Security Deposit shall stand forfeited in full and shall be absolutely at the disposal of the QMTI.

CLAUSE 2

Compensation for Delay If the contractor fails to maintain the required progress in terms of Clause 4 of Clauses of Contract or to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to the QMTI on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below as the QMTI (whose decision in writing shall be final and binding) may decide on the amount of tendered value of the work for every completed day / month (as applicable) that the progress remains below that specified in Clause 5 of Clauses of Contract or that the work remains incomplete.

This will also apply to items or group of items for which a separate period of completion has been specified.

Compensation for delay of work	To be decided by CEO, QMTI
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The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the QMTI.

CLAUSE 3

When Contract Can Be

Determined

Subject to other provisions contained in this clause, the QMTI may, without prejudice to his any other rights or remedy against the contractor in respect of any delay, inferior workmanship, any claims for damages and/or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:

- i) If the contractor having been given by the Resident Engineer, QMTI a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or unworkmanlike manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.
- ii) If the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the CEO, QMTI (which shall be final and binding) he will be unable to secure completion of the work by the date for completion and continues to do so after a notice in writing of seven days from the CEO, QMTI.
- iii) If the contractor fails to complete the work within the stipulated date or items of work with individual date of completion, if any stipulated on or before such date(s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the CEO, QMTI.
- iv) If the contractor persistently neglects to carry out his obligations under the contract and/or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the CEO, QMTI.
- v) If the contractor shall offer or give or agree to give any person in QMTI service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for QMTI..

vi) If the contractor shall enter into a contract with QMTI in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the term of payment thereof have been previously disclosed in writing to the QMTI.

vii) If the contractor shall obtain a contract with QMTI as a result of wrong tendering or other non-bonafide methods of competitive tendering.

When the contractor has made himself liable for action under any of the cases aforesaid, the CEO, QMTI shall have powers:

a) To determine or rescind the contract as aforesaid (of which termination notice in writing to the contractor under the hand of CEO, QMTI shall be conclusive evidence). Upon such determination the Earnest Money Deposit, Security Deposit already recovered and Security Deposit under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the QMTI.

b) After giving notice to the contractor to measure up the work of the contractor and to take such whole, or the balance or part thereof, as shall be un-executed out of his hands and to give it to another contractor to complete the work. The contractor, whose contract is determined or rescinded as above, shall not be allowed to participate in the tendering process for the balance work.

In the event of above courses being adopted by the CEO, QMTI, the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provision aforesaid the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the CEO, QMTI has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

CLAUSE 4

Time and Extension

for Delay

The time allowed for execution of the works as specified in the Schedule 'A' or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the works shall commence in such time period as mentioned in Schedule 'A' or from the date of the handing over of the site/building whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid,

QMTI shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the earnest money & Security Deposit absolutely.

4.1 As soon as possible after the Contract is concluded the Contractor shall submit a Time and Progress Chart for each mile stone and get it approved by the QMTI. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the CEO, QMTI and the Contractor within the limitations of time imposed in the Contract documents, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate program has been agreed upon) complete the work as per milestones given in Schedule 'A'.

4.2 If the work(s) be delayed by:-

- i) force majeure, or
- ii) abnormally bad weather, or
- iii) serious loss or damage by fire, or
- iv) civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or
- v) delay on the part of other contractors or tradesmen engaged by CEO, QMTI in executing work not forming part of the Contract, or
- vi) any other cause which, in the absolute discretion of the authority mentioned in Schedule 'A' is beyond the Contractor's control.

Then upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the CEO, QMTI but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Resident Engineer, QMTI to proceed with the works.

4.3 Request for rescheduling of Mile stones and extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen days of the happening of the event causing delay on the prescribed form the CEO . The Contractor may also, if practicable, indicate in such a request the period for which extension is desired.

4.4 If any such case the authority mentioned in Schedule 'A' may give a fair and reasonable extension of time and reschedule the mile stones for

completion of work. Such extension shall be communicated to the Contractor by the CEO, QMTI in writing, within 3 months of the date of receipt of such request. Non application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the CEO, QMTI and this shall be binding on the contractor.

CLAUSE 5

Measurement of

Work Done

CEO, QMTI shall, except as otherwise provided, ascertain and determine by measurement the value in accordance with the contract of work done.

All measurement of all items having financial value shall be entered in Measurement Book and/or level field book so that a complete record is obtained of all works performed under the contract.

All measurements and levels shall be taken jointly by the Engineer, QMTI or his authorised representative and by the contractor or his authorised representative from time to time during the progress of the work and such measurements shall be signed and dated by the Engineer, QMTI and the contractor or their representatives in token of their acceptance. If the contractor objects to any of the measurements recorded, a note shall be made to that effect with reason and signed by both the parties.

If for any reason the contractor or his authorised representative is not available and the work of recording measurements is suspended by the CEO, QMTI or his representative, QMTI shall not entertain any claim from contractor for any loss or damages on this account.

If the contractor or his authorised representative does not remain present at the time of such measurements after the contractor or his authorised representative has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurement, then such measurements recorded in his absence by the Engineer, QMTI or his representative shall be deemed to be accepted by the Contractor.

The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for measurements and recording levels.

Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision

in the relevant Standard Method of measurement or any general local custom. In the case of item which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available then a mutually agreed method shall be followed.

The contractor shall give not less than seven days' notice to the Engineer, QMTI or his authorised representative in-charge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineer, QMTI or his authorised representative in-charge of the work, who shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of measurements without such notice having been given or the Engineer, QMTI's consent being obtained in writing the same shall be uncovered at the Contractor's expense, or in default thereof no payment or allowance shall be made for such work the materials with which the same was executed.

Engineer, QMTI or his authorised representative may cause either themselves or through another officer of the QMTI to check the measurements recorded jointly or otherwise as aforesaid and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.

It is also a term of this contract that recording of measurements of any item of work in the measurement book and/or its payment in the interim, on account of final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.

CLAUSE 6

Conditions of

RA bills

Contractor can submit RA bills. The RA bill should be of minimum 10 lakhs and the time between two bills should be minimum 1 (one) month.

CLAUSE 7

Completion Certificate

and Completion Plans

Within ten days of the completion of the work, the contractor shall give notice of such completion to the Engineer, QMTI and within thirty days of the receipt of such notice the Engineer, QMTI shall inspect the work and if there is no defect in the work shall premises on which the work shall be executed all scaffolding, surplus materials, rubbish and all huts and sanitary arrangements required for his/their work people on the site in connection with the execution of the works as shall have been erected or constructed by the contractor(s) and cleaned off the dirt from all wood work, doors, windows, walls, floor or other parts of the building, in, upon, or about which the work is to be executed or of which he may have had possession for the purpose of the execution thereof, and not until the work shall have been measured by the Engineer, QMTI or his authorized representative. If the contractor shall fail to comply with the requirements of this Clause as to removal of scaffolding, surplus materials and rubbish and all huts and sanitary arrangements as aforesaid and cleaning off dirt on or before the date fixed for the completion of work, the Engineer, QMTI may at the expense of the contractor remove such scaffolding, surplus materials and rubbish etc., and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the contractor shall have no claim in respect of scaffolding or surplus materials as aforesaid except for any sum actually realised by the sale thereof.

CLAUSE- 7 A

Contractor to Keep

Site Clean

The splashes and droppings from white washing, colour washing, painting etc., on walls, floor, windows, etc. shall be removed and the surface cleaned simultaneously with the completion of these items of work in the individual rooms, quarters or premises etc. where the work is done without waiting for the actual completion of all the other items of work in the contract. In case the contractor fails to comply with the requirements of this clause, the Engineer, QMTI shall have the right to get this work done at the cost of the contractor either departmentally or through any other agency. Before taking such action, the Engineer, QMTI shall give ten days notice in writing to the contractor.

CLAUSE 8

Payment of

Final Bill

The final bill shall be submitted by the contractor in the same manner as specified in interim bills within one months of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Engineer, QMTI whichever is earlier. No further claims shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by CEO, QMTI, will, as far as possible be made within the period specified hereunder, the period being reckoned from the date of receipt of the bill by the CEO, QMTI or his authorized representative complete with accounts of dismantle materials, if any.

CLAUSE 9

Material to be provided

by the Contractor

The contractor shall, at his own expense, provide all materials, required for the works (if water and electricity will be provided by QMTI the contractor will have to pay according to the rates approved by QMTI). The contractor shall, at his own expense and without delay, supply to the Engineer, QMTI samples of materials to be used on the work and shall get these approved in advance. All such materials to be provided by the Contractor shall be in conformity with the specifications laid down or referred to in the contract. The contractor shall, if requested by the Engineer, QMTI furnish proof, to the satisfaction of the Engineer, QMTI that the materials so comply. The Engineer, QMTI shall within thirty days of supply of samples or within such further period as he may require intimate to the Contractor in writing whether samples are approved by him or not. If samples are not approved, the Contractor shall forthwith arrange to supply to the Engineer, QMTI for his approval fresh samples complying with the specifications laid down in the contract. When materials are required to be tested in accordance with specifications, approval of the Resident Engineer, QMTI shall be issued after the test results are received.

The Contractor shall at his risk and cost submit the samples of materials to be tested or analysed and shall not make use of or incorporate in the work any materials represented by the samples until the required tests or analysis have been made and materials finally accepted by the Engineer, QMTI. The Contractor shall not be eligible for any claim or compensation

either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of materials.

The Engineer, QMTI or his authorised representative shall at all times have access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery are being obtained for the works and the contractor shall afford every facility and every assistance in obtaining the right to such access.

The Engineer, QMTI shall have full powers to require the removal from the premises of all materials which in his opinion are not in accordance with the specifications and in case of default the Engineer, QMTI shall be at liberty to employ at the expense of the contractor, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Engineer, QMTI shall also have full powers to require other proper materials to be substituted

thereof and in case of default the Engineer, QMTI may cause the same to be supplied and all costs which may attend such removal and substitution shall be borne by the Contractor.

CLAUSE 10 A

Advance Payment

Advance equal to 80% of the value of the materials present on site may be given, if requested by the contractor. Such advance shall be in Two or More installments to be determined by the QMTI at their sole discretion. The first installment of such advance shall be released by the QMTI to the contractor on a request made by the contractor to the CEO, QMTI in this behalf. The second and subsequent installments shall be released by the QMTI only after the contractor furnishes a proof of the satisfactory utilization of the earlier installment to the entire satisfaction of the Engineer, QMTI.

CLAUSE 10 B

Dismantled Material

QMTI's property

The contractor shall treat all materials obtained during dismantling of a structure, excavation of the site for a work, etc. as QMTI's and such materials shall be disposed off to the best advantage of QMTI according to the instructions in writing issued by the Engineer, QMTI.

CLAUSE 11

Work to be Executed in

Accordance with

Specification, Drawings, etc. The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner both as regards materials and otherwise in every respect in strict accordance with the specifications. The contractor shall also conform exactly, fully and faithfully to the design, drawings and instructions in writing in respect of the work assigned by the Engineer, QMTI and the contractor shall be furnished free of charge one copy of the contract documents together with specifications, designs, drawings and instructions as are not included in the standard specifications of Public Works Department or in any Bureau of Indian

Standard or any other, published standard or code or, Schedule of Rates or any other printed publication referred to elsewhere in the contract. The contractor shall comply with the provisions of the contract and with the care and diligence execute and maintain the works and provide all labour and materials, tools and plants including for measurements, structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these, is specified or is reasonably inferred from the contract. The Contractor shall take full responsibility for adequacy, suitability and safety of all the works and methods of construction.

CLAUSE 12

Deviations/ Variations

Extent and Pricing

The Engineer, QMTI shall have power

- (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and
- (ii) to omit a part of the works in case of nonavailability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the CEO, QMTI and such alterations omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered,

additional or substituted work which the contractor may be directed to do in the

- (iii) manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do the main work except as hereafter provided.

12.1 The time for completion of the works shall, in the event of any deviations resulting in additional cost over the tendered value sum being ordered, be extended after discussion with the CEO if requested by the contractor.

12.1.2 Rates for such altered, additional or substituted work shall be determined by the Resident Engineer, QMTI as follows:

- i) If the rate for altered, additional or substituted item of work is specified in the Schedule of Quantities, the contractor shall carry out the altered, additional or substituted items at the same rate.
- ii) If the rate for any altered, additional or substituted item of work is not specified in the Schedule of Quantities, the rate for that item shall be derived after discussion with the CEO or Engineer.
- iii) In the event of the contractor failing to inform the Resident Engineer, QMTI within the stipulated period of time, the rate which he proposes to claim, the rate for such item shall be determined by the Engineer, QMTI on the basis of market rate(s).
- vi) Deviation limit is as following:
 - (a) Deviation limit shall apply to individual Items.
 - (b) The value of overall deviation limit shall not exceed 10% of the Tendered value of work.

CLAUSE 13

Foreclosure of Contract due
to Abandonment or Reduction
in Scope of Work

If at any time after acceptance of the tender QMTI shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, the CEO, QMTI shall give notice in

writing to that effect to the contractor and the contractor shall act accordingly in the matter. The contractor shall have no claim to

any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

The contractor shall be paid at contract rates full amount for works executed at site and, in addition, a reasonable amount as certified by the CEO for the items which could not be utilized on the work to the full extent in view of the foreclosure.

The contractor shall, if required by the CEO furnish to him books of account, wage book, time sheets and other relevant documents and evidence as may be necessary to enable him to certify the reasonable amount payable under this condition.

CLAUSE 14

Carrying out part work

at risk & cost of contractor

If contractor:

i) At any time makes default during currency of work or does not execute any part of the work with the due diligence and continues to do so after a notice in writing of 7 days in this respect from the Engineer, QMTI; or

ii) Commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days even after a notice in writing is given in that behalf by the Engineer, QMTI; or

iii) Fails to complete the work (s) or items of work with individual dates of completion, on or before the date(s) so determined and

does not complete them within the period specified in a notice given in writing in that behalf by the Engineer, QMTI.

The CEO without invoking action under clause 3 may, without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to QMTI, by a notice in writing to take the part work/part incomplete work of any item (s) out of his hands and shall have powers to:

- a) Take possession of the site and any materials, constructional plant, implements, stores, etc. thereon; and/or
- b) Carry out the part work/part incomplete work of any item (s) by any means at the risk and cost of the contractor.

The CEO shall determine the amount, if any, is recoverable from the contractor for completion of the part work/part incomplete work of any item (s) taken out of his hands and execute at the risk and cost of the contractor, the liability of contractor on account of loss or damage suffered by QMTI because of action under this clause shall not exceed 10% of the tendered value of the work.

In determining the amount, credit shall be given to the contractor with the value of work done in all respect in the same manner and at the same rate as if it had been carried out by the original contractor under the terms of his contract, the value of contractor's materials taken over and incorporated in the work and use of plant and machinery belonging to the contractor. The certificate of the CEO as to the value of work done shall be final and conclusive against the contractor provided always that action under this clause shall only be taken after giving notice in writing to the contractor. Provided also that if the expenses incurred by the department are less than the amount payable to the contractor at his agreement rates, the difference shall not be payable to the contractor.

Any excess expenditure incurred or to be incurred by QMTI in completing the part work/part incomplete work of any item(s) or the excess loss of damages suffered or may be suffered by QMTI as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to QMTI in law or per as agreement be recovered from any money due to the contractor or any account, and if such money is insufficient, the contractor shall be called upon in writing and shall be liable to pay the same within 30 days.

If the contractor fails to pay the required sum within the aforesaid period of 30 days, the CEO shall have the right to sell any or all of the contractors' unused materials, constructional plant, implements, temporary building at site etc. and adjust the proceeds of sale thereof towards the dues recoverable from the contractor under the contract and if thereafter there remains any balance outstanding, it shall be recovered in accordance with the provisions of the contract. In the event of above course being adopted by the CEO the contractor shall have no claim to

compensation for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements or made any advance on any account or with a view to execution of the work or the performance of the contract”.

CLAUSE 15

Suspension of work

i) The contractor shall, on receipt of the order in writing of the CEO, QMTI, (whose decision shall be final and binding on the contractor) suspend the progress of the works or any part thereof for such time and in such manner as the Engineer, QMTI may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of the following reasons :

- a) on account of any default on the part of the contractor or;
- b) for proper execution of the works or part thereof for reasons other than the default of the contractor; or
- c) for safety of the works or part thereof.

The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Engineer, QMTI.

In the above cases the contractor shall be entitled to an extension of time equal to the period decided by CEO, QMTI.

CLAUSE 16

Action in case Work not

done as per Specifications

All works under or in course of execution or executed in pursuance of the contract shall at all time be open and accessible to the inspection and supervision of the Engineer, QMTI, his authorized subordinates in charge of the work and all the superior officers of QMTI or authorized representative of QMTI, and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractors, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the contractor's agent shall be considered to have the same force as if they have been given to the Contractor himself.

If it shall appear to the Resident Engineer, QMTI or his authorised subordinates in charge of the work that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract the contractor shall, on demand in writing which shall be made within 1 month of the completion of the work from the Engineer, QMTI specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the failing to do so within a period specified by the CEO, QMTI in his demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under Clause 2 of the Clauses of Contract (for non-completion of the work in time) for this default.

In such case the Resident Engineer, QMTI may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the competent authority may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and/or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the QMTI to be conveyed in writing in respect of the same will be final and binding on the contractor.

CLAUSE 17

Contractor Liable for Damages,
defects during

Maintenance Period

If the contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, roads, road curb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wires, trees, grass or grassland, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any

cause whatever or if any defect, shrinkage or other faults appear in the work within twelve months after a certificate final or

otherwise of its completion shall have been given by the Resident Engineer, QMTI as aforesaid arising out of defect or improper materials or workmanship the contract shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Engineer, QMTI cause the same to be made good by other workman and deduct the expense from any sums that may be due or at any time thereafter may become due to the contractor, or from his security or the proceeds of sale thereof or of a sufficient portion thereof. The security deposit of the contractor shall not be refunded before the expiry of twelve months after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later.

CLAUSE 18

Directions for execution

of Works

All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the CEO, QMTI who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.

CLAUSE 19

Settlement of Dispute

& Arbitration

Except where otherwise provided in the contract all questions and disputes relating to the meaning of the specifications, design, drawings and instructions here-in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter:

- i) If the contractor considers any work demanded of him to be outside the requirements of the contract, or disputes any drawings, record or decision given in writing by the Engineer,

QMTI on any matter in connection with or arising out of the contract or carrying out of the work, to be unacceptable, he shall promptly within 15 days request the Engineer, QMTI in writing for written instruction or decision. Thereupon, the Engineer, QMTI shall give his written instructions or decision within a period of one month from the receipt of the contractor's letter.

If the Engineer, QMTI fails to give his instructions or decision in writing within the aforesaid period or if the contractor is dissatisfied with the instructions or decision of the Engineer, QMTI, the contractor may, within 15 days of the receipt of the Engineer, QMTI decision, appeal to the Director (Technical) who shall afford an opportunity to the contractor to be heard, if the latter so desires, and to offer evidence in support of his appeal. The Director (Technical) shall give his decision within 30 days of receipt of contractor's appeal. If the contractor is dissatisfied with this decision, the contractor shall within a period of 30 days from receipt of the decision, give notice to the QMTI for appointment of arbitrator failing which the said decision shall be final binding and conclusive and not referable to adjudication by the arbitrator.

ii) Except where the decision has become final, binding and conclusive in terms of Sub Para (i) above disputes or differences shall be referred for adjudication through arbitration by a sole arbitrator appointed by the QMTI. If the arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever another sole arbitrator shall be appointed in the manner aforesaid. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.

It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each such dispute alongwith the notice for appointment of arbitrator and giving reference to the rejection by the Director (Technical) to the appeal.

It is also a term of this contract that no person other than a person appointed by QMTI, as aforesaid should act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitration at all.

It is also a term of the contract that if the contractor does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within 30 days of receiving the

intimation from the Engineer, QMTI that the final bill is ready for payment, the claim of the contractor shall be deemed to have been waived and absolutely barred and the QMTI shall be discharged and released of all liabilities under the contract in respect of these claims.

The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 2019 or any statutory modifications or reenactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.

It is also a term of this contract that the arbitrator shall adjudicate on only such disputes as are referred to him by the QMTI and give separate award against each dispute and claim referred to him and in all cases shall give reasons for the award.

It is also a term of the contract that if any fees are payable to the arbitrator these shall be paid equally by both the parties.

It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fees, if any, of the arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award (including the fees, if any, of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner, such costs or any part thereof shall be paid and fix or settle the amount of costs to be so paid.

CLAUSE 20

Lumpsum Provisions

in Tender

When the estimate on which a tender is made includes lump sum in respect of parts of the work, the contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this contract for such items, or if the part of the work in question is not,

in the opinion of the CEO, QMTI payable of measurement, the CEO, QMTI may at his discretion pay the lump-sum amount entered in the estimate, and the certificate in writing of the CEO, QMTI shall be final and conclusive against the contractor with

regard to any sum of sums payable to him under the provisions of the Clause.

CLAUSE 21

Action where no

Specification's are specified

In the case of any class of work for which there is no such specifications as referred to in Clause 11 of Clauses of Contract such work shall be carried out in accordance with the Bureau of Indian Standards Specifications. In case there is no such specifications in Bureau of Indian Standards, the work shall be carried out as per manufacturers specifications, if not available then as per District Specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer, QMTI.

CLAUSE 39

Termination of Contract

on death of contractor

Without prejudice to any of the rights or remedies under this contract if the contractor dies, the QMTI shall have the option of terminating the contract without compensation to the contractor.

SPECIAL CONDITIONS

NAME OF WORK :-RENOVATION & MODIFICATION OF DIESEL MECHANIC WORKSHOP & CLASSROOM AT QUEEN MARY'S TECHNICAL INSTITUTE (QMTI), KIRKEE. AT QUEEN MARY'S TECHNICAL INSTITUTE (QMTI), KIRKEE.

1. SECURITY AND PASSES ETC.

- 1.1 Contractors attention is invited to condition 25 of IAFW-2249. He shall employ only Indian Nationals after verifying their antecedent and loyalty. He shall, on demand, by the Engineer-in-Charge, submit a list of his agents, employees and work people concerned and shall satisfy the Engineer-in-Charge, as to the bonafides of such people.
- 1.2 The Engineer-in-Charge shall, at his discretion have the right to issue passes, as per rules and regulations of the installation/are in force to control the admission of the contractor, his agents, employees and work people to site of the work or any part thereof. Passes shall be returned at any time, on demand by Engineer-in-Charge or the authorities concerned and in all cases, on completion of work.
- 1.3 The contractors and his agent, employees and work people shall observe all the rules promulgated by the authorities controlling the installation/area in which work is to be carried out e.g. prohibition of smoking and lighting, fire precautions, search of persons on entry and exist keeping to specific routes observing specified timings etc. Nothing extra shall be admissible for any man-hour etc. lost on this account.

2. INSPECTION OF SITE

- 2.1 For the purpose of inspection of site, the tenderer is advised to contact the Chief Executive Officer, QMTI and visit the site of work with his permission. The tenderer shall be deemed to have inspected and examined the sites and its surrounding. Whether or not he actually visitsthesite and to have satisfied himself before submitting his tender as to the nature of the ground and soil (so for as practicable), the nature of work and materials necessary for completing work and the means of access to the site, the accommodation he may required and in general shall be deemed to have himself obtained all necessary information on Inspection of site as to risks, contingencies and other circumstances which may influence or affect his tender.
- 2.2 No extra payment consequent on any mistake or misunderstanding or otherwise on this account will be allowed. Contractor shall make suitable approaches to convey men, materials, plants and machinery required for the satisfactory completion of work. On completion of work the site shall be cleared for all temporary approaches. Tendered rates shall inter-alia be deemed to include for the said approaches.

3. MATERIALS AND SAMPLES

- 3.1 Materials provided by the contractor incorporation in the works, shall, unless otherwise specified in the particulars specifications, comply with requirements of the relevant Indian Standards (IS of the year of publication/edition) as specified in the MES, SSR Part-I. The contractor may, however at his own discretion provide and incorporate in the works, such material complying with the requirement of any corresponding, subsequently amended or revised edition of I.S. without an adjustment in the contract sum.
- 3.2 The contractor shall produce samples of all material, articles, fittings, accessories etc., that he proposes to use and get them approved in writing by the Chief Executive Officer, QMTI. The materials, articles etc, as approved shall be labeled as such and such be signed by the Chief Executive Officer, QMTI and the contractor or contractor's Representative. These samples shall be kept in the custody of the Engineer-in-Charge.
- 3.3 The brands of all materials, articles, fittings etc, approved together with the names of the manufacturers and firms from which supplies have been arranged shall be recorded in the materials passing register.
- 3.4 The materials for which IS do not exist, which are specified in these particulars specifications, shall confirm to the samples kept in the Chief Executive Officer, QMTI office, shall comply with the requirement of these samples. The contractor (s) is/are advised to inspect the samples, which remain open for inspection with prior consultation with Chief Executive Officer, QMTI during working hours. The contractor shall be deemed to have full knowledge of the samples whether he inspects them or not.
- 3.5 If materials in metric sizes shown on drawings are not available, the contractor shall provide materials of equivalent sizes, which shall not be less than the metric size/dimensions under any circumstances.
- 3.6 All items, equipments, fittings and components will bear ISI certification Marks. If licenses for use of ISI certificate marks are not issued for any item such items shall confirm to relevant latest IS. If item is manufactured confirming to IS, the same shall be of best quality approved by Chief Executive Officer, QMTI. Where makes are mentioned for any item, it will be one of the specified makes, in addition to the above requirements.

4. ADMISSION TO SITE

- 4.1 "The contractor shall be allotted the area as marked on site plan/lay out plan for the purpose of storage of materials erection of temporary workshop, stores etc. The contractor shall pay nominal rent of Rs 1/- per year or part of a year in respect of each and every separate area of land allotted to him. No defence land is available for accommodation of labour for which the contractor shall make his own arrangement at his own expense.
- 4.2 The area as occupied shall be vacated by the certified date of completion and site of work shall be cleared as stipulated in condition 49 of IAFW-2249.

4.3 The person who is directly employed by the contractor for the purpose of execution of work shall only be allowed to stay and work in these areas. The contractor shall ensure that outsiders who are not directly connected with the work do not stay in this area. Chief Executive Officer, QMTI shall exercise proper check for the same.

4.4 The contractor shall ensure proper sanitation of the area to the satisfaction of the Engineer-in-Charge.

5. **MINIMUM WAGES PAYABLE TO LABOUR**

5.1 The Contractor shall have no extra claim what so ever, if on account of local factors and or regulations, he is required to pay the wages in excess of minimum wages as described above during the execution of work other than as admissible.

6. **CONTRACTORS, REPRESENTATIVES, AGENTS, SERVANTS & WORKMAN**

The contractor shall employ only Indian National as his representatives, Agents, Servants and workman and verify their antecedents and loyalty before employing them for the works. He shall ensure that no person of doubtful, antecedents and nationality is in any way, associated with the works. For reasons of technical collaboration or other consideration, the employment of any foreign national is unavoidable the contractor shall furnish full particulars to this effect to the Accepting Officer at the time of submission of his tender. The Chief Executive Officer, QMTI shall order the contractor to cease to employ in connection with this contract, any representative, agent, Servant & Workman employees whose continues employment at his opinion is undesirable. The contractor shall not be allowed any compensation on this account.

7. **PERIOD FOR KEEPING THE TENDER OPEN**

The tender shall remain open for acceptance for a period of 30 days from the date of specified for the submission, excluding the date of submission.

8. **SIGNING ON CONTRACT DOCUMENTS**

The person signing the tender on behalf of another or on behalf of a Firm shall attach with the tender a proper power of attorney duly executed in his favour by such other person or by all the parties stating that he has authority to bind such other persons or the Firm as the case may be in all matters pertaining to the contract including the Arbitration clause.

9. **OUT OF POCKET EXPENSES**

No out of pocket expenses incurred by the tenderer in submitting his tender shall be reimbursed whether tender is accepted or not.

10. **CLEANING DOWN**

The contractor shall clean all floors, remove cement/lime/paint drops, clean joinery, glass etc., touch up all painters' work and carry out all the other necessary items of marks to make the premises clean and tidy before handing over the buildings

11. **WATER AND ELECTRICITY**

Tenderers attention is invited to the fact the water and electricity required for the work including curing will be available at the site of work at the nearby available water point. The contractor shall have to make arrangements for storing / transporting of water if required by him. The recovery of water will be affected at PMC rate which is applicable. The contractor will have to pay according to rates discussed with QMTI for the water and electricity. In case of non availability of water due to shortage at site contractor will make arrangements for water and electricity at site out of his own expenses.

12. **RECORD OF CONSUMPTION OF CEMENT**

- 12.1 For the purpose of keeping record of cement issued and consumed in works, the contractor shall maintain a properly bound register in the form approved by the Engineer-in-Charge showing daily receipt from MES, quantity used in works and balance in hand. This register shall be signed daily by the contractor's representative and Engineer-in-Charge in token of their verification of its correctness. The check will not, however, absolve the contractor or his responsibility to justify the consumption of cement at the time of finalization of his account.
- 12.2 The register shall be kept at site in the safe custody of the contractor during progress of the work and he shall on demand, produce the same for verification of inspecting officer. On completion of the work, the register shall be handed over to the Engineer-in-Charge for record with MES.

13. **AVAILABILITY OF QUARRY**

"No quarries on defence land are available".

14. **DAMAGE TO EXISTING STRUCTURE / BUILDING**

Any damage done to the existing structure during the execution of work shall be made good by the contractor at his own cost and site of work left clean and tidy on completion. Rectification or reinstatement, making good etc., shall conform to the standard of materials originally used in the work and finished work shall match with existing work in all respect to the entire satisfaction of the Chief Executive Officer, QMTI and authorized engineer.

15. **LEVIES AND TAXES**

The tenderer shall note and ensure that their tendered rates are inclusive of all statutory levies including VAT, works contract tax, labor welfare cess and any taxes/levies imposed by

Maharashtra state / Central Government. The tenderers shall also note that all taxes / levies are to be mentioned in Tender as per Government liabilities.

In terms of State Government, Sales tax labour welfare rules in vogue and as promulgated from time to time sales tax on works contracts labour welfare cess will be recovered at source from payments to be made to contractor at rates as specified by the Govt.

16. **STANDARD OF WORKMANSHIP AND FINISHES**

The contractor shall carry out certain items of work and services such as wall floor, painting, plaster ceiling, joinery and the like and toilet fittings in the toilet under the close supervising of the Engineer-in-Charge. On approval of these samples of workmanship by Chief Executive Officer, QMTI those items will be labeled as guiding samples so that further work may be executed confirming to these samples.

17. No Reimbursement/refund shall made in cost of variation in prices of any materials and labors during progress of work.

18. **LABOUR (REGULATION AND ABOLITION) ACT**

Contract labour (Regulation & Abolition) Act 1970 is applicable to MES contractors. Rates quoted by the tenderer shall be deemed to take into account the cost etc. required to comply with the provisions contained in the said act and the rules framed under the said act.

19. **CONDITIONS FOR WORKING IN UN-RESTRICTED AREA :**

- (a) The works under the contract lies in UN-RESTRICTED AREA.
- (b) The contractor, his agents, employees work people and vehicle may require to pass through the unit lines in which case the Engr-in-Charge shall at his discretion have the right to issue passes, control their admission to the site of work or any part thereof. The contractor shall on demand by the Engr-in-Charge submit a list of personnel etc. concerned and shall satisfy the Engr-in-Charge as to the bonafides of such people. Please issued shall be returned at any time on demand by the Engr-in-Charge and in any case on completion of the work.
- (c) The contractor and his agent, employees and work people shall observe all the rules promulgated by the authority controlling the area in which the work is to be carried out e.g. prohibition of smoking, lighting and keeping to specified routes, occasional restricted hours of working etc. Any person found violating the security rules laid down by the authority, shall be immediately expelled from the area without assigning any reason whatsoever and the Contractor shall have no claim on this account. Nothing extra shall be admissible for any man hours lost on this account.

20. **ARBITRATION AND JURISDICTION** Matters of dispute shall first be discussed between both the parties and authorized Engineer. If matter is not resolved it shall be referred to an Arbitrator who shall be appointed by Chairman QMTI. When so needed the legal dispute shall be within the jurisdiction of pune.

PARTICULAR SPECIFICATIONS

I.0 GENERAL

- 1.1 Work under this contract shall be carried out in accordance with Schedule 'A', Special Conditions, Particular Specifications, drawings including notes thereon (unless specified otherwise) and general rules and specifications given in PWD DSR.
- 1.2 The term 'general Specification' referred to hereinbefore as well as referred to in shall mean the specifications contained in the PWD DSR.
- 1.3 General Rules, Specifications, Special Conditions, method of measurements, preambles in the PWD DSR shall be deemed to be applicable to the work under this contract, unless specifically mentioned otherwise in these documents.
- 1.4 The term "as specified", wherever appears in tender documents and drawings, relates to relevant particular specifications and in its absence general specifications.
- 1.5 Particular specifications in this section given hereinafter shall be generally applicable to all works covered under Schedule 'A'. The particular specifications are brief and are only to particularize, amend and emphasize the specifications given in PWD DSR, which are not repeated.
- 1.6 Where specifications/provisions given in these particular specifications are at Variance with the provisions/specifications given in, specifications/provisions given in these particular specifications, hereinafter, shall be followed.
- 1.7 Where specifications for any item of work are not given in PWD DSR or in these particular specifications, specifications as given in relevant Indian Standard or Code of practice shall be followed.
- 1.8 Reference to any drawings which is mentioned on the drawing forming part of the tender but not specifically mentioned in the list of drawings shall be deemed to be forming part of the tender. The tenderer shall refer such drawings/details in the office of Accepting Officer/concerned Chief Executive Officer, QMTI before quoting his tender.
- 1.9 The contractor shall not take cognizance of Note(s) appearing on drawings regarding the bearing capacity of soil taken into consideration while designing the foundation, as it is for departmental purpose only.

2.0 LAYOUT

2.1 In laying out buildings centre line dimensions mentioned in the drawings or reduced there from shall be strictly followed.

3.0 MATERIALS

- 3.1 All materials to be supplied by the contractor for incorporation in work shall conform to relevant specifications/IS.
- 3.2 In case specification of materials needed for incorporation is not contained anywhere in the contract documents, the specification of such materials proposed to be incorporated in work shall be got approved in writing from the Chief Executive Officer, QMTI before incorporation in the work. Contractor is advised to check availability, lead, time of procurement from these suppliers before quoting.
- 3.3 As far as practicable all manufactured articles other than those manufactured in contractor's workshop at site shall bear ISI certification mark and which are readily available in the market and are given in Special Condition. It is mandatory for the contractor that ISI certified marked items/articles as listed therein shall only be incorporated in the work. Names of manufactures/suppliers of certain items/materials is given in Appendix 'B'. The Contractor is advised to check availability lead time of procurement from these suppliers before quoting.
- 3.4 Local materials such as stone aggregate, sand, lime etc shall generally conform to the sample kept in Chief Executive Officer's office in addition to their conformity with relevant specifications given in the tender documents. The samples of such materials shall be got approved from Chief Executive Officer, QMTI in writing before the materials are brought at site in bulk. The contractor shall submit samples of materials to Chief Executive Officer, QMTI through Engineer-in-Charge Chief Executive Officer, QMTI for approval.
- 3.5 Letters conveying approval of samples/materials by Chief Executive Officer, QMTI will internal mention source of supply/name of manufacturer, trade name/brand (if applicable) and reference to clause of the tender documents containing specification of particular materials.
- 3.6 The contractor and executives will ensure that the materials incorporated in the work are identical with the approved samples.

4.0 EXCAVATION AND EARTHWORK :

4.1 SURFACE DRESSING:

- 4.1.1 Surface dressing shall be carried out to a depth 15 cm in soft / loose soil to the extent required for the area covered by the buildings in order to remove vegetation and/or small inequalities all

around the building to a width of three meters beyond the outer edge of plinth protection. The site shall be dressed to slope away from the structure. Cost of surface dressing is deemed to be included in unit rates of buildings of Sch 'A' Part I.

- 4.1.2 All spoils obtained from surface dressing shall be disposed off to a distance n.exc. 50 m as directed by the Engineer-in-Charge.

4.2 EXCAVATION

- 4.2.1 Excavation shall be done to the depth as shown on drawings/as required at site and as directed by Engineer-in-Charge Chief Executive Officer, QMTI
- 4.2.2 Decision of the Chief Executive Officer, QMTI shall be final, conclusive and binding as regards classification of soils and rocks.
- 4.2.3 Unit rate quoted by the contractor against works cover under Sch 'A' shall include cost of excavation & earth work in any type of soil and rock (soft/lose, Hard/Dens soil shall be classified as a soil and soft rock, hard rock, hard rock by chiseling classified as a rock.
- 4.2.4 **FILLING** :-Soil obtained from excavation (except earth/ spoil obtained from surface dressing) may be used for filling, If approved by Chief Executive Officer, QMTI and authorized engineer.

4.3 PRECONSTRUCTION ANTITERMITE TREATMENT IN FOUNDATION AND GROUND FLOORS

- 4.3.1 Pre constructional anti termite chemical treatment, which includes treatment of bottom and sides of foundation trenches/pits, filling in trenches/pits, and below floors, junctions of walls and floors, external perimeter of building(s) and surroundings of conduits/pipes, shall be carried out all as specified in PWD DSR.
- 4.3.2 Anti termite treatment shall be got done through approved specialist agency who shall be a member of Indian Pest Control Association holding valid license as per clause 13 of insecticides Act 1968. Persons employed to do the anti termite treatment shall be qualified as per rules 1971. The specialist agency may be any one from the list which is available with Chief Executive Officer, QMTI. Prior approval of Chief Executive Officer, QMTI will be obtained before ordering the work on specialist agency.
- 4.3.3 Anti termite treatment shall be carried out with emulsion of Chlorpyrifos 20 EC, or Dursban 50 TC purchased direct from the manufacturer or his authorized agent. Original purchased vouchers shall be produced before the Chief Executive Officer, QMTI for verification and defacement by Chief Executive Officer, QMTI against this contract. Chemicals banned by the

Government for use in anti termite treatment shall not be used. Chemical brought by the contractor shall be tested before incorporation in the work and cost of testing shall be borne by the contractor.

4.3.4 The defects liability period of anti termite treatment shall be 10 years and the contractor shall be responsible to keep the entire buildings free from termite infection for a period of 10 years after the date of taking over the completed buildings from the contractor. The contractor may obtain a similar guarantee from the specialist firm engaged by him for the purpose.

4.3.5 Please refer Special Conditions/particular specifications for the other details and retention of Security deposit for the purpose of guarantee.

4.3.6 Anti termite treatment shall be carried out to buildings at Sl. No(s) 1 of Sch 'A'

4.4 HARD CORE

Refer PWD DSR. Hard core shall be of broken trap stone of gauge not exceeding 63 mm, well graded to provide dense and compact sub grade. Unless otherwise indicated or shown in drawings/specifications, the thickness of hard core shall be 100 mm consolidated. Hard core filling where indicated on drawings shall be spread, leveled in layers not exceeding 15 cm thick well rammed, watered and consolidated. Moorum may be used to fill interstices in hard core. Thickness wherever shown on drawings/schedule of finishes shall be treated as consolidated thickness.

5. CONCRETE.

5.1 MATERIALS

5.1.1 **CEMENT** : Cement shall be ordinary Portland cement all as specified in Appendix 'A' to particular specifications and shall be procured by contractor at his own cost.

5.1.2 AGGREGATE:

a) Fine aggregate (sand) shall be stored at site in bins or in dumps on brick platform or by using other approved method so as to avoid contamination and risk of shoveling earth, or other impurities along with it while in use.

b) All coarse and fine aggregates shall conform to samples *kept in the office of the Chief Executive Officer, QMTI.*

5.2. Cost of materials, labour and other incidental including transportation charges for all test including the routine work test specified hereinafter shall be borne by the contractor. However

the departmental laboratory facilities where available will be extended with the charges. Following data and results thereof shall be submitted to the Chief Executive Officer, QMTI by the contractor for approval of mix design prior to commencement of the actual works :-

- (a) Grading and density of coarse and fine aggregates proposed to be used.
- (b) 7 to 28 days compressive strength of the cement concrete.
- (c) Trial mix proportion of aggregates, cement, any admixture and water for consistency (slumps) tests and their results.
- (d) The strength characteristics obtained both for 7 and 28 days compressive strength for the selected trial mixes, using a minimum of 3 water cement ratios
- (e) Results of additional trials till the desired slump value were reached and the target mean strength is obtained to achieve the specifications.

5.2.1 For design mix, it will be express condition that only weigh-matching shall be followed and no conversion of weights into volumes shall be permitted.

5.2.2 **Quantity of cement for pricing of tender :-**

For the purpose the tender the contractor shall consider minimum cement content of 360 Kgs per cubic meter for design mix M-25 concrete with moderate exposure condition.

5.2.2.1 The mix design shall be carried out from the institution/laboratories mentioned hereinbefore and works shall be executed accordingly, keeping in view the requisite safe strength criteria of concrete and structural stability and the contractor shall be fully responsible for the same. No price adjustment shall be made on account of variation in actual cement contents for design mix approved in case the same exceeds the minimum cement content of 360 kgs per cubic meter of M-25 grade concrete. If cement content as per actual mix design works out lower than minimum cement contents specified mentioned above, the contractor shall provide minimum cement content as indicated above i.e. 360 Kgs per cubic meter and nothing extra shall be payable on this account. The contractor shall be responsible for the use of requisite quantity of cement to achieve the quality and strength of the concrete as per various provisions of IS 456-2000. The contractor is deemed to have verified and obtained details applicable to this effect at a particular station before quoting tender and no claim whatsoever, shall be entertained on account of variation in the quantity of other ingredients of concrete.

5.3. Contractor shall take every precaution to strengthen the shuttering as required to withstand the additional pressure that may be created due to pumping of concrete. Workability of concrete shall be as specified in IS-456-2000.

5.3.1 If certain admixtures are required to be added to RMC either in plant or at place of delivery to improve the workability the same shall be added as per manufacturer's instructions with prior approval of Chief Executive Officer, QMTI. Quantity of admixture at any stage should not

exceed the maximum limit as specified by manufacturer. Admixture if any to be used should be compatible with cement

- 5.3.2 Contractor if desires to use admixture shall conduct the test for cement, admixture etc., in an independent testing lab approved by Chief Executive Officer, QMTI without extra cost to the Govt.
- 5.3.3 Revision of design mix due to change in aggregate proportions due to change in size and relative density/bulk density of aggregate shall be immediately brought to the notice of the Chief Executive Officer, QMTI and in all cases provisions contained in IS-456-2000 for mix considerations/acceptance criteria shall be complied with.
- 5.3.4 The time between mixing of concrete at manufacturer's yard and transportation and delivery at site shall not be more than 1 hours. In case longer time is unavoidable the same can be permitted by Chief Executive Officer, QMTI adopting using admixtures all as permissible as per IS without any extra cost to the Govt.
- 5.3.5 One set of 7 cubes of every 50 cum of concrete production or every 50 batches whichever is greater or as per the discretion of Engineer-in-Charge shall be cast for testing 28 days and 7 days cube strength additional cubes should be Cast.

5.4. **MIXING**

- 5.4.1 All concrete shall be mixed in mechanical concrete mixer. Where only small quantity of cement concrete is involved, hand mixing may be adopted if approved by the Engineer-in-Charge. The contractor should arrange to wash out and clean the mixing drum on completion of work and or on stoppage of work if stoppage is for more than 20 minutes.

5.4.2 **TRANSPORTING. DEPOSITING AND COMPACTING**

Transporting depositing and compacting generally shall be carried out as specified in PWD DSR.

5.4.3 **PROTECTION AND CURING OF CONCRETE**

This shall be carried out in accordance with specifications, given in PWD DSR.

5.5 **PROTECTION AND CURING OF CONCRETE**

This shall be carried out in accordance with specifications, given in PWD DSR.

5.6 **PRECAST CEMENT CONCRETE**

- 5.6.1 Lintels (without chajja) with a span of less than 1.5 m clear and PCC bed blocks, copings and the like may be precast at the discretion of the contractor all as specified in Clause 4.20 of PWD DSR as applicable. All precast articles shall be set in CM (1:3) with joint to match.

5.7 STRIPPING TIME FOR FORM WORK: The contractor's attention is invited to the stipulation in Clause 4.11.6.3 regarding stripping of form work. The periods stipulated therein are for concrete using ordinary Portland cement.

5.8 LEAVE/FORM HOLES AND CHASES :The contractor as the work proceeds should Leave/form holes/chases in concrete/masonry and RCC where and as directed by the Engineer-in-Charge and make good in cement and sand mortar (1:3) when ordered to do so.

5.9 FINISH TO CONCRETE SURFACE : Finish to exposed surface of all concrete works shall be as specified below :-

- a) Exposed surface of RCC lintels, beams, parti walls, Parapets columnsetc, which are continuous with the adjoining plastered surfaces of walls shall be plastered, specifications of plaster being same as that adopted for wall plastering. Plaster shall be applied all over the exposed surfaces of such concrete including projected portion of columns, beams/brackets etc.
- b) Exposed RCC/Concrete surfaces such as soffits of floor/roof slabs, chajjas, ^canopies parapets etc including wherever ceiling of rooms wherein false ceiling has been catered for shall be finished fair and even by plastering as specified in PWD DSR. In addition, soffits of floor/roof slabs shall also be treated with Sagol finish as directed by the Engineer-in-Charge.
- c) Exposed surfaces of concrete other than those referred above shall be finished as specified.

5.10 PCC COVING : PCC coving with PCC (1:2.4) type B-0 mixed with integral water proofing compound shall be provided at junction of RCC chajja with wall/lintel/beam to the radius of 75 mm irrespective whether shown or not shown on drawings. Coving shall be 15 cm high on wall and to the full length of chajja.

5.11 FILLETING

Provide triangular filletings to skirting / dado as directed by Engineer-in-Charge with CM (1:3) finished even and smooth without using extra cement.

5.12 CONCRETE PADDING : Padding under bearing of RCC lintels to make up the height of opening in wall wherever required shall be done with PCC (1:3:6) type C-1. PCC blocks shall not be cut to under sized dimension and used to make up the required height in such positions.

5.13 RCC LINTELS : The bearing of lintels shall be 15 cm or effective depth (Whichever is more), unless otherwise shown on drawings.

5.14 Lintels (without chajja) for opening not exceeding 1.50 meters clear span may be precast at contractor's option. However these shall be priced as cast-in-situ lintels in the event of deviation if any. All other lintels and bands shall be cast-in-situ.

5.15 DRIP COURSE/THROATING / WEATHERING : Following works shall be executed whether shown on drawings or not :-

- i) Provision of proper drip course and / or throating and weathering to all chajja, roof, cills, coping and the like.
- ii) All flat surfaces exposed to weather shall be finished with imperceptible slope for smooth run of rain water. (in cases no slope is mentioned in drawings or specified).

5.16 WINDOW CILL

5.16.1 PCC window cill shall be In Grade M-15 (Nominal mix) finished even & smooth without using extra cement in the locations as shown on drawing.

5. 17 PLINTH PROTECTION :

5.17.1 Irrespective of what ever shown on drawings provide plinth protection 750 mm wide with 40 mm thick PCC(1:2:4) Type B-1 over 75 mm thick consolidated bed of hardcore over rammed moorum/soil filling. Plinth/protection shall be laid to slope of 1:50 Exposed edges of plinth protection shall be provided with triangular filleting in CM 1:3. The top surfaces and edges shall be finished fair without using extra cement. PCC shall be laid in alternate bays and the joints in bays in plinth protection shall be filled with mastic filling comprising 1 part of heated bitumen 85/25 or 90/100 grade and 3 parts of sand (all by weight).

5.19 PRECAST CEMENT CONCRETE SOLID AND HOLLOW BLOCK

5.19.1 MATERIAL:

(a) **Cement:** Cement shall be ordinary Portland cement grade 43. As specified in Apex 'A' to Particular Specification

(b) **Fly Ash** : Fly ash conforming to IS 3812 (Part 2) may be used (optional) for part replacement of fine aggregate up to 20 percent by weight.

(c) **Aggregates**

(i) The aggregates used in the manufacture of blocks shall be clean and free from deleterious matter and shall conform to the requirement of IS 383.

(ii) The grading of the combined aggregates shall conform as near as possible to the requirements indicated in IS 383 for 20mm nominal size all-in-aggregates..

5.19.2 The blocks shall conform to IS-2185 (Part- I) 2005

5.19.3 Solid blocks shall be of grade C4 & C5. generally 200mm wide and 300 mm wide solid blocks shall be of grade C5 and 100 mm solid blocks shall be of grade C4.

6. PRELAMINATED PARTICLE BOARD

6.1 Pre laminated particle board where indicated/shown in drawing shall be three layered medium density particle board bonded with phenol formaldehyde synthetic resin adhesive with melamine finish, conforming to IS-3087 and IS-12823 Type S and of brand 'NOVAPAN, KITLAM, ANCHORLAM, BHUTAN BOARD, ECO BOARD, NOVATEK SUPER, Colour shade, tint and design of the lamination shall be as approved by the Chief Executive Officer, QMTI. Thickness of the board shall be 19 mm if not indicated on drawings.

6.2 FLUSH DOORS

6.2.1 Flush door shutters shall be provided at locations indicated on drgs and to the dimensions shown on drg.

6.2.2 Flush shutters shall be solid core type with block board core with commercial veneer facing on both sides.

6.3 **FRP DOORS** All the toilet/bath & WC *door* shutter where indicated shall be made of solid panel FRP door.

7.0 BUILDER'S HARDWARE

7.1 GENERAL

7.1.1 All articles of builder's hardware shall be new, soundly and strongly made, finished to correct shape, free from defects or flaws of any type, shall have smooth action and *conform* to sample kept in the office of Chief Executive Officer, QMTI.

7.1.2 Samples of builders hardware shall be submitted to the Chief Executive Officer, QMTI for *approval* before *ordering* in Bulk

7.1.3 All articles of builder's hardware shall bear ISI marking. In case any *item/fitting* with ISI mark is not manufactured then it shall conform to the *relevant* ISI specifications and/or specifications given in PWD DSR for the relevant item.

7.2 HARDWARE

irrespective of wherever shown on drawings, provided aluminum anodised *hardware* fittings to doors. The size of the builders hardware and no's to be provided of each type shall be as per shown on schedule of Iron mongery on respective drawings".

7.2.1 But hinges shall be of cold rolled mild steel medium weight as per IS-1311. Hinges shall be bright finished with smooth surfaces.

7.2.2 **SCREWS:**

7.2.3 Bow handle shall be aluminum alloy fabricated handles with continuous base plate and shall be as per PWD DSR. The shutters of built in ward robes/cupboards, wherein rim/mortise locks or knobs are shown on drg, handles shall not be *provided*.

7.2.4 Aldrop bolts (i.e. sliding bolts hasp & staple) shall be aluminum anodized extruded section and as per PWD DSR.

8. **STEEL AND IRON WORK**

8.1 **GENERAL**

All steel required for the work under the contract shall be procured, supplied and incorporated in the works by the contractor under his own arrangement.

8.1.1 Grade and Quality Steel supplied by the contractor shall confirm to the following grades and quality **Steel for concrete reinforcement**

Reinforcement bars shall be High Strength deformed steel bars produced by Thermo Mechanical Treatment process (TMT steel bars of grade Fe 500) meeting all the requirements of IS 1786.

8.1.2 However, non structural steel as for guard bars, hold fast, railing, grill, chowkhat etc galvanized steel sheets, and the structural steel where total requirement under the contract is less than 5.00 tonnes may be procured from authorized dealers of main producers after obtaining permission of the Accepting Officer in writing.

8.1.3 The contractor shall produce original vouchers from main manufacturer's / secondary producers for the total quantity of steel supplied, under each consignment and to be incorporated in the work. The original vouchers shall be kept on record of the Chief Executive Officer, QMTI duly defaced by Engineer-in-Charge and authenticated.

8.1.4 **TESTING AND TEST CERTIFICATE**

a. The contractor shall produce manufacturer's Test certificate in original along with the test sheet giving the result of each mechanical test as applicable and the chemical composition of

the steel supplied as specified in relevant IS codes, duly signed by the manufacturer with each consignment.

Note: Production of the test certificate in respect of steel required for guard bars, hold fasts, grills and like by the contractor may not be insisted upon.

- b. The original test certificate shall also be kept on record in the office of Chief Executive Officer, QMTI duly defaced by Engineer-in-Charge and authenticated.
- c. Chief Executive Officer, QMTI has the right to get one more sample (3 specimen) tested if he is not satisfied with the consignment. However testing charges for the additional sample over and above frequency shall be borne by the department.
- d. If the test results as per manufacturer's test certificates or of independent testing of random samples are not as per criteria laid down in the relevant BIS provisions, the entire lot which is represented by the samples shall be rejected. All such rejected materials shall be removed and replaced by the contractor at his own cost forthwith.
- e. Cost of transportation of samples (to and fro) to the approved laboratory / test house and all testing charges shall be borne by the contractor.

8.2 PRESSED STEEL DOOR FRAMES : Pressed steel door frames where indicated on drawings, shall be as specified in PWD DSR. Filling in pressed steel frame shall be with PCC (1:3:6) Type C-0 concrete. For pricing of deviation rates in PWD DSR subject to contract percentage shall be applicable irrespective of minor variation in size/shape. Mild steel pressed/sheet shall be 1.25 mm thick. PS frames shall be factor/ made Each door frame shall be provided with If stiffener all as shown on drawing.

8.3 STEEL WINDOW / VENTILATORS : Steel windows shall be all as specified PWD DSR with the following modification and shall be provided wherever indicated on drawings :-

- (a) Striking plate shall be of mild steel.
- (b) Frames shall be electrically flush butt welded.

8.3.1 The hinges for glazed shutter shall be M.S. projecting type friction hinges & for gauged shutter shall be projecting type non friction hinges according to angle of opening indicated/ required. The handles, shall be of mild steel stove enameled finish, Steel windows shall be fixed with lugs/ screws as specified in IS. However lugs shall be provided to gauged shutter opening inside though provided with non friction hinges.

8.3.2 Steel windows shall have a shop coat of red oxide primer at the time of receipt at site and shall be applied with two coats of synthetic enamel paint after fixing in position.

8.3.3 MS RAILING

Ms Railing wherever shown on dwrgs shall be provided all as per the details, pattern shown on drawing. Mortise hole left in concrete shall be grouted in CM (1:2) and finished to match with the adjoining surfaces of concrete/wail. All the exposed surfaces of steel shall be painted with two coats of synthetic enamel painting over a coat of primer.

9.0 **ROOFING:**

9.1 **ROOFING GENERAL** :-GI Sheet with purlins .

10. **FLOORING**

10.1 **Sub base**

Cement concrete sub floor (i.e. PCC sub base laid below floor finish) in ground floor shall be in plain cement concrete 1:4:8 types D2 using 40mm graded stone aggregate with 75mm thickness. PCC sub floor need not be laid in alternate bays and the same shall be worked up to an even surface to receive the floor finish as specified. Irrespective of what is shown on drawing ground floor finishes shown in schedule of finishes dig no. shall be laid over 75mm thick sub base over 100mm thick hard core over moored filling.

10.2 **PCC flooring**

10.2.1 PCC floors/wearing coat shall be plain cement concrete 1:2:4 using 20mm graded stone aggregate and same shall be provided at locations mentioned in drawings to the thickness indicated in drawings. Floors shall be finished even and smooth using extra cement.

10.2.2 Cement concrete floor/ wearing coat shall be laid in alternate bays not exceeding 1.20 sqmeters. 15mm glass dividing strips shall be provided to form joint in all cement concrete floors and wearing coat. The dividing strips shall be 3mm less than the thickness of PCC floor/ wearing coat. PCC floor/ wearing coat up to 40mm thickness only shall be provided with glass dividing strips.

10.2.3 The surface of PCC floor / wearing coat shall be finished with a steel trowel to an even and smooth surface using extra cement.

10.4 **Ceramic Tile Flooring**

10.4.1 Wherever shown on drawing/indicated in schedule of finishes, ceramic tiles in flooring shall be conforming to IS-13712, grade B-II(a).

10.4.2 Tiles shall be of glossy/matt finish (except WC batch, toilet) as approved by Chief Executive Officer, QMTI. Tiles in WC, batch, toilet shall be of with 'non-skid finish' as approved by Chief Executive Officer, QMTI.

10.4.3 The size of tiles shall be 600x600x7mm to 8mm as approved by Chief Executive Officer, QMTI.

10.4.4 The tiles shall be laid over 20mm thick bedding layer in CM 1:6 and shall be as specified in PWD DSR

10.4.5 The tiles shall be tested at the sampling rate given in IS 137.12.

10.4.6 The make of tile shall be as given in Appendix "C and as approved by Chief Executive Officer, QMTI.

10.4.7 Wherever shown on drawing/indicated in schedule of finishes ceramic tiles in dado/skirting shall be confirming to IS-137.12 grade B-II (a).

10.4.8 Tiles shall be of 'glossy' finish as approved by Chief Executive Officer, QMTI.

10.4.9 The size of tiles shall be 300 x 200 x 7 to 8 mm thick as approved by Chief Executive Officer, QMTI.

10.4.10 The tiles shall be laid over 10mm thick bedding/ backing layer in CM 1:4 and shall be as specified in SSR Part-I.

10.4.11 The tiles shall be tested at the sampling rate given in IS-137 12 10.8.12 the make of tile shall be as given in

11.0 PLASTERING

Plastering shall be carried out all as shown in schedule of finishes/drwg's and /or specified hereinafter .

11.1 INTERNAL PLASTER

- (a) Providing internal cement plaster approx. 20mm- 30mm thick in single coat in cement sand. mortar 1:4 with neeru finish to concrete or brick surfaces, in all positions including Chickenmesh at joints, scaffolding and curing.

11.2 EXTERNAL PLASTER

- 11.2.1 (a) Providing and fixing external sand faced plaster in single coat (20mm) approximate including scrapping and cleaning of existing surface.

11.3 PLASTER GROOVE AND CHICKEN WIREMESH

11.3.1 Junction of wall plaster internally with concrete floors/roof slabs/beams / columns shall be provided with plaster grooves.

11.3.2 The chicken wire mesh to be provided on the either side of all junctions in dissimilar construction for external plaster and shall be galvanized mild steel fabric cloth 0.56 mm

nominal dia of wire and average width of aperture 12 mm, 7.5 cm wide both sides of junctions before the external plaster is applied,

11.3.3 The position where the PCC block walling is on the both sides of lintel/beams/columns, the width of chicken wire mesh shall be 7.5 cm on either side and fixed with tinned tacks on PCC walls.

12.0 **WHITE WASHING/COLOUR WASHING :**

12.1 **GENERAL**

12.1.1 White wash/colour wash shall be provided as specified in PWD DSR. The workmanship shall be as described in PWD DSR for new work.

12.2 **WHITE WASH**

12.2.1 Two coats of white (lime) wash after preparation of surfaces shall be applied to surfaces as indicated in Schedule finishes unless otherwise specified in this specifications. Preparation and application shall be as per PWD DSR

12.3 **APEX PAINT**

12.3.1 Two coats of APEX paint shall be applied to surfaces where in Schedule of finishes, Apex paint shall conform to IS-5410 and shall be applied as specified in PWD DSR. Color/Shade of cement paint shall be approved by Chief Executive Officer, QMTI.

12.4 **OIL BOND DISTEMPER :**

12.4.1 Where indicated on drawing, provide two coats of oil bond distemper all as specified in PWD DSR.

12.5 **PAINTING:**

12.5.1 Painting shall be of quality not inferior to those required by the relevant IS and as per PWD DSR.

12.5.2 Workmanship and preparatory works shall be as per PWD DSR as applicable for new works.

12.5.3 Painting shall be with priming coat, under coat and one finishing coat unless mentioned otherwise.

12.5.4 Primer for wood work shall be pink primer and for steel shall be red oxide generally. Priming coat shall be redone if more than six months have lapsed before executing the under coat.

12.5.5 The final finish of paint shall be glossy suitable for, internal / external use as approved by the Chief Executive Officer, QMTI.

12.5.6 Galvanised steel articles (sheet, pipes etc and wire cloth) and builders hardware shall be left untreated.

12.5.7 All coats of paint shall be synthetic enamel paint and shall be obtained from any one of the manufacturers listed in Appendix 'C' and shall be of first grade/first quality.

12.5.8 In case of deviations, SSR rates shall be applied adjusted by the contractor's percentage.

12.5.9 Exposed surface of all steel and wood items shall be painted with two coats of synthetic enamel paint over a coat of primer unless otherwise specified elsewhere.

13.0 **GLAZING**

13.1 **SHEET GLASS**

13.1.1 Sheet glass for glazing shall be of selected quality (A'grade) plain, clear, good quality free from specks, bubbles, smoke wanes, air holes and other defects and shall conform to IS-2835. The thickness of sheet glass where not indicated on drawings shall be 4 mm nominal thickness for the panes not exceeding 0.5 Sqm each and 5 mm (nominal thickness) for panes exceeding 0.5 Sqm each. Glazing shall be done with sheet glass to all window except in situations wherein pin headed glass has been specified here-in-after.

13.2 **PIN HEADED GLASS**

13.2.1 Pin headed specified pattern white figured glass shall be provided in the following situations :-

a) Windows / Ventilators of WC and bath / toilets.

13.3 Each pane of glass shall be in whole piece.

13.4 Glazing to windows/vents shall be carried out as per PWD DSR.

13.5 Putty for wood and metal shall conform to IS-419.

14.0 **Sanitary and Plumbing**

14.1 Unit rate for buildings listed in Sch 'A' includes for all sanitary appliances, fittings and fixtures shown and/or mentioned on drawings including waste pipes up to gully trap and soil pipe from WC upto first manhole. Tenderer attention is drawn to Note 16 of Schedule 'A'.

14.2 All sanitary appliances & fittings shall be vitreous China, white, first quality conforming to Is 2556 and shall bear ISI mark. The sanitary appliance & fittings shall be procured from any one of the firms mentioned hereinafter and as approved by the Chief Executive Officer, QMTI.

- 14.3 All soil pipes upto the cast iron duck foot bend 45 cm below the ground level shall be 100 mm dia. Vent pipes shall be 75 mm dia & anti syphonage pipes shall be 50 mm dia. These pipes shall be cast iron centrifugally cast (Spun) pipes of spigot & socket type.
- 14.4 All waste pipes embedded under floor in wall & up to surface gully (i.e. gully trap) shall be 75 mm dia (nominal internal dia) cast iron (Spun) pipes spigot/socket type. Waste water discharge pipe from wash hand basin to nahani trap shall however be of GI pipe as specified hereinafter.
- 14.5 Cast iron (Spun) pipe with their accessories/fittings shall be withers & shall be approved make conforming to IS-3989 / 1984.
- 14.6 Soil/Waste/vent/antisiphonage pipes & fittings shall be fixed to walls 50 mm clear of wall, distance pieces & spike nails to run 65 mm into tarred hard wood plug built into walls if < with wooden plugs & screws 22 gauge for securing to concrete. Pipes & fittings shall be jointed & fixed as specified in PWD DSR.
- 14.7 Cast iron pipes and fittings below ground level & concealed under floor shall be jointed with lead joints. Other cast iron pipes & fittings shall be jointed properly with mixture of cement, linseed oil & chopped harp well pressed into the joint.
- 14.8 All drain pipes from surface gully (i.e. gully trap) up to first manhole outside the building as well as vent pipe connecting cast iron soil pipe duck foot bend below ground level upto first manhole shall be 100 mm dia salt glazed stoneware .pipe of approved make-grade A' conforming to IS-651. Bedding, packing under & haunching shall be in PCC 1:3:6 Type C-2 as specified DSR.

14.9 WC Pedestal Type (European water closet)

Pedestal type (wash down) water closet shall be white pedestal pan (pattern I) of height 390mm including concealed "P" or "S" trap, white or black plastic sheet and cover shall be thermosetting conforming to IS-2548 (Part I) and shall be flat with hinging device of brass chromium plated. Each seat is provided with 3 nos. of rubber buffers. 10 litres discharge-capacity PVC low level flushing cistern all as specified here-in-before for squatting pattern WC shall be provided with necessary fixing Arrangement and fixing to wall. The flush pipe shall be

32mm dia LDPE pipe with working pressure rating 4 kg/sqcm required length. with suitable plastic coupling, nuts and other accessories all as specified in paras PWD DSR. Fixing shall be done as specified in PWD DSR.

14.10 Wash Hand-Basin

- 14.10.1 Wash hand basin shall be flat back of size 550 x 400 mm conforming to IS-2556 (Part IV) with built in over flow and single tap hole, waste fittings, rubber plug and chain, a pair of standard MS brackets for fixing to walls with 32mm dia PVC flexible acid resistant waste pipe of working pressure rating 4 kgs/Sq cm and 15 mm dia brass chromium plated pillar tap (one

number). WHB shall be provided as shown in the drawings and connected to waste pipe with PVC reducer. Wash hand basin shall be as specified in PWD DSR. The mild steel brackets shall be painted with two coats of aluminium paint as specified in PWD DSR.

14.11 **Mirror**

Polished sheet glass mirror shall be 5.0mm thick. These shall be Lion brand or Atul brand, Kohinoor brand or Golden fish brand as approved by Chief Executive Officer, QMTI and shall be of 1st quality. The size of mirror shall be 600mm x 450mm with beveled edges and square corners polished edged with fused PVC frame work including backing and fixed to wall

15.0 **3 Tier / 2 tier RCC shelving**

15.1.1 RCC shelves shall be in M-25 (Design mix) as per drawing. Top and sides of the shelves shall be finished even and smooth with extra cement. Soffits shall be given three coats of white wash. RCC shelves shall be provided at locations shown on drawing with full beading. Half brick walls/PCC block wall 100mm thick in partitions in shelf shall be specified hereinbefore and exposed surface of partition shall be plastered in CM 1:6, 10mm thick and given 3 coats of white wash.

15.2 Tier Cudappah shelving shall be provided at locations shown on drawing. Thickness of cudappah where shown on drawing shall be 20 to 30mm Cudappah stone shall be polished on top side.

16.0 **INTERNAL WATER SUPPLY**

16.1 **SCOPE OF WORK :**

The work under this contract shall comprise of :-

a) Provision of CPVC & VPVC water tubing and fittings all as described in Schedule A' shown on drawings and specified herein.

b) Provision of water supply lines to overhead service tank, from overhead tanks to WC's, wash hand basins, taps etc, including necessary controls.

c) Provision of bib cocks, stop cocks, showers roses, ball valves etc.

17.2 **WORKMANSHIP**

a) Pipes running on walls shall be all as specified in Clause 18.51 of SSR Part -1.

b) Water storage tanks including pipes, fittings/ fixtures specials and connections are covered under lump sum price of building. However connection to tanks shall be as under:-

i) Inlet shall be provided with valve/stop cock on the riser and controlled by ball valve in the tank.

ii) Outlet shall be provided with valves/stop cock and shall be 5cm above bottom of tank.

iii) Anti-airlock or air vent pipe shall be provided and branched from outlet.

- iv) Overflow shall be provided slightly above level of inlet pipes and should be discharged in conspicuous spot clear off the roof and not on the roof.
- v) Washout pipe of 25 mm dia of 15 cm short length shall be provided and shall be plugged at the end.

19. **SPECIFIC REQUIREMENTS OF WORK PROCESS**

- (a) All the pipe line/fittings are to be fixed consecutively & serial wise. Fixing of pipe line and then inserting of fittings will not be allowed.
- (b) After the completion of testing all the chases, holes are to be properly filled with plaster in cm (1:3), properly finished so as to match with the existing surfaces.

20. **MATERIALS :**

- (a) Pipes running on wall shall be fixed all as specified in PWD DSR.
- (b) MS Galvanized tubes and fittings shall be as specified in PWD DSR and grade mentioned in Schedule 'A'. MS fittings shall be cast malleable type or wrought iron fittings.
- (c) Bib taps and stop valves shall be of brass cast forged all as per PWD DSR.'
- (d) All pipes, fittings, Bib cock etc shall be of approved make with ISI certification marks.

21. **WATER TUBBING**

- a). water tubing shall be galvanized MS screwed and socketed and tubing and fittings shall comply with relevant IS specification in para 18.4 Part I and shall be medium grade.
- b) All CPVC & UPVCs and fixtures such as stop cock, Bib cock shall bear ISI certification mark or of specified make.

22. **TESTING**: Testing shall be carried out all as per PWD DSR. The whole of the works is to be tested at the contractor's expense at such time and in such a manner as the MEDICAL

DIRECTOR (PRC) shall direct and it shall be done to his entire satisfaction. Test result shall be jointly recorded by contractor and Engineer-in-Charge for supply from each service tank.

23. **INTERNAL ELECTRIFICATION**

22.1 **GENERAL**

- a) The materials, workmanship and the installation as a whole will generally be governed by specifications, and rules and the principles laid down in SSR 1991, Part I Section 19, Specifications given here under are in amplification and modifications, the specifications given here under will take precedence.

- b) Items of electrical work shall be deemed to include internal minor items to make the installations in the building complete in all respects, duly tested and certified as fit for switching electric supply on the taking inside the buildings.
- c) Due regard be given for the door and windows, openings , location of water taps, locations of sinks etc. in fixing the run of cables and positions of fittings and control switches and outlet points.
- d) The installation shall strictly comply with the provisions contained in the latest edition of Indian Electricity Rules and latest edition of the Indian Standard Electrifications as applicable to the work, except where such regulations and rules are modified by the specifications. It shall be of high standard and approved construction used in modern electrical works as regards design as well as workmanship. Complete works shall be suitable in all respects for the type of voltage indicated in the relevant items
- e) All electrical works shall be executed by skilled licensed workers, Only licensed supervisors and workers will be employed, and the contractor on demand by the Engineer-in-charge shall produce such evidence of qualifications for his workers/supervisors either at the commencement of the work or any time thereafter.
- f) The PVC casing capping and concealed conduits shall be marked on the walls / structure and approval of the Chief Executive Officer, QMTI obtained in writing before fixing etc as applicable.
- g) Locations of fittings and accessories indicated on drawing are tentative and may be changed by the Engineer-in-charge during execution of works. No adjustment of rates / prices shall be made on this account.
- h) All the electrical fittings, accessories, wiring and runs of cable shall be clear of doors, windows, built in cupboards, opening etc.
- j) Looping in system of wiring shall be used throughout installation. Connectors may, however be used at the discretion of Engineer - in --charge due to unavoidable practical difficulties.

24 .Note :- For any specification or process of work not mentioned in the tender the descision by architect will be final.

Appendix 'A'

1. CEMENT

- 1.1 **GENERAL.** Cement required for the work under the contract shall be procure, supplied in incorporated in the work by contractor under his own arrangement. Cement shall be tested quality and shall comply with IS specification.

Type of cement for the subject work to be procured in incorporated in the work shall be OPC/PPC grade 43/53 in accordance with IS –8112-1989

1.2 SOURCE OF PROCUREMENT

Cement will procured by the contractor from any one of following main producers from suppliers of cement.

- a) ACC
- b) L & T
- c) JK Cement
- d) The India Cement (Coromandal)
- e) Rajashri
- f) Birla Corporation Ltd (Cement Division)

The contractor shall furnish the particulars of the manufacturer/supplier of the cement along with the date of manufacture to the Chief Executive Officer, QMTI for every lot of cement separately. The cement so brought shall be fresh and in no case older than 60 days from the date of manufacture. Before placing the order for supply of cement by the contractor, he shall obtain written approval from Chief Executive Officer, QMTI regarding name of manufacturer, quantity of cement etc.

1.3. TESTING OF CEMENT.

- A. The contractor shall submit the manufacturers test certificate in original along with test sheet giving the result of each physical test as applicable and the chemical composition of the cement or authenticated copy thereof, duly signed by the manufacturer with each consignment. The test certificate and test sheet shall be furnish with each batch of cement. The test shall be carried out any other recognized laboratories so designated by Chief Executive Officer, QMTI.

The entire cost of testing shall be borne by the contractor.

Appendix 'B'

SOURCE OF LOCAL MATERIAL

- | | | |
|---------------------------------|---|-----------|
| a) Stone aggregate for concrete | - | Local |
| b) Sand | - | Local |
| c) Cement | - | Birla co. |

Notes:-

Source indicated above are for guidance only the contractor may at his discretion procure material from other sources without any extra cost to government.

The tenderer shall amongst other things also ascertain all information such as Royalties, Taxes, Duties and other charges etc, On the materials and no additional payment shall be made on account of the foregoing.

SIGNATURE OF CONTRACTOR

Chief Executive Officer, QMTI

DATED : _____

For Accepting Officer

Appendix 'C'

APPROVED NAMES FOR PRODUCTS TO BE INCORPORATED IN WORKS

Sl No	Name of Product	Make /Name of Firm
4	Vitrified Tiles	a) RAK b) Asian or Equivalent
5	Synthetic Enamel Paints	a) Asian
6	Cement Base paints	d) Asian
7	Dry/Oil bound distemper and emulsion.	a) Asian,
8	C.P & Sanitary Fittings	a) Jaguar essco
12	MCB, RCCB	a) Schneider, b)Siemens
16	.Piano type switches/flush type sockets/switch socket combi/bell push/ceiling rose/call bells/buzzer/lamp holders etc.	a) Vinay Aura or Equivalent
18	Rigid/PVC Conduits &Accessories.	a) Diamond b) Precision c)Asian d) Modi e)Prince f) Finolex g) Protoplast.
19	F/tube light fittings/street light fittings and other luminaries / Fittings with HPSV/HPMV lamps and CFL fittings	a) Crompton b) WIPRO c) Philips d) SYSKA
20	UPVC (Sch 40) ,CPVC (Sdr 11) & PVC Type A pipes	a) Paras
21	ExhaustFans/Wall Fans/Pedestal/Ceiling fans	a) Crompton b) Bajaj c) Usha d) Havells
22	House wiring cables	a) Polycab c)RR

Appendix 'D'

REFERENCE IMAGES

1. Lab Stool
- 2.



2. Teachers Chair



3. Hand Wash Point Workshop



4. Hanging batten LED Tube



5. Teachers Table -



6. Students Table –



7. PVC Foam Name Plate & Grill to Doors -

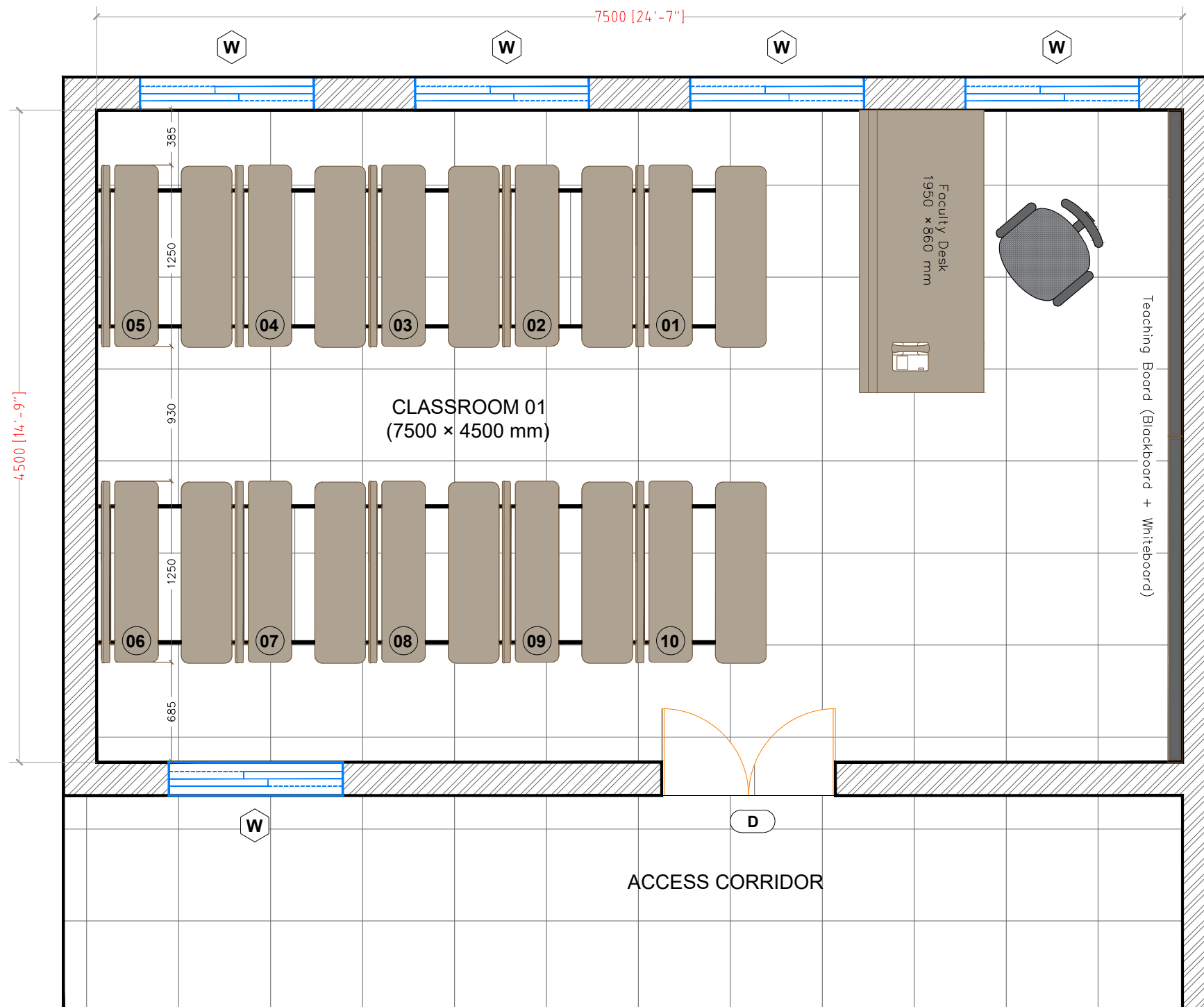


8. Grill to Windows -



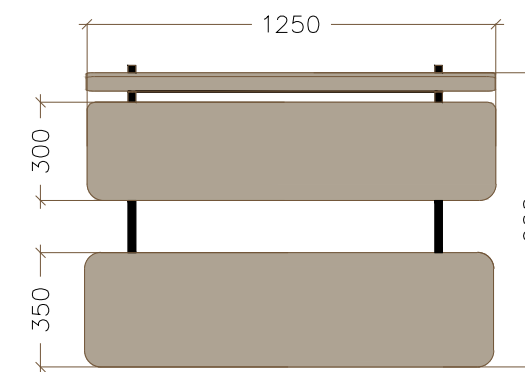
9. Display boards -





Door Schedule			
Sr.No	Size (W × H)	Description	Lintel from SSL (mm)
D	1200 X 2100	Double-leaf uPVC flush door as per approved design, colour, and finish.	2100

Window Schedule				
Sr.No	Size (W × H)	Description	Sill from SSL (mm)	Lintel from SSL (mm)
W	1200 X 900	3+1 track powder coated aluminum sliding window with mosquito net.	1200	2100
V	800 X 600	Powder-coated aluminum top-hung ventilator with push-open operator.	3100	3700



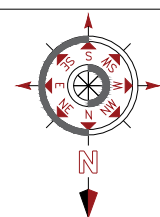
Typical Student Bench
12050 × 900 mm

FURNITURE LAYOUT PLAN

NOTES :

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DRAWING NOT TO BE SCALED
ARCHITECT SHALL BE CONSULTED
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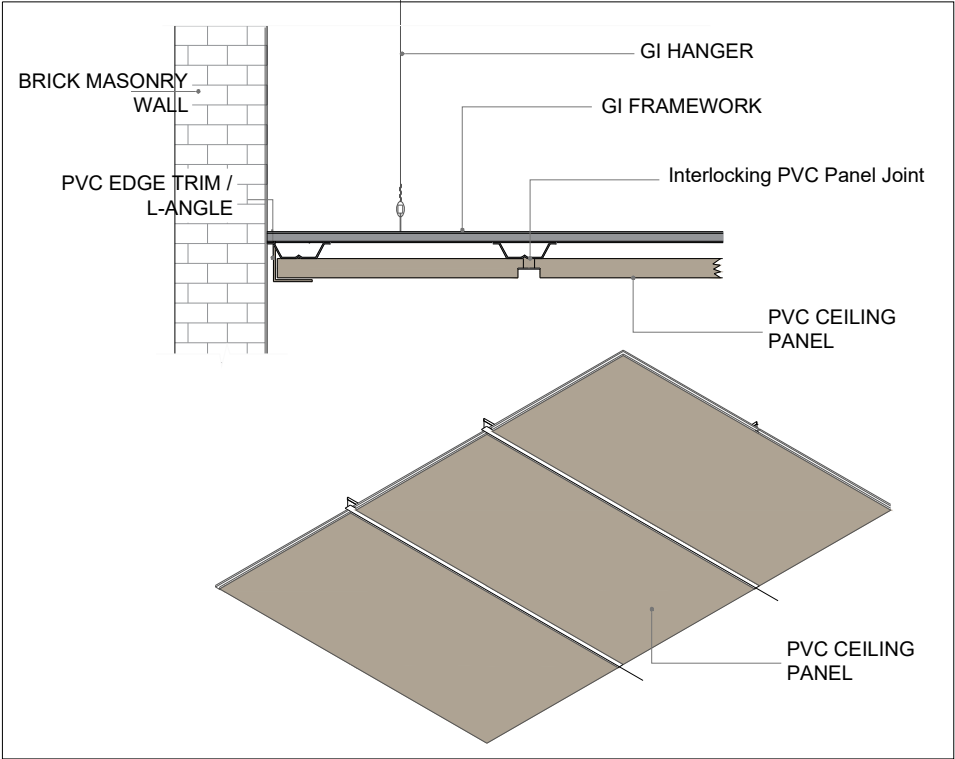
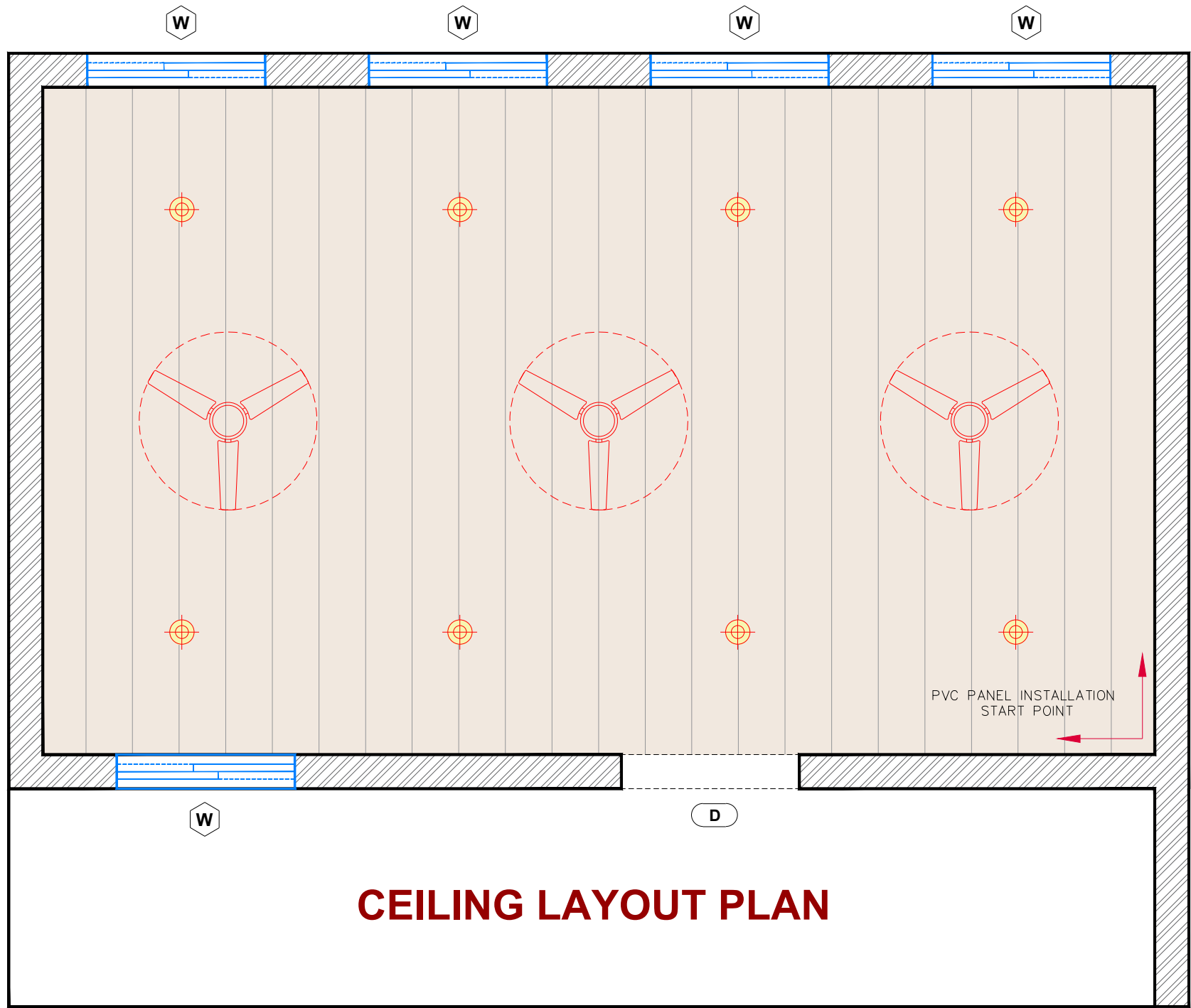
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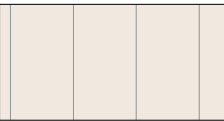


No.	Description	Date
1	EMAIL	28/07/26

Project :-Proposed Renovation of Queen Mary's Technical Institute, Khadki, Pune.

Client	M/s. Queen Mary's Technical Institute	A3
Rev No.	R0	
Date	28/07/26	
Drawn by	Tanay Kandge	
Subject Of Drawing:	Furniture Layout Plan	Scale NTS

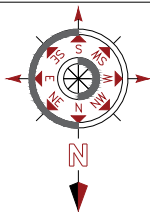


LEGEND	
	Approved PVC False Ceiling Fixed to the Bottom Chord of Roof Truss with Necessary Framework and Accessories.



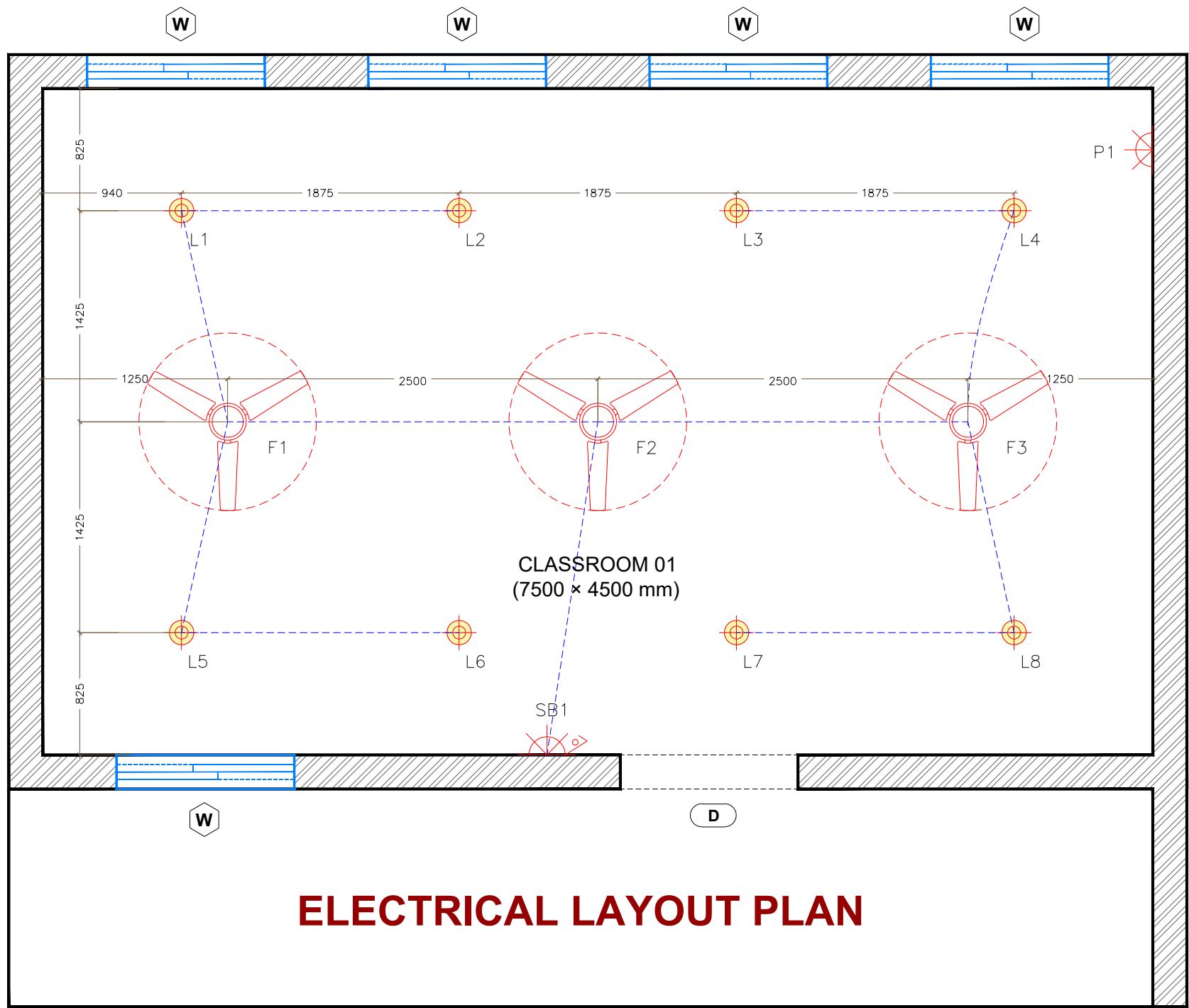
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Client	M/s. Queen Mary's Technical Institute	
Rev No.	R0	A3
Date	28/07/26	
Drawn by	Tanay Kandge	
Subject Of Drawing:	Ceiling Layout Plan	Scale NTS



ELECTRICAL LAYOUT PLAN

LEGEND :-

S.n.	Description	Symbols
1	Ceiling light point	
2	Switchboard with half point	
3	Ceiling Fan(D-1200mm)	
4	6A-socket Outlet &Switch	

SWITCH & SOCKET DETAILS FOR FIRST FLOOR

Area	Switch Board	SB	Fixture Controlled	M.Box	M.Plate
Classroom	SB1	4'6"	4 Light Switches 3 Fan Switches 3 Fan Regulators 1 No. 6A Socket with Switch	12M	12M
	P1	4'6"	Digital Board Point 2 No. 6A Socket Outlet	6M	6M

Color coding:-

Following color coding shall be followed in wiring:-
Phase:- Red/yellow/Blue/(3 phase wiring).
Line :- Red/yellow/Blue/(1phase wiring).
(1 phase wiring using any one from R Y B color.)
Neutral:-Black.
Earth :-Green/Yellow.

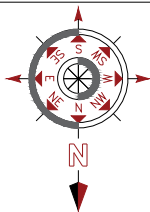
Wiring sizing:

- a.Point wiring(From main switchboard to each LP & FP):- $\frac{2 \times 1.5 \text{ sq. mm.}}{+1.5 \text{ sq. mm E.wire}}$
- b.Submain wiring/circuit wiring(DB to switch board):- $\frac{2 \times 2.5 \text{ sq. mm.}}{+1.5 \text{ sq. mm E.wire}}$

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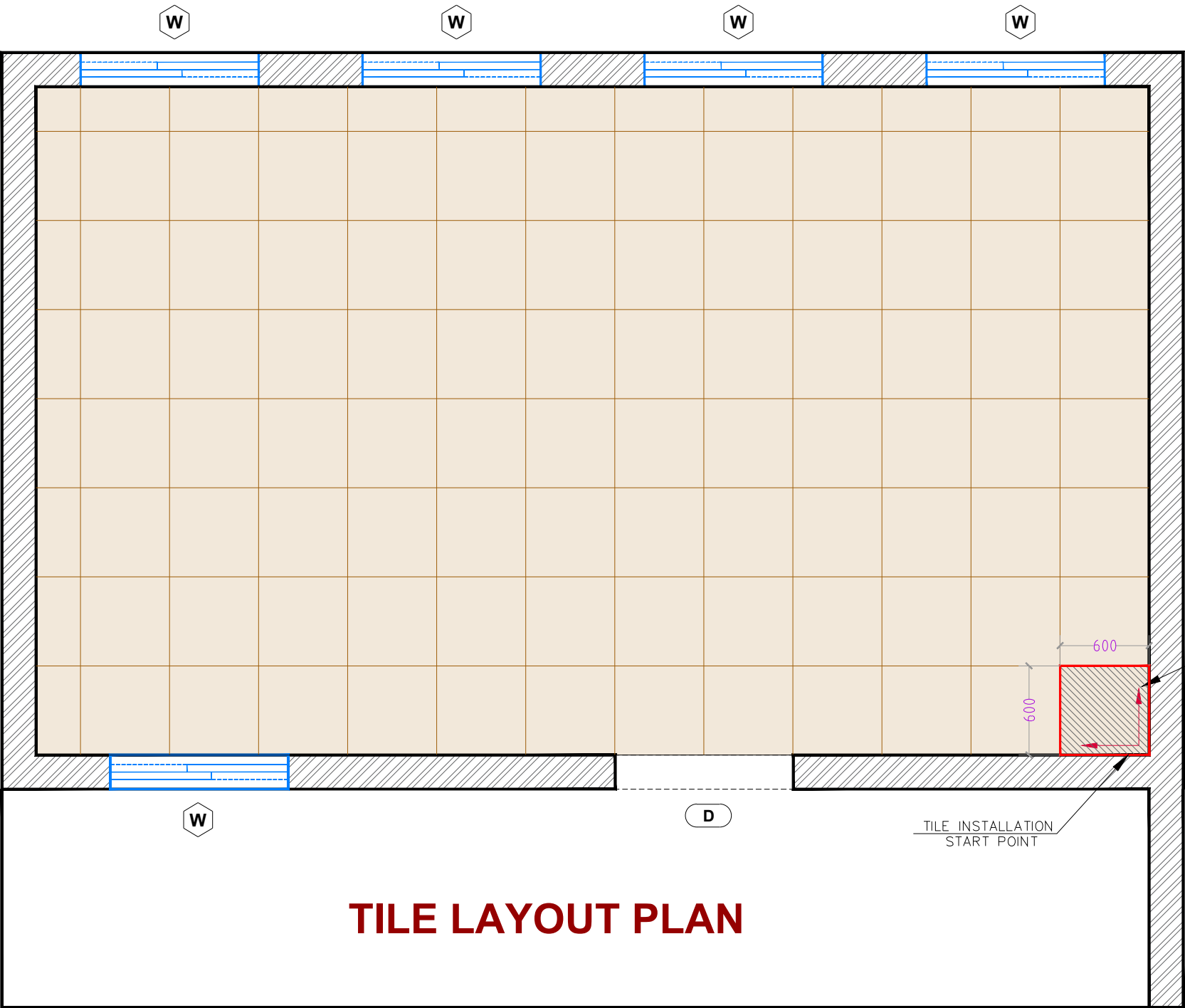


No.	Description	Date
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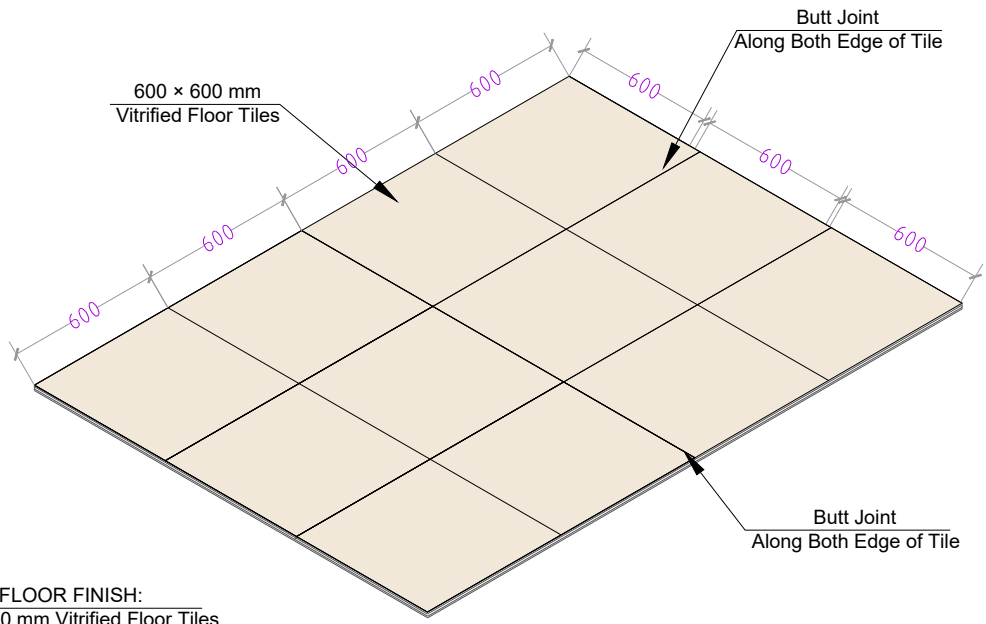
Project :-Proposed Renovation of Queen Mary's Technical Institute, Khadki, Pune.

Client	M/s. Queen Mary's Technical Institute
Rev No.	R0
Date	28/07/26
Drawn by	Tanay Kandge
Subject Of Drawing:	Electrical Layout Plan

A3
Scale NTS



TILE LAYOUT PLAN



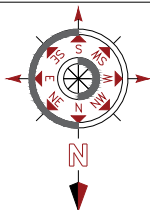
FLOOR FINISH:
600 x 600 mm Vitrified Floor Tiles
With Butt Joint Along Both Edge of
Tile

ISOMETRIC DETAIL OF FLOOR
TILE INSTALLATION



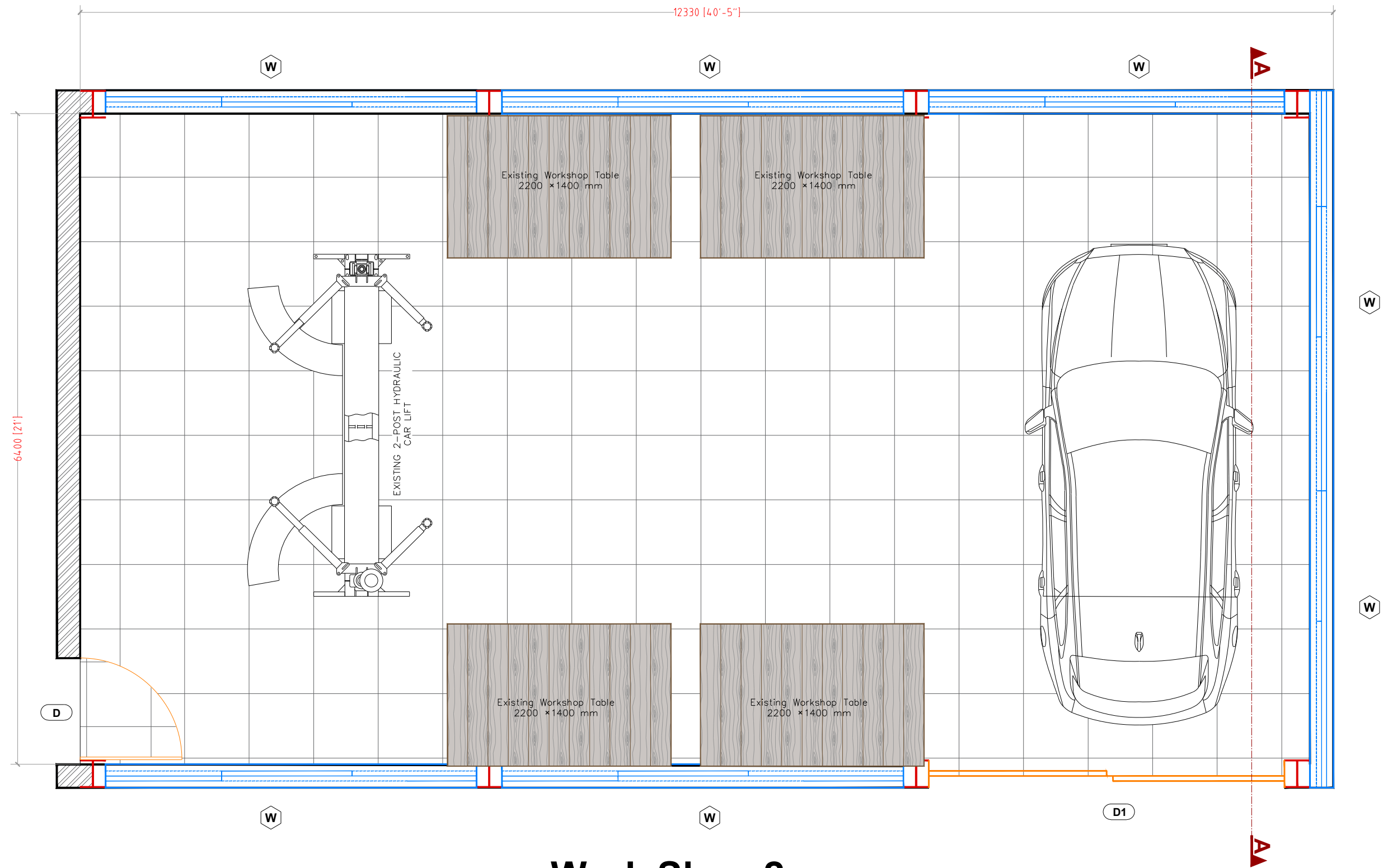
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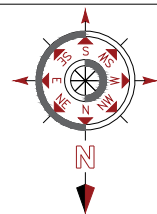
Project :-Proposed Renovation of Queen Mary's Technical Institute, Khadki, Pune.		
Client	M/s. Queen Mary's Technical Institute	
Rev No.	R0	A3
Date	28/07/26	
Drawn by	Tanay Kandge	
Subject Of Drawing:	Tile Layout Plan	Scale NTS



Work Shop 2

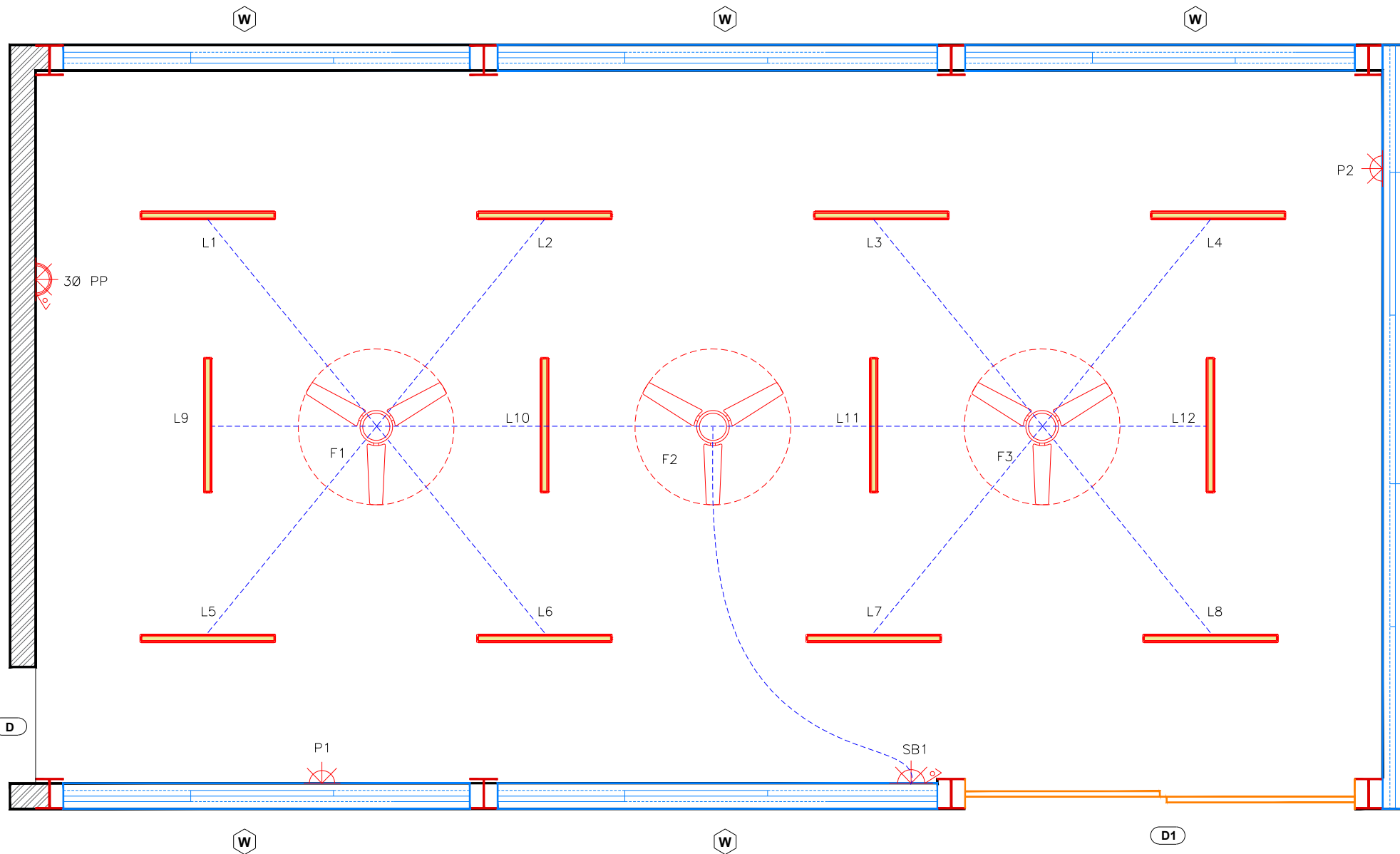
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Project :-Proposed Renovation of Queen Mary's Technical Institute, Khadki, Pune.		
Client	M/s. Queen Mary's Technical Institute	
Rev No.	R0	A3
Date	28/07/26	
Drawn by	Tanay Kandge	
Subject Of Drawing:	Furniture Layout Plan	Scale NTS



LEGEND :-

S.n.	Description	Symbols
1	40W Suspended LED Batten Light	
2	Switchboard with half point	
3	Suspended Ceiling Fan(D-1400mm)	
4	6A/16A-Socket Outlet &Switch	
5	3-Phase Power Point	

SWITCH & SOCKET DETAILS FOR FIRST FLOOR

Area	Switch Board	SB	Fixture Controlled	M.Box	M.Plate
Work Shop 2	SB1	1200	4 Light Switches 3 Fan Switches 3 Fan Regulators 1 No. 6A Socket with Switch	16M	16M
	P1,P2	1200	2 Nos. 6A/16A Switch With Socket	6M	6M
	3Ø PP	1200	Provision for 3Ø Power Point (415 V AC)	P65 Surface-Mounted Industrial Enclosure	

Color coding:-

Following color coding shall be followed in wiring:-
Phase:- Red/yellow/Blue/(3 phase wiring).
Line :- Red/yellow/Blue/(1phase wiring).
(1 phase wiring using any one from R Y B color.)
Neutral:-Black.
Earth :-Green/Yellow.

Wiring sizing:

- a.Point wiring(From main switchboard to each LP & FP):-
b.Submain wiring/circuit wiring(DB to switch board):-

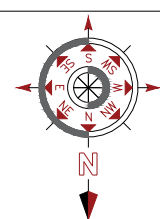
$\frac{2 \times 1.5 \text{ sq.mm.}}{+1.5 \text{ sq.mm E.wire}}$
 $\frac{2 \times 2.5 \text{ sq.mm.}}{+1.5 \text{ sq.mm E.wire}}$

Work Shop 2

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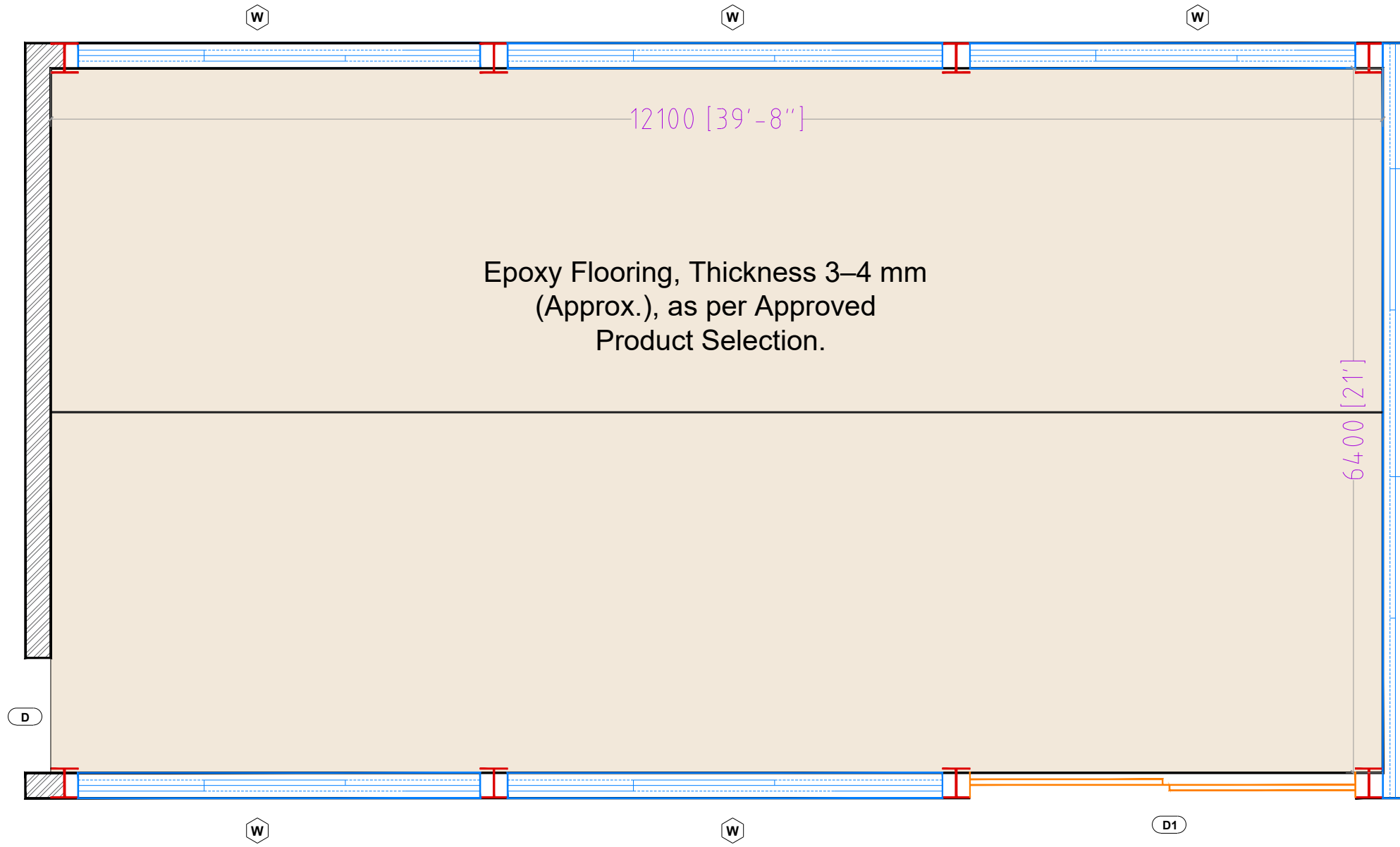
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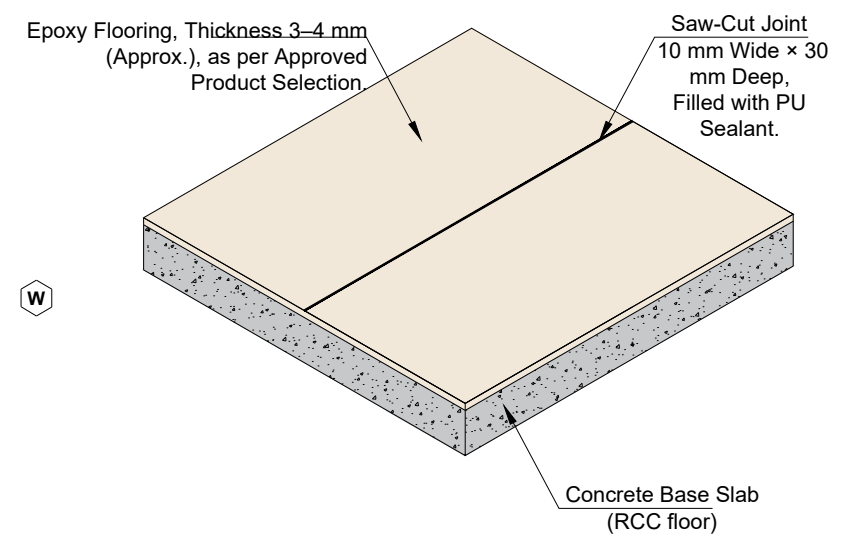
No.	Description	Date
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Project :-Proposed Renovation of Queen Mary's Technical Institute, Khadki, Pune.

Client	M/s. Queen Mary's Technical Institute	A3
Rev No.	R0	
Date	28/07/26	
Drawn by	Tanay Kandge	
Subject Of Drawing:	Furniture Layout Plan	Scale NTS



Work Shop 2



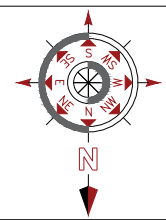
EPOXY FLOORING
TYPICAL CROSS SECTION

- Notes.
- 1. Epoxy flooring shall be applied as per the manufacturer's specifications.
 - 2. Colour shall be as approved by the Architect/Client.



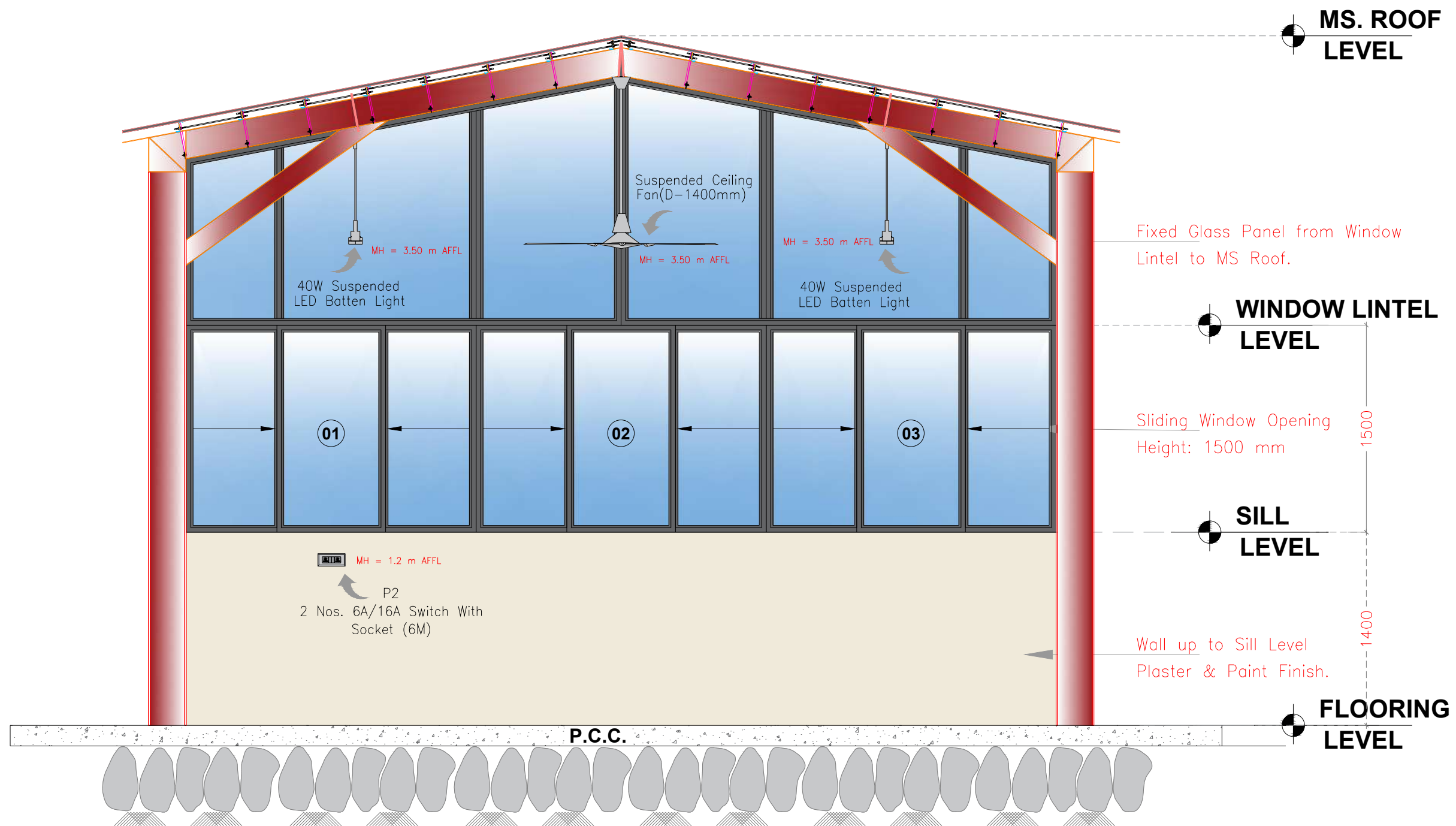
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Drawn by	Tanay Kandge	
Subject Of Drawing:	Furniture Layout Plan	Scale NTS

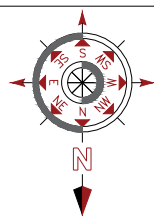


SECTION A - A

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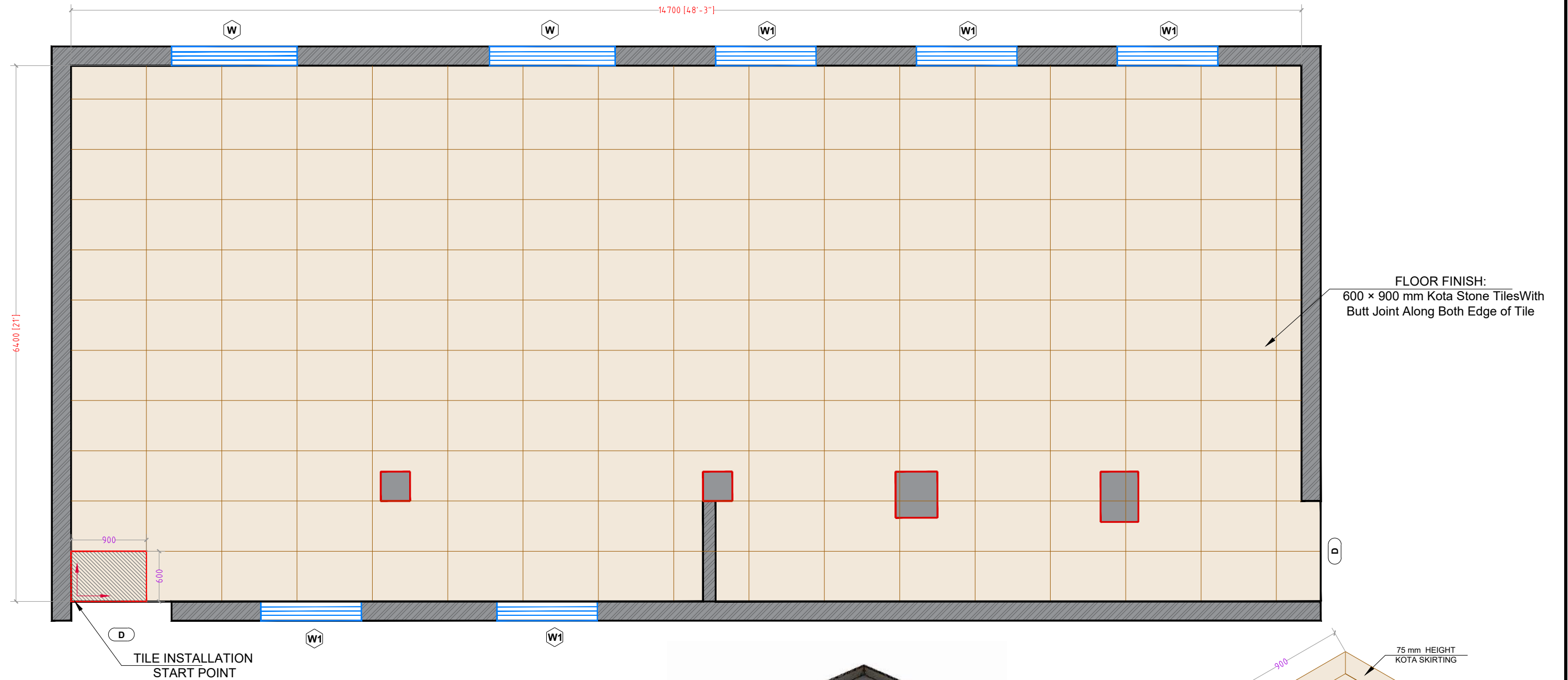
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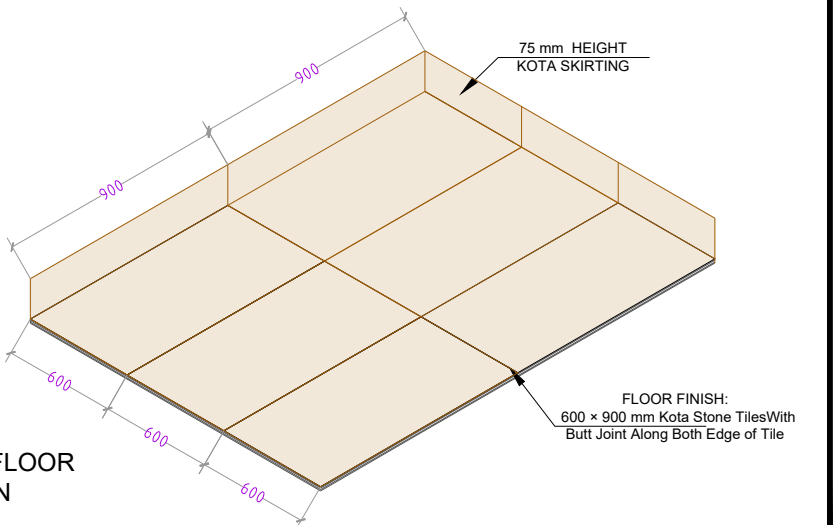
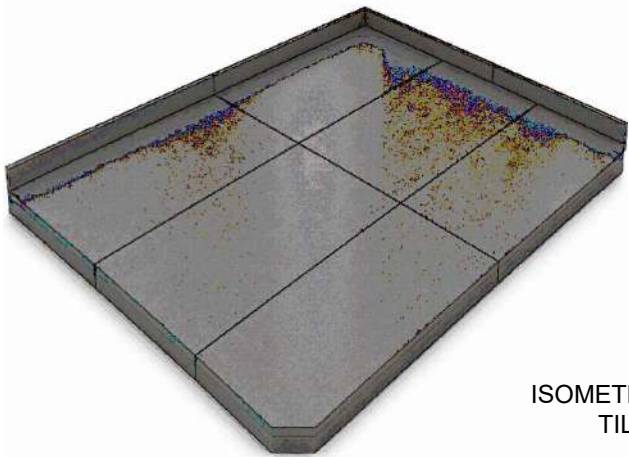
No.	Description	Date
1	EMAIL	28/07/26

Project :-Proposed Renovation of Queen Mary's Technical Institute, Khadki, Pune.

Client	M/s. Queen Mary's Technical Institute	A3
Rev No.	R0	
Date	28/07/26	
Drawn by	Tanay Kandge	
Subject Of Drawing:	Furniture Layout Plan	Scale NTS

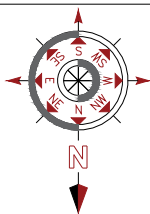


TILE LAYOUT PLAN



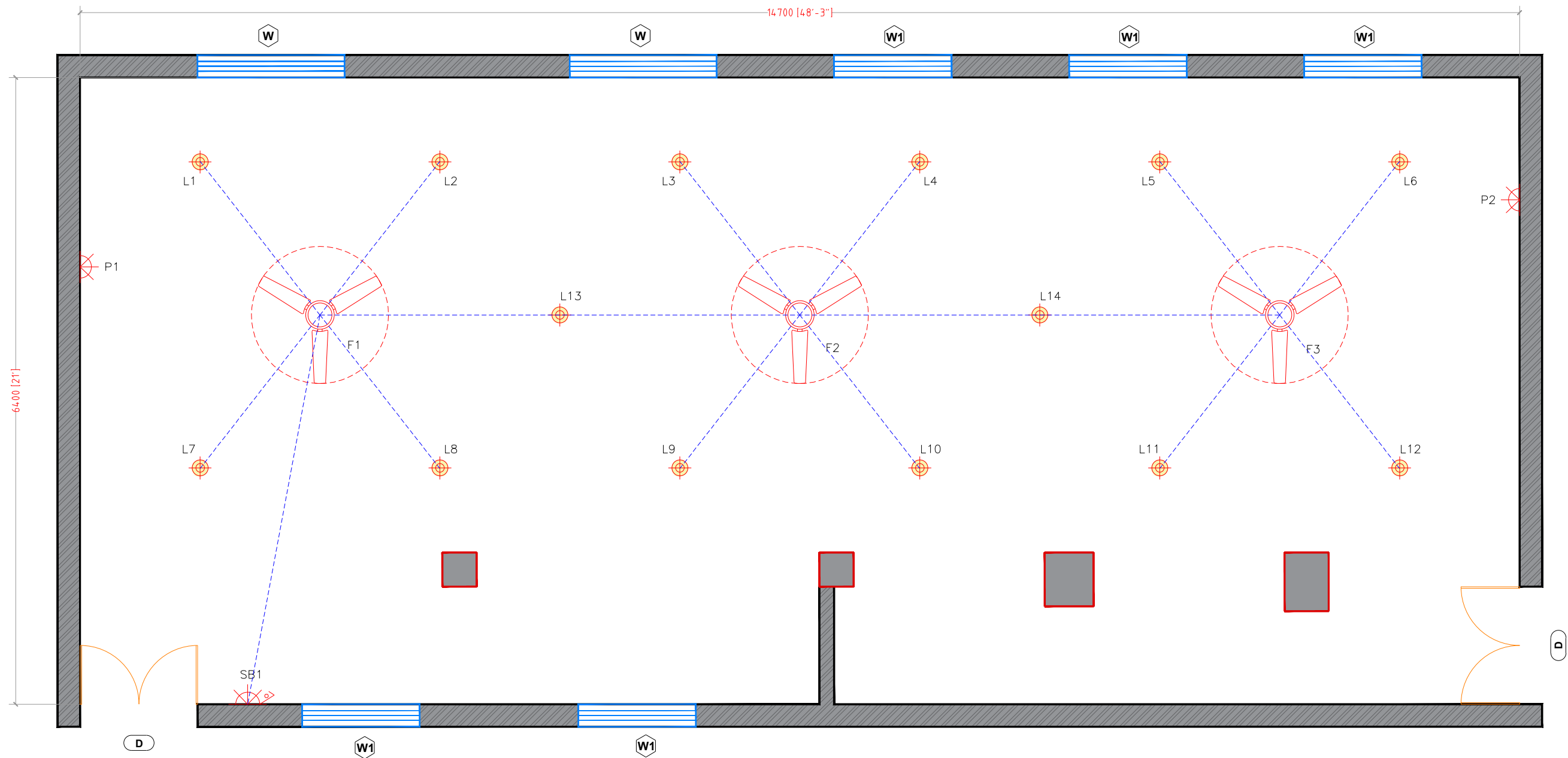
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Client	M/s. Queen Mary's Technical Institute	A3
Rev No.	R0	
Date	28/07/26	
Drawn by	Tanay Kandge	
Subject Of Drawing:	Floor Plan	Scale NTS



LEGEND :-

S.n.	Description	Symbols
1	Ceiling Light Point-12W LED Downlight	
2	Switchboard with half point	
3	Ceiling Fan(D-1400mm)	
4	6A-socket Outlet &Switch	

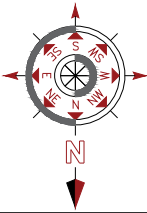
SWITCH & SOCKET DETAILS

Area	Switch Board	Height	Fixture Controlled	M.Box	M.Plates
Work Shop 1	SB1	1200	4 Light Switches 3 Fan Switches 3 Fan Regulators 1 No. 6A Socket with Switch	16M	16M
	P1,P2	1200	2 Nos. 6A/16A Switch With Socket	6M	6M

Color coding:-
Following color coding shall be followed in wiring:-
Phase:- Red/yellow/Blue/(3 phase wiring).
Line :- Red/yellow/Blue/(1phase wiring).
(1 phase wiring using any one from R Y B color.)
Neutral:-Black.
Earth :-Green/Yellow.

Wiring sizing:
a.Point wiring(From main switchboard to each LP & FP):-
b.Submain wiring/circuit wiring(DB to switch board):-

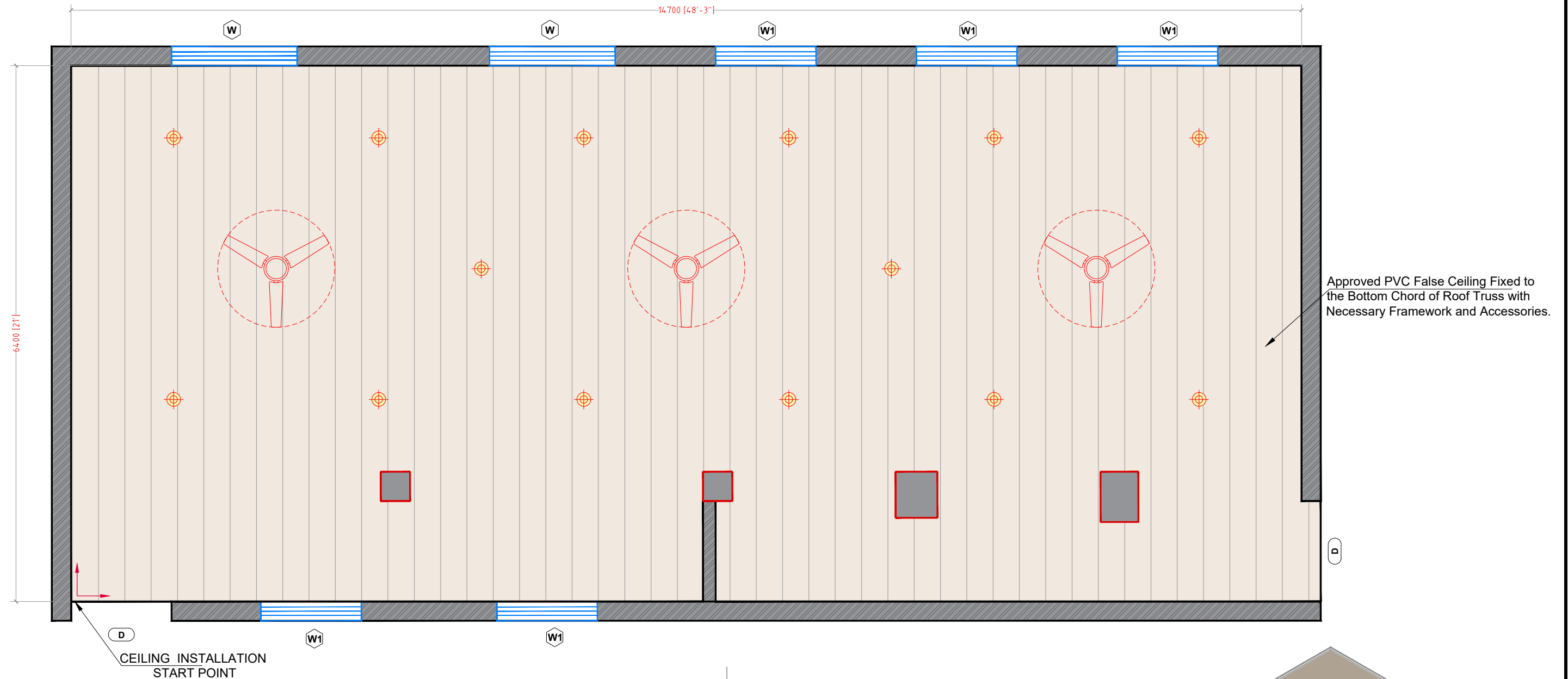
2x1.5 sq.mm.
+1.5 sq.mm E.wire
2x2.5 sq.mm.
+1.5 sq.mm E.wire



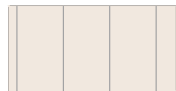
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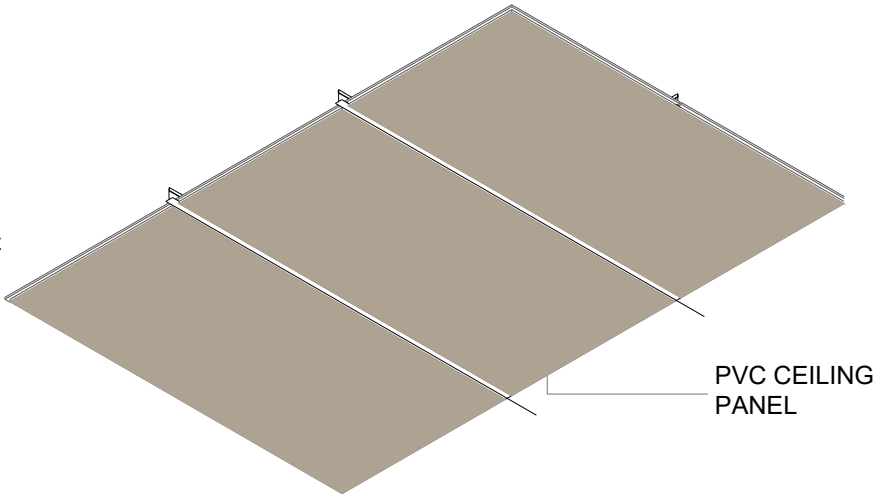
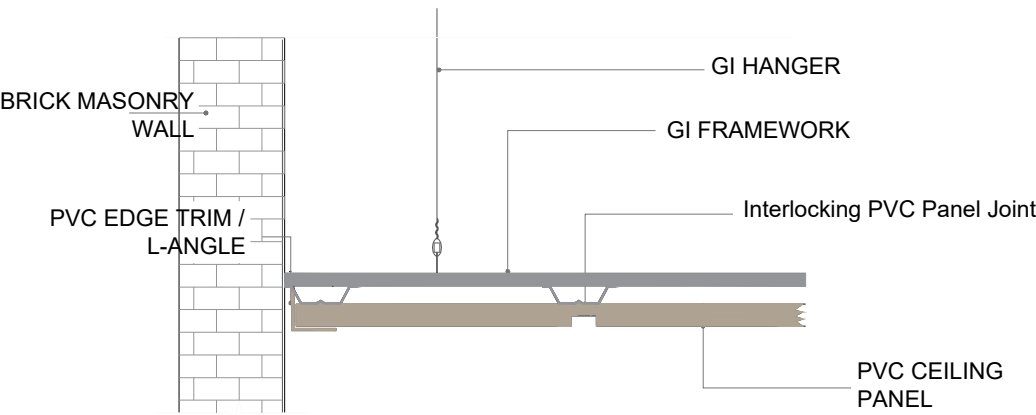
Project :-Proposed Renovation of Queen Mary's Technical Institute, Khadki, Pune.

Client	M/s. Queen Mary's Technical Institute	A3
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Date	28/07/26	
Drawn by	Tanay Kandge	
Subject Of Drawing:	Floor Plan	Scale NTS



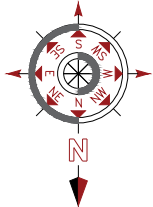
Work Shop 1 CEILING LAYOUT PLAN

LEGEND	
	Approved PVC False Ceiling Fixed to the Bottom Chord of Roof Truss with Necessary Framework and Accessories.



NOTES :
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No.	Description	Date
1	EMAIL	28/07/26

Project :-Proposed Renovation of Queen Mary's Technical Institute, Khadki, Pune.		
Client	M/s. Queen Mary's Technical Institute	
Rev No.	R0	A3
Date	28/07/26	
Drawn by	Tanay Kandge	
Subject Of Drawing:	Floor Plan	
		Scale NTS