#### INDIAN INSTITUTE OF TROPICAL METEOROLOGY ( IITM) PASHAN, PUNE-411 008 e-TENDER NOTICE

Tender Notice Number: IITM/CE/SHBK/2015-16/11

Director, Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, Pashan, Pune-411 008, (India). Invites sealed separate tenders for following work (Part-I – Technical Bid, Part-II – Commercial Bid) in separate sealed covers from Contractors registered in the approved list of contractors of PWD/MES/ CPWD/ Railways/P&T/Industrial Experienced contractors and any other government departments inappropriate class for following work:

Tender Notice Number : IITM/CE/SHBK/2015-16/11

Name of Work : Kitchen Equipments and HVAC systems works for student Trainee Hostel building, IITM & IMD at IMD colony campus, Pashan, pune-411008

Tender Document Fees : Rs. 1000/- (drawn in the favour of Director, IITM Pune).

Date of Issue of Tender Document : From 14/01/2016 To 03/02/2016

Date and Time of Pre-Bid Meeting: 21/01/2016 at 11:00 hrs

Last Date of receipt of tender: 03/02/2016 at 12:30 hrs

Date and time of opening the tender (Technical Bids Only): 03/02/2016 at 15:00 hrs

Tender documents can be down loaded from the institute website <u>http://www.tropmet.res.in</u> or e-procurement web site <u>http://eprocure.gov.in</u> and can also be obtained from the civil wing of the institute.

The tender document fee: [Non Refundable] by demand draft drawn in the favour of Director, IITM Pune.

The Institute reserves the right to reject any or all tenders without assigning any reason thereof.

Civil Engineer For Director IITM, PUNE e-mail : anupam@tropmet.res.in

#### भारतीय उष्णदेशीय मौसमविज्ञान संस्थान (आईआईटीएम) पाषाण, पुणे– 411 008 ई-निविदा सूचना

#### निविदा सूचना संख्या : आईआईटीएम/सीई/एसएचबीके/2015-16/11

निदेशक, भारतीय उष्णईदेशीय मौसम विज्ञान संस्था न, डॉ. होमी भाभा मार्ग, पाषाण, पुणे – 411 008 (भारत) पीडब्ल्यूडी/एमईएस/सीपीडब्ल्यूडी/रेलवे/पी एंड टी/अनुभवी औद्योगिक ठेकेदारों तथा अन्य समकक्ष सरकारी विभागों द्वारा ठेकेदारों की अनुमोदित सूची में पंजीकृत ठेकेदारों तथा अन्य समकक्ष सरकारी विभागों द्वारा ठेकेदारों की अनुमोदित सूची में पंजीकृत ठेकेदारों से निम्नलिखित कार्य (भाग- I तकनीकी बोली, भाग- II वाणिज्यिक बोली) हेत् अलग-अलग मुहरबंद लिफाफे में निविदाएं आमंत्रित करते हैं :

निविदा सूचना संख्या : आईआईटीएम/सीई/एसएचबीके/2015-16/11

कार्य का नाम : आईएमडी, कालोनी परिसर, पाषाण, पुमे 411 008 स्थित आईआईटीएम एवं आईएमडी छात्र प्रशिक्षु छात्रावास भवन हेतु रसोई उपकरण एवं एचवीएसी प्रणाली कार्य

निविदा दस्तावेज शुल्क : रु. 1000/- (निदेशक, आईआईटीएम, पुणे के पक्ष मे डिमांड ड्राफ्ट द्वारा)

निविदा दस्तावेज जारी करने की तारीख :14/01/2016 से 03/02/2016 तक

बोली-पूर्व बैठक की तारीख एवं समय 21/01/2016 को 11:00 बजे

निविदा प्राप्ति की अंतिम तारीख : 30/02 /2016 को 12:30 बजे

निविदा (केवल तकनीकी बोलियाँ) खोलने की तारीख एवं समय 3,002/2016 को 15:00 बजे

निविदा दस्तावेज संस्थान की वेब साइट <u>http://www.tropmet.res.in</u> एवं ई-प्रोक्योरमेंट वेब साइट <u>http://eprocure.gov.in</u> से डाउनलोड किए जा सकते है और संस्थान के सिविल विंग से भी प्राप्त किए जा सकते हैं।

निविदा दस्तावेज शुल्क :[अप्रतिदेय] डिमांड ड्राफ्ट द्वारा, निदेशक, आई.आई.टी.एम., पुणे के पक्ष में संस्थान किसी निविदा या सभी निविदाओं को बिना कारण बताए निरस्त करने का अधिकार रखता है।

> सिविल इंजीनियर कृते निदेशक आईआईटीएम, पुणे ई-मेल: anupam@tropmet.res.in

भारतीय उष्णदेशीय मौसमविज्ञान संस्थान (आईआईटीएम)	
INDIAN INSTITUTE OF TROPICAL METEOROLOGY (IITM)	
पाषाण, पुणे – 411 008 PASHAN, PUNE-411 008	
ई-निविदा सूचना e-TENDER NOTICE	
निविदा सूचना संख्या : आईआईटीएम/सीई/एसएचबीके/2015-16/11	
Tender Notice Number : IITM/CE/SHBK/2015-16/11	
निदेशक, भारतीय उष्ण1देशीय मौसम विज्ञान संस्था <sub>g</sub> न, डॉ. होमी भाभा मार्ग, पाषाण, पुणे – 411 008 (भारत) पीडब्ल्यूडी/एमईएस/सीपीडब्ल	यूडी/रेलवे/पी एंड टी/अनुभवी औद्योगिक ठेकेदारों तथा
अन्य समकक्ष सरकारी विभागों द्वारा ठेकेदारों की अनुमोदित सूची में पंजीकृत ठेकेदारों तथा अन्य समकक्ष सरकारी विभागों द्वारा ठेकेदारों की अनुम	मोदित सूची में पंजीकृत ठेकेदारों से निम्नलिखित कार्य
(भाग- I तकनीकी बोली, भाग- II वाणिज्यिक बोली) हेतु अलग-अलग मुहरबंद लिफाफे में निविदाएं आमंत्रित करते हैं :	
Director, Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, Pashan, Pune-411 008, (India). Invites sealed separate Part-II – Commercial Bid) in separate sealed covers from Contractors registered in the approved list of contractors of PWD/MES contractors and any other government departments inappropriate class for following work:	
निविदा सूचना संख्या : आईआईटीएम/सीई/एसएचबीके/2015-16/11	
Tender Notice Number : IITM/CE/SHBK/2015-16/11	
कार्य का नाम : आईएमडी, कालोनी परिसर, पाषाण, पुमे 411 008 स्थित आईआईटीएम एवं आईएमडी छात्र प्रशिक्षु छात्रावास भवन हेतु र Name of Work : Kitchen Equipments and HVAC systems works for student Trainee Hostel building, IITM & IMD at IMD colon	
निविदा दस्तावेज शुल्क : रु. 1000/- (निदेशक, आईआईटीएम, पुणे के पक्ष में डिमांड ड्राफ्ट द्वारा)	y campus, rashan, pune-411008
Fender Document Fees : Rs. 1000/- (drawn in the favour of Director, IITM Pune).	
निविदा दस्तावेज जारी करने की तारीख :14/01/2016 से 03/02/2016 तक	
Date of Issue of Tender Document : From 14 / 01 / 2016 To 03 /02 /2016	
बोली-पूर्व बैठक की तारीख एवं समय 21/01/2016 को 11:00 बजे	
Date and Time of Pre-Bid Meeting : 21/01/2016 at 11:00 hrs	
निविदा प्राप्ति की अंतिम तारीख : 30/02 /2016 को 12:30 बजे	
Last Date of receipt of tender : 03 /002 /2016 at 12:30 hrs	
निविदा (केवल तकनीकी बोलियाँ) खोलन की तारीख एवं समय 3,002/2016 को 15:00 बजे	
Date and time of opening the tender (Technical Bids Only) : $03/02/2016$ at 15:00 hrs	
निविदा दस्तावेज संस्थान की वेब साइट <u>http://www.tropmet.res.in</u> एवं ई-प्रोक्योरमेंट वेब साइट <u>http://eprocure.gov.in</u> से डाउनलोड किए	ं जा सकते है और संस्थान के सिविल विंग से भी प्राप्त
किए जा सकते हैं।	
Tender documents can be down loaded from the institute website <u>http://www.tropmet.res.in</u> or e-procurement web site <u>http://epro</u> civil wing of the institute.	ocure.gov.in and can also be obtained from the
<b>निविदा दस्तावेज शुल्क :</b> [अप्रतिदेय] डिमांड ड्राफ्ट द्वारा, निदेशक, आई.आई.टी.एम., पुणे के पक्ष में	
The tender document fee: [Non Refundable] by demand draft drawn in the favour of Director, IITM Pune.	
संस्थान किसी निविदा या सभी निविदाओं को बिना कारण बताए निरस्त करने का अधिकार रखता है।	
The Institute reserves the right to reject any or all tenders without assigning any reason thereof.	सिविल इंजीनियर/Civil Engineer
	कृते निदेशक/For Directo
	आईआईटीएम, पुणे/IITM, PUN
	ई-मेल: anupam@tropmet.res.in

## INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR. HOMI BHABHA ROAD, PASHAN, PUNE-411 008

# KITCHEN EQUIPMENT AND HVAC WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD, AT IMD COLONY, PASHAN, PUNE

Tender No. IITM/CE/SHBK/2015-16/11

# TENDER FOR KITCHEN EQUIPMENT AND HVAC WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD, AT IMD COLONY, PASHAN, PUNE FOR INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008

#### e-TENDER NOTICE

Director, Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, Pashan, Pune-411 008, (India). Invites sealed separate tenders for following work (Part-I – Technical Bid, Part-II – Commercial Bid) in separate sealed covers from Contractors registered in the approved list of contractors of PWD/MES/ CPWD/ Railways/P&T/Hotel/Industrial Experienced contractors and any other government departments inappropriate class for following work:

#### Name of work: KITCHEN EQUIPMENT AND HVAC WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD, AT IMD COLONY, PASHAN, PUNE

Tender documents can be downloaded from the institute website <u>http://www.tropmet.res.in</u> or e – procurement web site <u>http://eprocure.gov.in</u> and can also be obtained from the civil wing of the institute.

**The tender document fee:** Rs.1, 000-/, (Rupees One Thousand only) [Non Refundable] by demand draft drawn in the favour of Director, Pune.

Date of issue of tender documents	: 14.01.2016
Pre - Bid Meeting	: 21.01.2016 .
Venue of Pre-Bid meeting	: Indian Institute of Tropical
	Meteorology,
	Dr. Homi Bhabha Road,
	Pashan, Pune-411008

Last date of receipt of Tender at , Pune: 03.02.2016 at 12.30 Hrs. Opening of Tenders (Technical Bids only): 03.02.2016 at 15.00 Hrs. The Institute reserves the right to reject any or all tenders without assigning any reason thereof.

> Civil Engineer For Director Email:<u>anupam@tropmet.res.in</u>

# TENDER FOR KITCHEN EQUIPMENT AND HVAC WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD, AT IMD COLONY, PASHAN, PUNE FOR INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008

#### **TECHNICAL BID**

#### Volume 1

(Invitation for Bid, Instruction to bidders, General conditions of contract & Special conditions)

# TENDER FOR KITCHEN EQUIPMENT AND HVAC WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD, AT IMD COLONY, PASHAN, PUNE

FOR

# INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008

Tender No.	: IITM/CE/SHBK/2015-16/11	
Name of work	: KITCHEN EQUIPMENT AND HVAC WORKS FOR	
	STUDENT/TRAINEE HOSTEL BUILDING FOR IITM	
	AND IMD, AT IMD COLONY, PASHAN, PUNE	

Tender document fee: Rs.1,000/- (Rupees One Thousand Only) [Non Refundable] by Demand draft drawn in the favour of Director, Pune-411008.

Date of issue of tender documents	: 14.01.2016
Pre - Bid Meeting	: 21.01.2016
Venue of Pre-Bid meeting	: Indian Institute of Tropical
	Meteorology,
	Dr. Homi Bhabha Road, Pashan,
	Pune-411008

Last date of receipt of Tender at , Pune: 03.02.2016 at 12.30 Hrs

Opening of Tenders (Technical Bids only): 03.02.2016 at 15.00 Hrs

Estimated Cost : Rs. 89 Lakhs

- **COMPLETION PERIOD** : **2 Months** from the date of handing over the site from commencement of the work.
- Earnest Money Deposit (EMD)**Rs.1.78 Lakhs** by demand draft (DD) or BankGuarantee (BG) from Nationalize/Schedule Bank in<br/>favour of The Director, Pashan, Pune-411008.

# INVITATION FOR BID

(IFB)

# NOTICE INVITING KITCHEN EQUIPMENT AND HVAC WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD, AT IMD COLONY, PASHAN, PUNE FOR INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008

#### TWO COVER SYSTEM

#### Tender Notice No. IITM/CE/SHBK/2015-16/11

- 1 Indian Institute of Tropical Meteorology, Pune, Maharashtra is setting up KITCHEN EQUIPMENT & HVAC works at Students Hostel Building at IMD colony, Pashan, Pune. Director Indian Institute of Tropical Meteorology, Pune Invites bid for the said work under the Two Cover System item rates composite Tender from the Contractors, who are eligible as per the minimum requirements defined in clause 2 & 3 below and who are on approved list of the appropriate class of PSUs or Government department
  - Average annual financial turnover during the last 3 years ending 31<sup>st</sup> March 2015 of the previous should be at least 30% of the estimated cost.
  - ii) Experience of having successfully completed similar works during last 5 years ending last day of month previous to the one in which applications are invited should be either of the following:-

The BIDDER should have three similar completed works costing not less than the amount equal to 40% of the estimated cost.

Or

Two similar completed works costing not less than the amount equal to 60% of the estimated cost.

Or

One similar completed work costing not less than the amount equal to 80% of the estimated cost.

The bidder should produce Banker's Solvency Certificate or Revenue Solvency Certificate of The value of **Rs. 26.70 LAKHS**. Solvency Certificate must have been obtained not earlier than 1st Apr 2015.

The successful bidder shall ensure that, the direct subcontractors engaged in the works, Complies with all conditions as specified in the Agreement between the employer and the Successful bidder.

# 1. Salient Features

Name of Work	KITCHEN EQUIPMENT AND HVAC WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD, AT IMD COLONY, PASHAN, PUNE	
Period of Completion	2 months from the date of handing over the site for commencement of work.	

**2.** Tender documents can be purchased from the Civil Engineering office, Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, NCL post, Pashan, Pune – 411008. INDIA

A	Cost of Tender Documents (Non – Refundable)	Rs.1000/-(Rupees One Thousand Only) by Demand Draft drawn from any Nationalized or Scheduled Banks In India payable at Pune in favors of Director, Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, NCL post, Pashan Pune – 411008. INDIA
В	Period of Issue of Tender Documents	Date of issue of tender documents :14.01.2016
C	Earnest Money Deposit (EMD)	<b>1.78 lakhs</b> By Demand Draft, drawn from any Nationalized Or Scheduled Banks in India payable at Pune in favor Of The Director, (or) By Irrevocable Bank Guarantee from any Nationalized or Scheduled Banks in India.
D	Pre-Bid Meeting	Pre - Bid Meeting :21.01.2016 Venue of Pre-Bid meeting: Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, Pashan, Pune- 411008
E	Last date for submission of bids	Bids to be submitted on or before 3/02/2016 at 12.30 Hrs at —DISPATCH SECTION Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, NCL post, Pashan Pune – 411008. INDIA
F	Opening of Technical bid	03.02.2016 at 15.00 Hrs.

The Director, Indian Institute of Tropical Meteorology, reserves the right to accept/reject anyone /all the tenders without assigning any reason thereof.

DIRECTOR, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR. HOMI BHABHA ROAD,NCL POST, PASHAN, PUNE – 411008.INDIA

#### Definitions

Terms which are defined in the Contract Data are not defined in the Conditions of Contract But keep their defined meanings. Capital initials are used to identify defined terms.

The **Adjudicator** is the person appointed jointly by the Employer and the Contractor to Resolve disputes in the first instance. The name of the Adjudicator is defined in the Contract Data.

**Bill of Quantities** means the priced and completed **Bill of Quantities** forming part of the Bid.

**Compensation Events** are those defined in Clause 44 of Conditions of Contract (Vol-II).

The **Completion Date** is the date of completion of the Works as certified by the Architect and Authorities.

The **Contract** is the contract between the Employer and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in Clause 2.3 of Conditions of Contract (Vol-II).

The **Contract Data** defines the documents and other information which comprise the Contract.

The **Contractor** is a person or corporate body who's Bid to carry out the Works has been accepted by the Employer.

The **Contractor's Bid** is the completed Bidding document submitted by the Contractor to the Employer.

The **Contract Price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.

Days are calendar days; months are calendar months.

A Defect is any part of the Works not completed in accordance with the Contract.

**Defects Liability Period** is the period named in the Contract Data and calculated from the Date of handing over of site to the Institute.

The **Employer** is the party who will employ the Contractor to carry out the Works. In this Contract The Director, Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, NCL post, Pashan, Pune, is the Employer.

The **Architect** shall mean the Consultants engaged by the Employer.

**Contractor's Equipment** is the Contractor's machinery and vehicles brought temporarily to The Site to construct the Works.

**The Initial Contract Price** is the Contract Price listed in the Employer's Letter of Acceptance.

**Drawings mean** the employer's drawings of the works included in the contract and any Variations to such drawings given by an Architect.

Party means either employer or contractor.

**Country** means the country in which the site is located.

**Employer's Liabilities** means those mentioned in sub clause 11.1 of Conditions of Contract (Vol-II).

**Force Majeure means** an exceptional events or circumstance which is beyond a Party's control, which such Party could not reasonably have provided against before entering in to the contract; which, having arisen, such party could not reasonably have avoided or overcome; and, which is not substantially attributable to the other party.

The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Contract Data. H **Materials** are all supplies, including consumables, used by the contractor for incorporation in the Works.

**Plant** is any integral part of the Works which is to have a mechanical, electrical, electronic or chemical or biological function.

The **Site** is the area defined as such in the Contract Data.

**Specification** means the Specification of the Works included in the Contract and any modification or addition made or approved by the Architect.

The **Start Date** is the date of issue of work order.

A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract which includes work on the Site.

**Temporary Works** are works designed, constructed, installed, and removed by the Contractor which are needed for installation of the Works.

A **Variation** is an instruction given by the Architect with the approval of authorities which varies the Works.

The **Works** are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the Contract Data.

# **SECTION 1:**

# **INSTRUCTIONS TO BIDDERS**

(ITB)

#### A. General

#### 1. Scope of Bid

- 1.1 On behalf of INDIAN INSTITUTE OF TROPICAL METEOROLOGY. The Director, INDIAN INSTITUTE OF TROPICALMETEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008, India invites bids for Kitchen Equipment and HVAC works for Students Hostel building at IMD colony Pashan, Pune for Indian Institute of Tropical Meteorology, (), Pune-411008.
- **1.2** The successful bidder will be expected to complete the works by the intended Completion date specified in the Contract data.
- 2. Source of Fund: Indian INSTITUTE OF TROPICAL METEOROLOGY, PUNE

#### 3. Eligible Bidders`

- **3.1** This Invitation for Bids is open to all reputed well established and experienced Contractors, who satisfy the qualifying criteria stipulated in Clause 4
- **3.2** All bidders shall provide in Section 2, Forms of Bid and Qualification Information, a statement that the Bidder is not associated, nor has been associated in the past, directly or indirectly, with the Consultant or any other entity that has prepared the design, specifications, and other documents for the Project or being proposed as Project Manager for the Contract. A firm that has been engaged by the Employer to provide consulting services for the preparation of tender documents, supervision and certification of the works, and any of its affiliates, shall not be eligible to bid.
- **3.3** Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by Government in accordance with sub-clause 34.1.

#### 4. Qualification of the Bidder

**4.1** All bidders shall be provided in Section 2 Forms of Bid and Qualification Information, a preliminary description of the proposed work method and schedule, including drawings and charts, as necessary.

- **4.2** Since the Employer has not undertaken pre-qualification of potential bidders, all bidders shall include the following information and documents with their bids in Section 2
- (a) Copies of original documents defining the constitution or legal status, place of registration and principal place of business.
- (b) Written power of attorney of the signatory of the Bid to commit the Bidder.
- (c) Total monetary value of supply and installation work performed for each of the last five years.
- (d) Experience in works of a similar nature and size for each of the last seven years, and details of works under way or contractually committed; and clients who may be contacted for further information on those contracts;
- (e) Major items of installation equipment proposed to carry out the Contract;
- (f) Qualifications and experience of key site management and technical personnel proposed for the Contract;
- (g) Reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the past three years;
- (h) Evidence of adequacy of working capital for this contract (access to line (s) of credit and availability of other financial resources);
- Information regarding any litigation or arbitration resulting from contracts executed by the Bidder in the last three years or currently under execution. The information shall include the names of the parties concerned, the disputed amount, cause of litigation, and matter in dispute;
- (j) Proposals for subcontracting components of the Works which in aggregate add to more than 20 percent of the Bid Price (for each, the qualifications and experience of the identified sub-contractor in the relevant field should be annexed; no vertical splitting of work for sub-contracting is acceptable); and
- (k) The proposed methodology and program of installation including Environmental Management Plan backed with equipment, materials and manpower planning and deployment, duly supported with broad calculations and quality control procedures proposed to be adopted, justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion as per milestones.

# 4.3 A. To qualify for award of the contract, each bidder in its name should have in the last three years i.e., 2012-13, 2013-2014 and 2014-15.

- (a) The BIDDER should be a well-established and reputed Contractor, registered as a legal entity in India for a minimum period of three years, and having experience of minimum five years and capacity in having similar experience.
- (b) The BIDDER should have an annual turnover of Rs.2 Crores (Rupees Two Crores) during any two of the past three financial years, ending on 31st March 2015
- **4.3 B** The bidder should produce Banker's Solvency Certificate or Revenue Solvency Certificate of the value of Rs. 26.70 Lakhs. Solvency Certificate must have been obtained not earlier than 31st March 2015.

#### 4.3 C. Each bidder should further demonstrate:

- (a) Availability (either owned or leased or by procurement) of the following key and critical equipment for this work:
- **NOTE:** Based on the studies, carried out by the Engineer the minimum suggested major equipment to attain the completion of works in accordance with the prescribed installation schedule are shown in the above list. The bidders should, however, undertake their own studies and furnish with their bid, with addition if any a detailed execution planning and methodology supported with layout and necessary drawings and calculations (detailed) as stated in clause 4.2 (k) above to allow the employer to review their proposals. The numbers, types and capacities of each plant/equipment shall be shown in the proposals along with the cycle time for each operation for the given production capacity to match the requirements.
- (b) availability for this work of 1 Project Manager with not less than FIVE years' experience in execution of similar Mechanical works and other key personnel with adequate experience as required. The bidders are to produce organization chart for the execution of the project with responsibilities included.
- 4.5 Sub-contractors experience and resources shall not be taken into account in determining the bidder's compliance with the qualifying criteria except to the extent stated in 4.4 (a) (e to h) above.
- 4.6 Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:

- made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or

- Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.; and/or

- participated in the previous bidding for the same work and had quoted unreasonably high bid prices and could not furnish rational justification to the employer.

4.7 Each bidder shall submit only one bid for one contract.

#### 5. Cost of Bidding

5.1 The bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer will in no case be responsible and liable for those costs.

#### 6. Site visit

6.1 The Bidder, at the Bidder's own responsibility and risk is encouraged to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for supply and installation of the Works. The costs of visiting the Site shall be at the Bidder's own expense.

#### **Bidding Documents**

#### 7. **Content of Bidding Documents**

7.1 The set of bidding documents comprises the documents listed in the table below and addenda issued in accordance with Clause 10:

Invitation for Bids Section

#### Volume I

Instruction to Bidders
 Forms of Bid and Qualification information
 Conditions of Contract & Special conditions
 Contract Data
 Forms of Securities

#### Volume II

6 Technical Specifications

# Volume III

7 Tender Drawings

#### Volume IV

# 8 Bills of Quantities

7.2 Bidding documents supplied should be completed and returned with the bid.

# 8. **Clarification of Bidding Documents**

8.1 A prospective bidder requiring any clarification of the bidding documents may notify the Employer in writing at the employers address indicated in invitation to Bid.

#### 8.2 **Pre-bid meeting**

- 8.2.1 The bidder or his official representative is invited to attend a pre-bid meeting,
- 8.2.2 The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 8.2.3 The bidder is requested to submit any questions in writing or by cable to reach the Employer not later than one day before the pre bid meeting.
- 8.2.4 Minutes of the meeting, including the text of the questions raised (without identifying the source of enquiry) and the responses given, will be transmitted without delay to all purchasers of the bidding documents. Any modification of the bidding documents listed in Sub-Clause 8.1 which may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause 10 and not through the minutes of the pre-bid meeting.
- 8.2.5 Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder. However bidder must attend the pre-bid meeting to get the clear understanding about the project requirements.

# 9. Amendment of Bidding Documents

9.1 Before the deadline for submission of bids, the Employer may modify the bidding documents by issuing addenda.

- 9.2 Any addendum thus issued shall be part of the bidding documents and shall be communicated in writing to all the purchasers of the bidding documents. Prospective bidders shall acknowledge receipt of each addendum in writing to the Employer.
- 9.3 To give prospective bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer shall extend as necessary the deadline for submission of bids, in accordance with Sub-Clause 19.2 below.

#### 10. Language of the Bid

10.1 All documents relating to the bid shall be in English language only.

#### 11. Documents comprising the Bid

11.1 The bid submitted by the bidder shall comprise the following:

## A. Technical Bid. (Envelope One)

(a) Technical Bid documents, tender drawings duly signed on each page with company seal.

- (b) EMD, Tender fee;
- (c) Priced Bill of Quantities, duly signed on each page with company seal.

(d) Qualification Information Form Documents and company profile.

(e) Copy of pre bid M.O.M. duly signed on each page with company seal.

(f) Bar chart of 2 month to complete the work and handing over of completed work site to the

And any other materials required be completing and submitting by bidders in accordance with these instructions. The documents listed under Sections 2, 4 and 7 of Sub-Clause 8.1 shall be filled in without exception.

#### B. Commercial Bid. (Envelope Two)

Commercial Quote hard copy in duplicate and one soft copy in the form of C.D.

#### 12. Bid Prices

- 12.1 The contract shall be for the whole works as described in Sub-Clause 1.1, based on the priced Bill Quantities submitted by the Bidder.
- 12.2 The bidder shall fill in rates and prices and line item total (both in figures and words) for all items of the Works described in the **Bill of Quantities** along with total bid price (both in figures and words). Items for which no rate or price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed Covered by the other rates and prices in the Bill of Quantities. Corrections, if any, Shall be made by crossing out, initialing, dating and rewriting.
- 12.3 The bidder shall quote the rates as per prescribed price bid format; the basic cost and taxes shall be shown separately. All duties, taxes, and other levies payable by the contractor under the contract, or for any other cause shall be quoted as per prescribed price bid format.

- 12.4 The rates and prices quoted by the bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of Clause 47 of the Conditions of Contract.
- 12.5 The rates of electrical/Mechanical part of the work shall include guarantee for 3 years for spares and labor, as specified by manufacturer.

#### 13. Currencies of Bid and Payment

13.1 The unit rates and the prices shall be quoted by the bidder entirely in Indian Rupees.

#### 14. Bid Validity

- 14.1 Bids shall remain valid for a period not less than **120 days** after the deadline date for bid submission specified in Clause 19. A bid valid for a shorter period shall be rejected by the Employer as non-responsive.
- 14.2 In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the bidders may extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or by cable.
- 14.3 Bid evaluation will be based on the terms & condition of tender and bid prices.

#### 15. Bid Security

- 15.1 The Bidder shall furnish, as part of his Bid, a Bid security in the amount as shown in column 4 of the table of IFB for this particular work. This bid security shall be in favor of the **DIRECTOR**, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008. and may be in one of the following forms:
- 16.1 Demand draft/Bank Guarantee from nationalized / scheduled bank located in India in favor of. **DIRECTOR** INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR. HOMI BHABA ROAD, PASHAN, PUNE-411008.
- 16.2 Bank guarantees issued as surety for the bid shall be valid minimum period of 4 months.

- 16.3 Any bid not accompanied by an acceptable Bid Security and not secured as indicated in Sub-Clauses 16.1 and 16.2 above shall be rejected by the Employer as nonresponsive.
- 16.4 The Bid Security of unsuccessful bidders will be returned after award of work to successful bidder.
- 16.5 The Bid Security of the successful bidder will be discharged when the bidder has signed the Agreement and furnished the required Performance Security.
- 16.6 The Bid Security may be forfeited

(a) If the Bidder withdraws the Bid after Bid opening during the period of Bid validity;

- (b) If the Bidder does not accept the correction of the Bid Price, pursuant to Clause 26; or
- (c) In the case of a successful Bidder, if the Bidder fails within the specified time limit to

(i) sign the Agreement; or

(ii) furnish the required Performance Security.

#### 17. Format and Signing of Bid

- 17.1 The Bidder shall prepare one original and one copy of the documents comprising the bid as described in Clause 12 of these Instructions to Bidders, bound with the volume containing the Form of Bid, and clearly marked "**ORIGINAL**" and "**COPY**" as appropriate. In the event of discrepancy between them, the original shall prevail.
- 17.2 The original and copy of the Bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder, pursuant to Sub-Clauses 4.2. All pages of the bid where entries or amendments have been made shall be initialed by the person or persons signing the bid.
- 17.3 The Bid shall contain no alterations or additions, except those to comply with instructions issued by the Employer, or as necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the person or persons signing the bid.

#### Submission of Bids

#### 18. Sealing and Marking of Bids

18.1 The bid shall be two cover / two part Bid system.

Part-I Technical Bid (Volume-1) and Conditions of contract, Contract Data and Forms of Securities (Volume-2) and Part-II Price Bid. Both the parts each in separate sealed cover duly marked Part-I (Cover-1) and Part-II (Cover-2). Both the sealed covers have to be submitted together in a common third sealed cover.

Part-I: - Technical Bid (Volume-1) and Conditions of contract, Contract Data and Forms of Securities (Volume-2).

Part-II:-The Price bid along with Bill of Quantities (Volume-3), Drawings (Volume-4) and Technical specifications (Volume-5).

#### 18.2 **The inner and outer** envelopes / cover shall

(a) be addressed to the Employer at the following address:

The Director,

Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, NCL post, Pashan, Pune– 411008. INDIA so as to reach on or before ......Hours.

- (b) bear the following identification:
  - Bid for ...... [name of contract]
  - Bid Reference No.....[insert number]
  - DO NOT OPEN BEFORE.....[time and date for bid opening, per

Clause 22]

- 18.3 In addition to the identification required in Sub-Clause 18.2, the inner envelopes shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared late, pursuant to Clause 20.
- 18.4 If the outer envelope is not sealed and marked as above, the Employer will assume no responsibility for the misplacement or premature opening of the bid.
- 18.5 Bidder will be supplied with one set of Bid Document the Bidder should treat this as **Original.** One additional copy of the Bid Document will be taken by the Bidder and make this copy as duplicate. The Duplicate copy will also contain one inner and outer cover like the Original.

#### 19. **Deadline for Submission of the Bids**

- 19.1 Bids must be received by the Employer at the address specified above. In the event of the specified date for the submission of bids declared a holiday for the Employer, the Bids will be received upto the appointed time on the next working day.
- 19.2 The Employer may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 10, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

#### 20. Late Bids

20.1 Any Bid received by the Employer after the deadline prescribed in Clause 20 will not be considered.

#### 21. Modification and Withdrawal of Bids

- 21.1 Bidders may modify or withdraw their bids by giving notice in writing before the deadline prescribed in Clause 19.
- 21.2 Each Bidder's modification or withdrawal notice shall be prepared, sealed, marked, and delivered in accordance with Clause 17 & 18, with the outer and inner envelopes additionally marked "**MODIFICATION**" or "**WITHDRAWAL**", as appropriate.
- 21.3 No bid may be modified after the deadline for submission of Bids.
- 21.4 Withdrawal or modification of a Bid between the deadline for submission of bids and the expiration of the original period of bid validity specified in Clause 15.1 above or as extended pursuant to Clause 15.2 may result in the forfeiture of the Bid security pursuant to Clause 16
- 21.5 Bidders may offer discounts to, or modify the prices of their Bids only by submitting Bid modifications in accordance with this clause, or included in the original Bid submission.

# **Bid Opening and Evaluation**

22. Bid Opening

22.1 The Employer will open all the technical Bids received (except those received late), including modifications made pursuant to Clause 21, in the presence of the Bidders or their representatives, the technical bids will be opened on 16.09.2015 at 15.00 hours at Indian Institute of Tropical Metrology, Dr.Homi Bhaba Road, Pashan, Pune-411008.

In the event of the specified date of Bid opening being declared a holiday for the Employer, the Bids will be opened at the appointed time and location on the next working day.

- 22.2 Envelopes marked "WITHDRAWAL" shall be opened and read out first. Bids for which an acceptable notice of withdrawal has been submitted pursuant to Clause 21 shall not be opened. Subsequently all envelopes marked Modification shall be opened and the submissions therein read out in appropriate detail.
- 22.3 The Bidders' names, the Bid prices, the total amount of Bid, any discounts, Bid modifications and withdrawals, the presence or absence of Bid security, and such other details as the Employer may consider appropriate, will be announced by the Employer at the opening. No bid shall be rejected at bid opening except for the late bids pursuant to Clause 20. Bids [and modifications] sent pursuant to Clause 21 that are not opened and read out at bid opening will not be considered for further evaluation regardless of the circumstances.
- 22.4 The Employer shall prepare minutes of the Bid opening, including the information disclosed to those present in accordance with Sub-Clause 22.3.

#### 23. **Process to Be Confidential**

23.1 Information relating to the examination, clarification, evaluation, and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any effort by a Bidder to influence the Employer's processing of Bids or award decisions may result in the rejection of his Bid.

#### 24. Clarification of Bids

24.1 To assist in the examination, evaluation, and comparison of Bids, the Employer may, at his discretion, ask any Bidder for clarification of his Bid, including breakdowns of the unit rates. The request for clarification and the response shall be in writing or by cable, but no change in the price or substance of the Bid shall be sought, offered, or permitted except as required to confirm the correction of

arithmetic errors discovered by the Employer in the evaluation of the Bids in accordance with Clause 26.

- 24.2 Subject to sub-clause 24.1, no Bidder shall contact the Employer on any matter relating to its bid from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Employer, it should do so in writing.
- 24.3 Any effort by the Bidder to influence the Employer in the Employer's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidders' bid.

# 25. **Examination of Bids and Determination of Responsiveness**

- 25.1 Prior to the detailed evaluation of Bids, the Employer will determine whether each Bid (a) meets the eligibility criteria defined in Clause 3; and 4.4 A, (b) has been properly signed; (c) is accompanied by the required securities and; (d) is substantially responsive to the requirements of the Bidding documents (e)Technical bid scrutiny, presentation and site visit.
- 25.2 A substantially responsive Bid is one which confirms to all the terms, conditions, and specifications of the Bidding documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the Works; (b) which limits in any substantial way, inconsistent with the Bidding documents, the Employer's rights or the Bidder's obligations under the Contract; or (c) whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.

25.3 If a Bid is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.

#### 26. **Correction of Errors**

- 26.1 Bids determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer **as follows**:
  - (a) where there is a discrepancy between the rates in figures and in words, the rate in words will govern; and
  - (b) where there is a discrepancy between the unit and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.
- 26.2 The amount stated in the Bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors and, with the concurrence of the Bidder, shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount the Bid will be rejected, and the Bid security may be forfeited in accordance with Sub-Clause 16.6 (b).

#### 27. Evaluation and Comparison of Bids

- 27.1 The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Clause 25.19
- 27.2 In evaluating the Bids, the Employer will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:

(a) making any correction for errors pursuant to Clause 26; or

(b) making an appropriate adjustments for any other acceptable variations, deviations; and

(c) making appropriate adjustments to reflect discounts or other price modifications offered in accordance with Sub Clause 21.5.

27.3 The Employer reserves the right to accept or reject any variation, deviation, or alternative offer. Variations, deviations, and alternative offers and other factors which are in excess of the requirements of the Bidding documents or otherwise

result in unsolicited benefits for the Employer shall not be taken into account in Bid evaluation.

- 27.4 The estimated effect of the price adjustment conditions under Clause 47 of the Conditions of Contract, during the period of implementation of the Contract, will not be taken into account in Bid evaluation.
- 27.5 If the Bid of the successful Bidder is seriously unbalanced in relation to the Architect's estimate of the cost of work to be performed under the contract, the Employer may require the Bidder to produce detailed price analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the execution methods and schedule proposed. After evaluation of the price analysis, the Employer may require that the amount of the performance security set forth in Clause 31 be increased at the expense of the successful Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

# Award of Contract

# 28. Award Criteria

28.1 Subject to Clause 29, the Employer will award the Contract to the Bidder whose Bid has been determined to be substantially responsive to the Bidding documents and who has offered the lowest evaluated Bid Price, provided that such Bidder has been determined to be (a) eligible in accordance with the provisions of Clause 3, and (b) qualified in accordance with the provisions of Clause 4.

# 29. Employer's Right to accept any Bid and to reject any or all Bids

29.1 Notwithstanding Clause 28, the Employer reserves the right to accept or reject any Bid, and to cancel the Bidding process and reject all Bids, at any time prior to the award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Employer's action.

# 30. Notification of Award and Signing of Agreement

30.1 The Bidder whose Bid has been accepted will be notified of the award by the Employer prior to expiration of the Bid validity period by cable, telex or facsimile confirmed by registered letter. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") will state the sum that the Employer will pay the Contractor in consideration of the execution, completion, and

maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").

- 30.2 The notification of award will constitute the formation of the Contract, subject only to the furnishing of a performance security in accordance with the provisions of Clause 31.
- 30.3 The Agreement will incorporate all agreements between the Employer and the successful Bidder. It will be signed by the successful within 28 days following the notification of award along with the Letter of Acceptance.
- 30.4 Upon the furnishing by the successful Bidder of the Performance Security, the Employer will promptly notify the other Bidders that their Bids have been unsuccessful.

# 31. **Performance Security**

31.1 Within 7 days of receipt of the Letter of Acceptance, the successful Bidder shall deliver to the Employer a Performance Security in any of the forms given below for an amount equivalent to 5% of the Contract price plus additional security for unbalanced Bids in accordance with Clause 27.5 of ITB and Clause 52 of Conditions of Contract:

- a bank guarantee in the form given in Section 8; or Demand draft/Bank Guarantee, from nationalized / scheduled bank located in India in favour of **DIRECTOR**, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008.

31.2 Failure of the successful bidder to comply with the requirements of sub-clause 31.1 shall constitute a breach of contract, cause for annulment of the award, forfeiture of the bid security and any such other remedy the Employer may take under the contract, and the Employer may resort to awarding the contract to the next ranked bidder.

# 32. Advance Payment and Security

- 32.1 No advance payment will be made.
- 32.2 Running payment will be made towards completed work up to value not less than of Rs.50 lakhs and above. Total number of bill not more than 2 numbers upto final bill.

#### 33. **Corrupt or Fraudulent Practices**

- 33.1 The Employer requires that Bidders, Suppliers, Contractors, and Consultants observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy, the Employer
  - (a) Defines, for the purposes of this provision, the terms set forth below as follows:
  - (i) Corrupt practice means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;
  - (ii) Fraudulent practice means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;
  - (iii) Collusive practice means a scheme or arrangement between two or more Bidders, with or without the knowledge of the employer, designed to establish bid prices at artificial, non competitive levels.
  - (iv) Coercive practice means harming or threatening to harm, directly or indirectly persons or their property to influence their participation in the procurement process or affect the execution of a contract;
  - (b) Will reject a proposal for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the Contract in question;
  - (c) will have the right to require that a provision be included in Bidding Documents and in contracts requiring Bidders, Suppliers, Contractors to permit the Employer to inspect their accounts and records and other documents relating to the bid submission and contract performance and to have them audited by auditors appointed by the Employer

# 34. Penalty Clause:

If the work is not completed within the aforesaid period the contractor shall pay liquidated damage of 1% per week subject to a maximum 10% of value of work order in case of delays beyond the accepted completion period for reasons solely attributed to him

#### 35. Extra Items

The rate of extra items shall be worked out in accordance with the following rules.

- a. The rates for the extra items shall be derived from the rate of an appropriate item of the similar class for which the rate has already been accepted, where same can be directly derived.
- b. The contractor shall be bound to carry out any extra items of work as per site requirement. The rate for extra items shall be derived from the rate already quoted. Where the items are not specified in the BOQ the rate shall be worked out at cost of material+labour+ Taxes +10% overheads & profit.
- c. Wherever applicable the basic rate difference in materials (mentioned in tender) shall be payable plus-minus without any profits, overheads etc., on said rate difference.
- d. Variation and Non- Tendered items, if any, shall be carried out under specific written instruction by architects and prior approval and sanction by the Institute. Sanction for all extra items shall be sought by the contractor within seven days from the occurrence such necessity. Maximum limit of non tender items/extra items shall be 10% of the ordered value.

#### SECTION 2:

# FORMS OF BID, QUALIFICATION INFORMATION AND LETTER OF ACCEPTANCE

#### Table of Forms:

- CONTRACTOR'S BID
- QUALIFICATION INFORMATION
- LETTER OF ACCEPTANCE
- NOTICE TO PROCEED WITH THE WORK
- AGREEMENT FORM

# Contractor's Bid

# NAME OF WORK: TENDER FOR KITCHEN EQUIPMENT AND HVAC WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR AND IMD AT IMD COLONY, PASHAN, PUNE

## To: **THE DIRECTOR,**

Address : INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008.

Sir,

Having examined the bidding documents including addendum, we offer to execute the Works Described above in accordance with the Conditions of Contract, Specifications, Drawings and Bill of Quantities accompanying this Bid.

This Bid and your written acceptance of it shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest or any Bid you receive.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

We also undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely — Prevention of Corruption Act 1988 .

We hereby confirm that this Bid complies with the Eligibility, Bid Validity and Bid Security

required by the Bidding documents.

Yours faithfully,

Authorized Signature: Name & Title of Signatory: Name of Bidder:

# **Qualification Information**

The information to be filled in by the Bidder in the following pages will be used for purposes of qualification criteria as provided for in Clause 4 of the Instructions to Bidders. This information will not be incorporated in the Contract.

To be eligible for Qualification, BIDDERS shall provide evidence to suitability of their meeting the Criteria indicated in Clause 4.0 and furnish details giving their full bio-data, organizational set up, technical experience, availability of plant and equipments etc. to establish their capacity and competence, and possession of adequate resources to carry out the contracts effectively and for this, the BIDS submitted shall include the following:(2)

1. Letter of tender; as in Appendix A

# 2. For Individual Bidders

- 2.1 Constitution or legal status of Bidder
- 2.2Total value of similar2012-2013 \_\_\_\_\_works executed and payments received in the2013-2014 \_\_\_\_\_last three years (in Rs. Crores)2014-2015 \_\_\_\_\_
- 2.3.1 Year wise work performed as prime contractor (in the same name) on works of a similar nature over the last five years.

2 Attach certificate(s) from the Employer

Immediately preceding the financial year in which bids are received.
 Attach certificate from Chartered Accountant.

- 2.4 Information on Bid Capacity (works for which bids have been submitted and works which are yet to be completed) as on the date of this bid.
- (A) Existing commitments and on-going works:
- (B) Works for which bids already submitted but yet to be finalized. Information to be given in the statement given below.

Description of Work (1)	Place& State (2)	Name and Address of Employer* (3)	Estimated value of works (Rs. Crores) (4)	Stipulated period of completion (5)	Date when decision is expected (6)	Remarks if any (7)

- \* Attach certificate(s) from the Employer.
- 2.5 Information of Contractor's Equipment, available Plant and Machinery is essential for carrying out the Works. The Bidder should list all the information requested below.

Refer also to Sub Clause 4.2 (d) of the Instructions to Bidders.

- Qualifications and experience of key personnel proposed for administration and execution of the Contract. Attach biographical data. Refer also to Sub Clause 4.2 (e) and 4.4 (B) (b) of instructions to Bidders and Sub Clause 9.1 of the Conditions of Contract.
- 2.7 Proposed subcontracts and firms involved. [Refer ITB Clause 4.2 (j)] Information to be given in the statement given below.

Sr. No.	Sections of the works	Value of Sub- contractor	Sub-contractor (name and address)	Experience in similar work

- 2.8 Financial reports for the last Three years: balance sheets, profit and loss statements, auditors' reports (in case of companies/corporation), etc
- 2.9 Evidence of access to financial resources to meet the qualification requirements: cash in hand, lines of credit, etc. List them below and attach copies of support documents [sample format attached].

- 2.10. Name, address, and telephone, telex, and fax numbers of the Bidders' bankers who may provide references if contacted by the Employer.
- 2.11 Information on litigation history in which the Bidder is involved.
- 2.12 Details of termination of contract by previous client if any in last five years
- 2.13 Statement of compliance under the requirements of Sub Clause 3.2 of the Instructions to Bidders.
- 2.14 Proposed work method and schedule. The Bidder should attach descriptions, drawings and charts as necessary to comply with the requirements of the Bidding documents. [Refer ITB Clause 4.1 and 4.2 (k)].
- 3.0 Additional Requirements
- 3.1 Bidders should provide any additional information required to fulfill the requirements of Clause 4 of the Instructions to the Bidders, if applicable.
- 3.2 Certificates in support of suitability, technical know-how and capability for having successfully completed the works during the last five years under Annexure A'.
- 3.3 A detailed description on the approach, methodology to the execution technology proposed, schedule and type of equipment to be used, names and responsibilities and detailed qualifications of the proposed subcontractors, if any etc.
- 3.4. A detailed description of any method of approach specially devised by the contractor to speed up the work.
- 3.5 Current solvency certificate or letter of support from the BIDDER'S Banker for an amount of Rs 26.70 Lakhs, not older than three months from the last date of submission of Bid.
- 3.6 Details of cases of having been barred or black listed from the Bidding process, if any. Black-listed Agencies'Tender is liable to be rejected.
- 3.7 The tender should be submitted in English only. Supporting documents such as Annual accounts, Balance sheets, Client's certifications, Testimonials etc., if attached in any other language, should be translated in English.

- 4.0 The BIDDERS must provide evidence of having adequate experience. This should include supporting certificates of reports relating to financial, technical and other capability of the BIDDERS. At least three certificates to be produced.
- 5.0 The BIDDERS for qualification shall provide all facilities to **THE DIRECTOR**, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008. For verification of the information / details furnished by them and also for inspection of their works carried out / in progress if requested.

## 6.0 **Nature of Submissions:**

- 6.1. The submissions from the BIDDER in response to the Clause-4 shall be in the form of a statement signed by the authorized signatory on behalf of the BIDDER, who shall hold the Power of Attorney to sign such documents. The Power of Attorney documents shall also be attached.
- Note :The DIRECTOR, INDIAN INSTITUTE OF TROPICAL METROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 or his authorized representatives reserves the right to verify any part of the information furnished by the BIDDER in the above statements without any prejudice to the terms and conditions of the Contract. The BIDDER is deemed to have given his consent for the right of verification by the The DIRECTOR, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 or his authorized representative when the BIDDER submits the above statements. If it comes to the notice of The DIRECTOR, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 that the BIDDER has suppressed any information or furnished misleading or inaccurate information, or in case whether any litigation currently in progress at the time of submission of BIDS lead to the decree by the Court of Law against the BIDDER, the The DIRECTOR, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 reserves the right to nullify the Qualification and to disgualify the BIDDER. If such information becomes available to The DIRECTOR, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 prior to issue of Letter of Intent, the BIDDER will be disgualified and will not be considered for award of work. If such information comes to the knowledge of the Client after the award of work, The DIRECTOR, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR. HOMI BHABA ROAD, PASHAN, PUNE-411008 of the BIDDER and such action would include but not Ltd to forfeiture of all deposits, guarantees etc. furnished in any form. The DIRECTOR, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 will also reserve the right to recover any Retention Money, Mobilization Advance paid by invoking of Bank Guarantees submitted, including invoking of the Performance Bond.

The entire work executed upto the stage of such termination including materials procured and delivered at site will be taken over by **The DIRECTOR**, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 and adjusted towards any payment due, as per contract conditions **The DIRECTOR**, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 can thereafter arrange for a bidding process for completion of the balance works, for which any additional financial burden to be met by **The DIRECTOR**, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 will also be recovered from the Contractor, who has been terminated, without prejudice to the other rights of **The DIRECTOR**, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 under the Contract.

## 7.0 **PARTICULAR ATTENTION**

- 7.1 Employer reserves its rights to disqualify any BIDDER if:
  - The BIDDERS have made untrue or false representation in the forms, statements and attachments submitted in proof of the qualification and requirements;
  - The BIDDER's track record of poor performance such as abandoning the work, not properly completing the contract, inordinate delays in completion or financial failures etc.
  - The BIDDERS have suits lodged / admitted / pending against it in a Court of Law for proceedings for declaration of Bankruptcy, etc or any suit which challenges the basic existence of the BIDDER and substantially influences its capacity to implement the **Works** satisfactorily. Information on the legal matters is to be submitted as per Statement-I.
  - The BIDDER shall unconditionally waive all rights in respect of challenging in any court any matter concerning this BID evaluation and award / termination of Contract. The aggrieved bidder can approach **The DIRECTOR,** INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 for their appeal against any order.

## 8.0 FINAL DECISION MAKING AUTHORITY

- 8.1 The main criteria for the selection of Contractors for the work will be on the consideration of their ability to fulfill their obligations under the contract. And competence to do good quality works within specified time schedule resources committed evaluation of technical submission etc. in addition to consideration given for competitiveness of bid price.
- 8.2 Selection for qualification will be made by a Tender evaluation committee on the basis of competence of individual bidders.
- 8.3 **The DIRECTOR,** INDIAN INSTITUTE OF TROPICAL METROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 reserves the right to accept or reject any Bid or to reduce the scope/ cancel the exercise without having to incur any cost or to assign any reason for its decision to any party whatsoever and
  - **The DIRECTOR,** INDIAN INSTITUTE OF TROPICAL METROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 decision on qualifying contractors will be final and binding on all the contractors.

# APPENDIX – A

## LETTER OF TENDER

Date:

То

The Director, Indian Institute of Tropical Metrology, Dr.Homi Bhaba Road, Pashan, Pune.

# Sub: SUBMISSION OF BID FOR, KITCHEN EQUIPMENT AND HVAC WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR AND IMD AT IMD COLONY, PASHAN, PUNE

Sir,

- 1 I / We .....having examined the details given in the Invitation to BIDDERS, we hereby submit the following information and relevant documents.
- a I/We hereby certify that all the statements, information and data provided in the enclosed Statements A to G. and accompanying sheets are true and correct to the best of my / our knowledge.
- b I/We ...... have read the instructions appended with the qualification document and I/We understand that any contract made between ourselves and **THE DIRECTOR**, INDIAN INSTITUTE OF TROPICAL METROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 on the basis of the information given by me / us is liable to be cancelled if any false information is detected at a later date.
- c I/We ......have also no objection if enquiries are made on all the projects and works listed by me / us in the accompanying sheets or any other enquiry on the information furnished herewith in the accompanying sheets.
- d I/We have furnished all information and details as asked for and have no further pertinent information to provide.
- e I/We submit the requisite certified solvency certificate and authorize **THE DIRECTOR,** INDIAN INSTITUTE OF TROPICAL METROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 to approach the Bank issuing the solvency

certificate to verify the correctness thereof. I/We also authorize **THE DIRECTOR**, INDIAN INSTITUTE OF TROPICALMETROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 to approach individuals, employers, companies, and corporation to verify my / our competency and general reputation.

- f I/We submit in Annexure 'A' the certificates in support of my / our suitability, technical know-how and capability for having successfully completed the works during the last five years.
- g I/We also agree that the decision of **THE DIRECTOR**, INDIAN INSTITUTE OF TROPICALMETROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 in the Qualification and selection of Contractors will be final and binding upon me / us.
- h I/We agree that **THE DIRECTOR,** INDIAN INSTITUTE OF TROPICAL METROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008 reserves the right to qualify any contractor or to cancel the exercise without assigning any reason for doing so or to incur any liability to any party whatsoever.
- i I/We agree not to withdraw from the contract after issue of LOI and before signing the agreement. If so we abide by the condition that liquidated damages shall be claimed against us by THE DIRECTOR, INDIAN INSTITUTE OF TROPICAL METROLOGY, DR. HOMI BHABA ROAD, PASHAN, PUNE-411008
- j The following are enclosed as enclosures to the letter of tender
  - 1. Certificate of Incorporation from Registrar of Companies
  - 2. Memorandum of Association
  - 3 Annual Report / Audited Balance Sheet & Profit and Loss Statement for the past5 years
  - 4. Solvency Certificate from Bankers for the value of Rs ----- LAKHS, current and dated not earlier than three months from the last date of submission of bid.
  - 5. Support Certificate from Bankers for Credit facilities available and cash flow of Rs ------ LAKHS per month.
  - 6. Proof of filing Income Tax returns for the previous three years.
  - 7. Sales Tax /Works Contract Tax / VAT / PAN Registration and Clearance certificate.

- 8. PERT/BAR Charts and quality Formats used at site such as pour card for Concrete etc.,
- 9. Testimonials from Clients / Consultants for completion of works included in Statement -D
- 10 LOI / Work Order issued by the Clients for ongoing works included in Statement E'
- 11. Organization Chart of Company showing the Officer in-Charge who will have direct link with and control of, site organization.
- 12. Organization Chart and Curriculum Vitae of top two officers, viz, .Project Manager and Coordinator.
- 13. Method Statement : Programming & Planning and Progress monitoring plan, weekly and monthly ; Management of direct subcontractors from selection through execution of work; Coordination with Specialist contractors like Electrical, Air-conditioning, lifts etc.; Quality control & quality Assurance at site; Safety Plan;
- 14. Statements A to H with complete details., and any certificates other than that listed above.

I / we hereby agree to abide by the decisions of The Director, INDIAN INSTITUTE OF TROPICAL METROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008. in all matters relating to this Qualification

Date of Submission

Signature of BIDDER with Official Seal

# SAMPLE FORMAT FOR EVIDENCE OF ACCESS TO OR AVAILABILITY OF CREDIT FACILITIES –CLAUSE 4.5 [B] [c] OF ITB

## BANK CERTIFICATE

This is to certify that M/s. ..... is a reputed company with a good financial Standing.

If the contract for the work, namely ..... is awarded to the above firm, we shall be able to provide overdraft/credit facilities to the extent of Rs. to meet their working capital requirements for executing the above contract.

\_\_\_ Sd. \_\_\_

Name of Bank Senior Bank Manager Address of the Bank

## Letter of Acceptance

(letterhead paper of the Employer)

[date]

[name and address of the Contractor]

Dear Sirs,

То:

This is	to no	tify you	that	your	Bid	dated _			for	exect	ution	of	the
										[r	name	of	the
contract	and i	dentificat	ion nu	ımber,	as	given in	the	Instructi	ons t	o Bid	ders]	for	the
Contract		Price		of		Rup	bees						
		) [amo	unt in		10 3		rocl	as corr	actad	and	mod	ifiod	l in

(\_\_\_\_\_\_) [amount in words and figures], as corrected and modified in accordance with the Instructions to Bidders1 is hereby accepted by our Agency.

We accept/do	not	accept	that	 be	appointed	as	the
Adjudicator2.							

We note that as per bid, you do not intend to subcontract any component of work.

[OR]	
We note that as per bid, you propose to employ M/sas	s sub-
contractor for executing	
[Delete whichever is not applicable]	

You are hereby requested to furnish Performance Security, plus additional security for unbalanced bids in terms of ITB clause 27.5, in the form detailed in Para 31.1 of ITB for an amount of Rs.————— within 21 days of the receipt of this letter of acceptance valid up to 28 days from the date of expiry of Defects Liability Period i.e. up to ......... and sign the contract, failing which action as stated in Para 31.2 of ITB will be taken.

We have reviewed the execution methodology submitted by you along with the bid in response to ITB Clause 4.2[k] and our comments are given in the attachment. You are requested to submit a revised Program including environmental management plan as per Clause 27 of General Conditions of Contract within 14 days of receipt of this letter.

Yours faithfully,

Authorized Signature Name and Title of Signatory Name of Agency

## Issue of Notice to proceed with the work

(letter head of the Employer)

———— (date)

То

Dear Sirs:

\_\_\_\_\_

Pursuant to your furnishing the requisite security as stipulated in ITB clause 31.1 and signing of the contract agreement for the execution of ----- @ a Bid Price of Rs.----, you are hereby instructed to proceed with the execution of the said works in accordance with the contract documents.

Yours faithfully,

(Signature, name and title of signatory authorized to sign on behalf of Employer).

## **Agreement Form**

## Agreement

 This agreement, made the \_\_\_\_\_\_ day of \_\_\_\_\_\_20 \_\_\_\_,

 between \_\_\_\_\_\_ [name and address of Employer]

 (hereinafter called —the Employer)|| of the one part and \_\_\_\_\_\_ [name and address of contractor] (hereinafter called —the Contractor|| ) of the other part.

Whereas the Employer is desirous that the Contractor execute Proposed KITCHEN EQUIPMENT AND HVAC WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR AND IMD AT IMD COLONY, PASHAN, PUNE [name and identification number of Contract] (Hereinafter called —the Works||) and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein, at a contract price of Rs.....

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, and they shall be deemed to form and be read and construed as part of this Agreement.
- 2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the Contract.
- 3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
- 4. The following documents shall be deemed to form and be read and construe as part of this Agreement, viz.:
  - i) Letter of Acceptance;
  - ii) Notice to proceed with the works;
  - iii) Contractor's Bid;

- iv) Contract Data;
- v) Conditions of contract (including Special Conditions of Contract);
- vi) Specifications;
- vii) Drawings;
- viii) Bill of Quantities; and
- ix) Any other document listed in the Contract Data as forming part of the contract.
- 5. PENALTY CLAUSE: If the Contractor fails to carry out the work as per specifications mentioned in the BoQ within the due date, the contractor is liable maximum of 10% of work order value and such money will be deducted from any money due or which may become due to the supplier. Completion period will be calculated from the date of handing the site to the contractor for execution of work.
- 6. Other terms and conditions will be application as per tender document and issued LOI
- 7. The Director, Indian Institute of Tropical Meteorology, Pune will be the final authority to decide the appropriate action and it will be binding on the vendor. Decision of Director, IITM in regard of interpretation of the terms and conditions shall be final and binding on the vendor.

In witness whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

The Common Seal of

was hereunto affixed in the presence of:

Signed, Sealed and Delivered by the said

in the presence of: Binding Signature of Employer

Binding Signature of Contractor

**Conditions of Contract and Special Conditions** 

The following tender specifications are included: Custom Fabricated Kitchen Equipments Cold Room / Refrigeration Imported Equipments Indian – Bought out Equipments Exhaust Hood / Fire Suppression System (All of the above in One BOQ)

The bidders are required to follow the instruction given and return the said document duly filled in with rates.

bidders shall afford whatever assistance is required in this process.

### **SPECIAL CONDITIONS**

### Scope of Work

Scope of work under this contract shall include the following as per details in the documents:

- Supply of equipments and installation to be done at the "Owner / Employer" site in Pune.
- Providing two (2) sets of Operating and Maintenance Manuals.
- The "Contractor" undertakes the responsibility to train the designated staff of the "Owner / Employer" and or any other representative of the "Owner / Employer".

### Bidding

The bidder shall study the specifications before preparing their bids and shall clearly indicate any changes or deviations from those given in the documents in their jobs. Deviations should be shown in a tabular form clearly indicating item wise deviation along side original specifications so these may be considered during evaluation of the bid.

The bidders are required to quote on the following basis:

- Ex- factory / work basis.
- Packing & forwarding.
- Loading Unloading
- Transportation from works to site.
- All applicable taxes and duties.
- Installation cost with details.
- The successful bidder will be required to submit fabrication drawings with details to an appropriate scale for all fittings etc. for owners / consultants review and approval prior to manufacturer.

- Successful bidder is required to verify all dimensions from site of all equipments ordered with him and of other equipment that may have impact on his equipment being procured from elsewhere.
- Successful bidder shall submit a program of manufacture, delivery & installation and the likely dates for inspection with in one week of placing orders.
- Successful bidder shall mark the points of services at the site and also have to verify the sizes at the site for all the equipments.
- Successful bidder shall provide all necessary holes and / or openings in the equipment, which may be required for the proper installation of the plumbing, electrical, ventilating and refrigerating connections.
- The successful bidder shall allow the owner or any party on his behalf, if necessary to inspect the equipment during fabrication, prior to assembly and before dispatch.
- The successful bidder or their agent shall be responsible for the unloading of his own materials and fittings into a secure area on site provided by the owners. They shall be responsible for providing their tools / tackle and other equipment on site for installing the equipment in the designated locations.
- Prior to acceptance of any tender, the successful bidder shall be required to visit the site and liaise with the consultants / contractor regarding the service facilities available from the other agencies, accessibility of the site and parts there in to enable their fittings to be installed.
- The successful bidder would be required to inform the owner's in the writing about any services they may require for the installation, well in the advance to the actual installation of the equipment.
- Inspection of all fittings shall be carried out by the owner / during and after the installation is completed. The drawback / deficiencies, if any shall be attended to by the successful bidder.

# **Bidder's Experience**

Every intending "Bidder" shall submit along with his bid a complete list of works of a similar nature carried out by him during the past two years. The bids not accompanied by such a list are liable to be rejected. "Employer" may prefer to inspect "Bidder's" manufacturing / fabricating facilities and completed installations. "Bidders" should indicate the places that can be visited by the "Employer" for such purposes.

# Spare parts for Equipment

The 'Bidder' shall include in his bid a complete list of recommended spare part that would be required for a period of two (2) years after commissioning, during the course of normal operations of the equipment. He shall also quote his rates for these separately on a ex-works basis and CIF basis (in case of imported equipments).

## Taxes, Duties, Freight, etc

All taxes and duties applicable are deemed to be included (if not indicated separately) by the 'Bidder' in his rates. Freight & Octroi, if applicable will be extra and will be informed by the 'Bidder' before the order is placed. Service Tax in case of installation charges will be mentioned separately by the 'Bidder' on the installation charges.

## Workmanship

Every 'Bidder' is expected to have inspected the site and studied the kitchen layout drawings. The workmanship should be strictly conforming to the highest standard and shall be in conformity with the specifications given separately. The entire work shall be carried out in the best possible manner and to the entire satisfaction of the 'Owner / Employer' or his authorized representative.

## Division of Work / Selection of Bidder

'Consultant' and 'Owner / Employer' reserve themselves the right to split up the scope of work, if found necessary.

'Consultant' and 'Owner / Employer' further reserve the right to place order on any of the Bidder without assigning any reason and their decision would be final.

## **Commissioning and Guarantee**

After the equipment installation is complete, the contractor shall carry out testing and commissioning in the presence of the 'Consultant' and / or 'Owner / Employer' as per norms of specification and obtain certificate from the 'Consultant' for satisfactory commissioning of equipment / installation. The successful 'Bidder' shall submit a guarantee to the 'Owner / Employer' against manufacturing defects, for good performance and satisfactory handing over of the installations. In case of any defects observed during operations, the 'Contractor' shall be informed and the 'Contractor' shall make good the equipment free of cost during the guarantee period. All expenses involved, including of personnel and equipments' transport shall be borne by the 'Contractor' for repair / replacement of the equipments during the guarantee period.

## Warranty/Guarantee

Successful Bidder shall provide guarantee/warrantee for a period of 2 years after the commissioning/handing over of site. During warranty period bidder has to provide preventive maintenance.

# **Supply Voltage and Ambient Conditions**

All the equipments will be suitable for either 1-phase, 220V, 50 cycle or 3-phase, 440V, 50 cycle. The power supply sometimes registers a variation of ~10%. The equipment shall be guaranteed to withstand the fluctuation and be tropicalised.

# Checking

Checking of manufactured equipment submittals by Consultant is for design concept only, and does not relieve the Contractor of responsibility for compliance with design drawings, details and specifications, verification of utilities with equipment requirements for conformity and location and verification of all dimensions of equipment and building conditions or reasonable adjustments due to deviations.

# **Operation Manual**

The successful 'Bidder' shall handover to the 'Owner / Employer' detailed technical specifications, operations and maintenance manual for the equipments in English. The manual shall contain complete details of the equipment and instructions for normal operation and repair. Two (2) copies of these manuals shall be handed over to the 'Owner / Employer'.

# Packing

The equipment shall be dispatched in a rail / road worthy packing and delivered in good condition at the site. The 'Bidder' shall take special care in packing to avoid damages due to rough handling in transit. Any damage will be to the 'Bidder's' account.

# Submissions along with Quotation

Soft and hard copy of the catalogues of the equipments quoted.

Soft copy of the technical Data sheet.

Any Deviation in specification from the tender needs to be brought to our notice at the time of submission of quotation.

Quotation will not be considered if any of the above is not submitted along with quotations.

Please note the vendor is expected to position a site supervisor during the execution of the job, who will coordinate all the related work with other agencies at site.

# HEALTH AND SAFETY

## CONTRACTORS AND SUB-CONTRACTORS GUIDELINES

- 1. Safe working practices must be observed at all times
- 2. It is the responsibility of the Contractors and sub-Contractors staff to use appropriate personal protection. It is the Contractors and sub-Contractors obligation to supply necessary protective equipment and clothing.
- 3. Certain areas are designated hazardous (eg. noisy areas) and warning signs must be obeyed.
- 4. Where the Contractors and sub-Contractors work presents a potential hazard, appropriate notices must be supplied and displayed, and the area made secure as far as is reasonably possible.
- 5. The **will** not provide tools, materials, lifting or access equipment, fixings or raw materials, unless by previous arrangement.
- 6. Any equipment brought to site by Contractors and sub-Contractors must not be used by untrained persons, and attention is drawn to the indemnity clause of the **orders**, which states that the Contractor is liable for any consequent damage or loss to people, equipment or buildings.
- 7. All welding, burning and grinding operations which could potentially cause fire must be reported to security.
- 8. No alcohol is permitted at site, and anyone deemed to be under the influence of alcohol will be required to leave the site.
- 9. Vehicle parking will be in designated areas only.
- 10. No smoking is allowed in work areas.
- 11. No food is to be consumed or left in work areas.
- 12. Warning signs and speed restrictions must be observed.
- 13. Place of work to be left in a tidy and safe condition at the end of each work period.
- 14. Care to be taken against contamination of any product of paint, oil, etc.
- 15. All injuries must be reported to the authorities as per law applicable.
- 16. A health and safety officer shall be employed on such conditions as circumstances require.

The above has been received and read by Contractor / Sub- Contractor, we agree to comply with these Rules (See foot-note)

Contractors

.....

Company.....

Date .....

## NOTE :

The Contractor will ensure that sub-Contractor receive and sign a copy of these Rules.

## CONTRACT DATA

## **Contract Data**

## Items marked "N/A" do not apply in this Contract.

The following documents are also part of the Contract:	Clause Reference
$\cdot$ The Schedule of Operating and Maintenance Manuals	[58]
· The Schedule of Sub Contractors	[7]
· The Schedule of Key Personnel	[9]
$\cdot$ The Methodology and Program of Interior and furnishing works	[27]
<ul> <li>The Schedule of Key and Critical equipment to be deployed on the work as per agreed program of execution.</li> </ul>	[27]

## The Employer is

Name:	The Director, Indian Institute of Tropical Meteorology (1.1)
Address:	Dr. Homi Bhabha Road, NCL post, Pashan, Pune.

## The Architect is (1.1)

Name:	M/s. C. R. Narayana Rao Consultants P ltd
	Architects & Engineers

Address: 10, Karpagambal Nagar, Mylapore, Chennai- 600004

The Adjudicator appointed jointly by the Employer and Contractor is: Name (1.1) Address :

The name and identification number of the Contract is **The Works consist of**- KITCHEN EQUIPMENT AND HVAC WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD, AT IMD COLONY, PASHAN, PUNE

The following documents also form part of the Contract: [2.3]

[3]

[3]

# 1. Agreement

# 2. Letter of Acceptance, notice to proceed with the works

(1) Contractor's Bid (2) Contract Data	
<ul><li>(2) Contract Data</li><li>(3) Conditions of Contract including Special Conditions of Contract.</li></ul>	
(4) Specifications	
(5) Drawings	
(6) Bill of Quantities	
The language of the Contract documents is English	
The law which applies to the Contract is the laws of Union of India	

The currency of the Contract is Indian Rupees.	[46]

Appointing Authority for the Adjudicator :- THE DIRECTOR

Indian Institute of Tropical Meteorology Dr. Homi Bhabha Road, NCL post, Pashan, Pune.

# FORMS OF SECURITIES

## Forms of Securities

Acceptable forms of securities are annexed. Bidders should not complete the Performance and Advance Payment Security forms at this time. Only the successful Bidder will be required to provide Performance and Advance Payment Securities in accordance with one of the forms, or in a similar form acceptable to the Employer.

**Annex A:** Bid Security (Bank Guarantee)

Annex B: Performance Bank Guarantee

**Annex C:** Performance Bank Guarantee for Unbalanced Items

## Annexure A

## **BID SECURITY (BANK GUARANTEE)**

WHEREAS, \_\_\_\_\_ [name of Bidder] (hereinafter called "the Bidder") has submitted his Bid dated \_\_\_\_\_\_ [date] for the Interior and furnishing works for student/trainee hostel for and IMD at IMD colony,Pashan,Pune.(hereinafter called "the Bid").

SEALED with the Common Seal of the said Bank this \_\_\_\_\_ day of \_\_\_\_\_ 2010\_\_\_\_.

THE CONDITIONS of this obligation are:

(1) If after Bid opening the Bidder withdraws his bid during the period of Bid validity specified in the Form of Bid; or

(2) If the Bidder having been notified of the acceptance of his bid by the Employer during the period of Bid validity:

(a) fails or refuses to execute the Form of Agreement in accordance with the Instructions to Bidders, if required; or

(b) fails or refuses to furnish the Performance Security, in accordance with the Instruction to Bidders; or

(c) does not accept the correction of the Bid Price pursuant to Clause 27 of Instruction to Bidders;

We undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the occurrence of one or any of the three conditions, specifying the occurred condition or conditions. This Guarantee will remain in force up to and including the date 2 days after the deadline for submission of Bids as such deadline is stated in the Instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this guarantee should reach the Bank not later than the above date.

DATE \_\_\_\_\_\_ SIGNATURE OF THE BANK \_\_\_\_\_\_

WITNESS \_\_\_\_\_\_ SEAL \_\_\_\_\_

[signature, name, and address]

1 The Bidder should insert the amount of the guarantee in words and figures denominated in Indian Rupees. This figure should be the same as shown in Clause 16.1 of the Instructions to Bidders.245 days after the end of the validity period of the Bid

## Annexure B

## PERFORMANCE BANK GUARANTEE

To:

The Director Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road,

NCL

post, Pashan, Pune, India.

WHEREAS \_\_\_\_\_ [name and address of Contractor] (hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. \_\_\_\_\_ dated \_\_\_\_\_ to execute Interior and furnishing works for student/trainee hostel for and IMD at IMD colony, Pashan, Pune.

(Hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of \_\_\_\_\_\_ [amount of guarantee]1\_\_\_\_\_\_ [in words], such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of \_\_\_\_\_\_ [amount of guarantee]1 as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

\_\_\_\_\_

This guarantee shall be valid until ...... (i.e.) 28 days from the date of expiry of the Defects Liability Period.

Signature and seal of the guarantor \_\_\_\_\_

Name of Bank \_\_\_\_\_

Address \_\_\_\_\_

Date \_\_\_\_\_

☑ An amount shall be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract and denominated in Indian Rupees.

# Annexure C

# PERFORMANCE BANK GUARANTEE (for unbalanced items)

To:

THE DIRECTOR, Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, NCL post, Pashan ,Pune, India.

WHEREAS \_\_\_\_\_\_ [name and address of Contractor] (hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. \_\_\_\_\_ dated \_\_\_\_\_ to execute Interior and furnishing works for student/trainee hostel for and IMD at IMD colony,Pashan,Pune. (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of \_\_\_\_\_\_ [amount of guarantee]1\_\_\_\_\_\_ [in words], such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of \_\_\_\_\_\_ [amount of guarantee]1 as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until ...... (i.e.) 28 days from the date of issue of the certificate of completion of works.

Signature and seal of the guarantor \_\_\_\_\_

Name of Bank \_\_\_\_\_

Address \_\_\_\_\_

Date \_\_\_\_\_

\_\_\_\_\_

1. An amount shall be inserted by the Guarantor, representing additional security for unbalanced Bids,

## **APPROVED MAKE LIST**

# HVAC

Dry Scrubber Unit: Exhaust fans: Inline exhaust fan: Centrifugal fan: GSS Ducting: Aluminium grills: PVC Pipe: Fire and Smoke Dampers: Cable:	HPS, Nutech , Rydair, NIVIA Kruger,Dynair,Airflow,Systemsaire Kruger,Dynair,Airflow,Systemsaire ZECO COSMOS,Jindal Supreme,Cosmos,Finolex Cosmos Polycab,Havells or Equivalent
Kitchen Equipments:	
Hose unit :	Eletrolux model no. MRM 15 or Indian Equivalent
Plastic Dustbin:	Nilkamal,Syntex or equivalent
Air Curtain:	Acme Environment control system, Almonard or equivalent
Weighing machine:	ISI specified brands or Approved by weights and measure department
Tilting wet grinder:	Rishab-Trident,Cosmos,Rajlakshmi or equivalent
Potato Peeler:	Cosmos or Indian Equivlent
Wet Masala grinder:	Cosmos, Trident or equivalent
Tilting boiling pan:	Electrolux,Bonnet,Nayati or equivalent
Dough kneader:	Berjaya I/BSP SM-50D, Cosmos or equivalent
Veg Processor:	Robot coupe, Halde or equivalent
Freezer:	Bluestar, Foster, Carrier or equivalent
Hand spray:	T & S or equivalent
Dishwash:	Hobart, WinterHalter or equivalent
Water softner:	European water care system AT 10/M
Dish/cutlery/glass racks:	Cambro or Equivalent
Water Cooler:	Aquaguard pure chill 80 PSS RO
Drain Grating:	ACO,SSS (VIANEN) or equivalent
Insectocuters:	Pest control India model-Spider or equivalent
Steam cleaner:	Karcher SG 4/4 or equivalent
Manifold And LPG:	United works Mumbai or equivalent
LPG Meter:	G4 Matrix model or equivalent
Gas Leakage detection:	Gas Vigil Technologies (CE certified) GV 108(Digital)
System	
Vermi compost:	Kwik composter model KC 100 (Earth care Equipments) or equivalent
Dumbwaiter:	East India elevators, power lift, blue star elevators india, beacon elevators and equivalent.

#### **TECHNICAL SPECIFICATIONS**

**Note to the bidders:** Bidders are requested to quote their rates as per the technical specification given below, the scope of the works is supply, installation, testing and commissioning of all the equipments and other accessories with all leads and lifts. Wherever possible approved makes of different kitchen equipment/materials/products have been specified in the item wise specifications and Images of the products, however in case any bidder wants to suggest equivalent additional makes of any product/equipment he is free to do so with complete technical specifications of the equipment/product, market rate of the item/product and technical brochure of the product during the pre bid meeting, so that additional equivalent makes of the products can be approved subjected to meeting the requirements of IITM Pune. Any request for approval of the equivalent makes after opening the commercial bids shall not be entertained. IITM Pune reserves the right to disapprove the suggested additional equivalent make and IITM Pune decisions shall be final and binding on the bidders.

#### 1. Fabricated Equipment:

All fabricated equipment must be as per specifications and to the satisfaction of IITM, Pune. Sample of each manufactured/fabricated products are to be got approved from the engineer in charge at site/in factory before mass production. Minor changes/additions/improvements in the final finish or method of fabrication suggested by IITM needs to be incorporated without additional cost.

#### 2. Welding and Soldering:

All seams and joints shall be shop welded or soldered as the nature of the material may require. Welds to be ground smooth and polished to match original finish.

#### 3. Sound-Deadening

The underside of all sink units in dish-wash area shall have a hard drying mastic 1/16" (2mm) minimum thickness with all reinforcements completely covered, sealed and painted with two or more coat of silver aluminum paint.

#### 4. Table Tops

All table tops will be one piece construction. Reinforced on the underside with Stainless Steel 304 welded in place so tops can support heavy weight without deflection. Cross bracing of SS 304 to be provided at not more than 750mm centre to centre.

- Plain Work Top: 16swg SS 304 sheet duly mounted on base frame with SS 304 studs.
   45mm down & 6mm in turn on front & side where backsplash is provided, otherwise on all sides. All bends to be rounded & smooth.
- B. Sunk Work Top: 16swg SS 304 sheet duly sunk in 25mm to avoid water spillage.

- C. Sink Top: 16swg SS 304 sheet duly mounted on the base frame with SS 304studs. 12mm raised marine edges turned out 12mm @ 45 deg., Down 45mm & in 6mm turn on front & both sides. Vertical & Horizontal corner coved. All bends to be rounded & smooth.
- D. **Garbage Chute Top:** 16swg SS 304 sheets duly sunk in 25mm to avoid water spillage having 200mm diameter and 200mm deep integral garbage chute. Care to be taken to ensure neck weld of garbage chute with top does not protrude and allows for easy flow of waste.
- E. **Rolling & Batter Top:** 16swg SS 304 sheet duly mounted on base frame with SS 304studs. 45mm down & 6mm in turn on front & side where backsplash is provided, otherwise on all sides. All bends to be rounded & smooth.
  - a. With suitable cut outs to house GN Pans as required.
  - b. Additional reinforcement of 25x25x6mm angles required at 150mm intervals

## 5. Fasteners:

Exposed bolt heads will not be permitted on fixtures.

Butt joints made by reverting straps under seams and then filled with solder will not be accepted.

Rivets of any kind, including pop-rivets, will not be accepted.

Exposed screw heads, when necessary, shall be of the same material as the pieces joined and countersunk flush.

### 6. Rolled Edges:

Rolls shall be as detailed with corners bull nosed, welded, ground and polished.

7. Corners:

Dish tables, splash backs and turned up edges shall have 15mm or larger radius bends in all horizontal and vertical corners, covered at intersections unless specified otherwise.

### 8. Framework (All Tables)

38x38x5 mm thick SS 304angle.Rubber gasket to be inserted between table topSS 304sheet & framework for sound deadening.

### 9. Backsplash

SS 304 backsplash of thickness same as the table top. 150mm high turned up 25mm at 60° towards the back & 12mm down at 90° with rounded junction for easy cleaning. Back splash to be fully covered at the back with minimum 20swg thick SS 304sheet.

## 10. Under shelf

Made of 18swg SS 304sheet, strengthened with one number SS 304 25x100x25mm (inverted "U" shape) channel underneath throughout length duly welded shelf width up to 600mm, and two numbers "U" shape channels between 600mm to 900mm shelf. Width & length of the shelf shall be as per table dimension (inside to inside of table

uprights).

### **11. Uprights and Cross Rails:**

Legs and cross rails shall be 38mm 16 gauge SS 304square tubing unless otherwise specified. All welds at cross rails shall be continuous and ground smooth. Tack welds are not acceptable. Top of legs to be fitted with 16 gauge SS 304gusset plate. Bottom of legs to be fitted with heavy duty adjustable SS 304bullet foot/floor leveler of approved make. Foot plug to be welded, ground and polished.

# Note: All rear uprights of equipment in any Preparation Areas must be 75mm away from wall to allow for unencumbered passage of LPG Line.

### 12. Closures:

Backs of all fixtures, splash back, shelves, etc., shall be closed.

### 13. Castors:

Castors shall be heavy duty, non-marking, SS ball-bearing with grease proof neoprene or polyurethane tires. Wheels shall be 150mm dia. Minimum width treads of 30mm. Minimum capacity per castor 115 kg.

## 14. Sinks:

Fabricated sinks shall have corners same as for metal tops. One piece welded construction with individual partitions, bottoms connected to drains and gap between the sink units to be closed with SS 304 16 SWG sheet.

Sinks bowl shall be 16 gauge SS 304 welded as integral part of top.

Accessories for Two and Three Sink Tables: GI pipe 40mm dia. overflow assembly with 40mm dia. SS drain valve for sink to be provided &flexible PVC drain pipe after the drain valve to lead to floor trap.

**Aprons:** 16 SWG SS 304 front apron to be provided to all the sink units down to sink depth.

### 15. Drains, Wastes:

All necessary drains and wastes shall be furnished by the Kitchen Equipment contractor with his equipment.

### 16. Hardware:

All hardware shall be of heavy duty construction and identified on shop drawings. All hardware shall be identified with manufacturer's name and number so that broken or worn parts may be replaced.

### 17. Ice Pans/Bins:

All ice pans, ice bins, refrigerated pan and cabinets shall be provided with breaker strips where adjoining top or cabinet face materials to prevent condensation. Breaker strips shall be fastened with SS 304, counter sunk screws. Pop rivets will not be accepted.

#### **18. Refrigerated Items:**

All evaporators for fabricated refrigerators/freezers shall be installed for accessibility and replacement. All reach-in refrigerators and freezers with remote refrigeration systems shall be complete with thermo-static expansion values at the evaporator.

Fabricated compartments, refrigerated shelves, plates, etc., shall be provided with a 20 gauge steel box to house expansion valves when valve is remote from evaporator. Install in base of fixtures or in a concealed position.

All refrigerated compartments shall be fitted with thermometers.

#### 19. Masonry Pads:

Masonry pads when indicated on drawings shall be constructed by the kitchen vendor without any additional cost.

Fixtures resting on masonry pads shall be sealed to pads to eliminate all crevices.

#### 20. SS 304 Storage Rack

#### Shelves: As specified

Shall be constructed in 18swg SS 304sheet duly mounted on 4 No's 14swg thick SS 304angle of size 40x40 mm with the help of corner brackets and SS 304 nuts & bolts, (no welding shall be allowed). Shelves shall be turned down 25mm & 5mm in on all sides. Shelves shall be strengthened with 25x100x25mm (inverted "U" shape) channel underneath. All bends to be rounded & smooth.

#### Load Carrying Capacity: Minimum 90 kgs/shelf.

For SS 304 Racks in Cold Rooms and Veg Stores, all shelves shall be duly perforated and ribbed to allow for air circulation. Ribbing to be at minimum/maximum distance of **100/150mm**. For SS 304Racks in all other areas, shelves shall be plain.

### II. GENERAL SPECIFICATIONS: COLD ROOMS

- 1. To provide all materials and labour necessary for the fabrication and installation of the Cold Storage Rooms in the size and shape in accordance with the equipment layout drawing, sizes as per BOQ and specifications as enumerated in this section.
- 2. All pre-fabricated cold storage rooms shall be manufactured and installed by approved vendor.
- 3. Work shall be accomplished so as not to delay the project construction schedule, interfere or conflict with the work being performed by other contractors. Work shall be coordinated and integrated in cooperation with them to prevent conflict of work necessitating changes to work already completed. Should conflicts occur, Kitchen Equipment Contractor shall notify the IITM for his coordination in its resolution.

- 4. The Kitchen Equipment Contractor shall provide not less than 20mm thick Kota stone flooring as a wearing floor inside the cold storage rooms to prevent prolonged exposure of the floor insulation.
- 5. During installation, curing and cleaning of the wearing floors inside the cold storage rooms, the cold storage room doors shall be left open and the rooms well ventilated to prevent damage to the interior. "Keep Out" signs shall be posted at each open door.
- 6. After the installation of the cold storage rooms and prior to the installation of the wearing floor and after the wearing floor has been cured, the cold storage room doors are to be closed and locked.
- 7. The Kitchen Equipment Contractor shall be responsible for making sure the cold storage rooms are not used by any other trade for storage or work areas. The Kitchen Equipment Contractor shall repair or replace any damaged areas on the interior of the cold storage rooms being used for storage or work areas.
- 8. The Kitchen Equipment Contractor shall fully familiarize himself with the job site and the architectural drawings and specifications. The Kitchen Equipment Contractor shall provide the necessary job site coordination with the various traders to insure job site conditions will meet the requirements of the cold storage rooms.
- 9. The cold storage rooms shall be cleared and ready for operation at the time the building is turned over to the Owner.

### COLD ROOM SPECIFICATION

**OVERALL SIZE** : As mentioned in the BOQ.

#### PANELS:

Wall, Floor and Ceiling panels shall all be metal clad, 100 mm thick rigid Poly Urethane Foam panels. All panels including floor panels and ceiling panels shall be locked together with tongue in groove cam lock, with holes plug sealed with vinyl caps, ie. all joints between panels including wall to wall panels, wall to ceiling panels and wall to floor panels shall be locked together with tongue in groove cam lock. All 900 corners or "T" corners for common cold rooms should form integral 900 corner panels or integral "T" corner panels, locked together with adjoining wall panel, floor panel and ceiling panel with tongue in groove cam-lock and any use of S.S. angles at these corners (either horizontally or vertically) to cover joints shall not be permitted.

Exposed exterior walls, internal walls, door cladding and internal ceiling finished with 0.5 mm Stainless Steel of type 304 No.3-finish, non-exposed exterior walls (adjacent to civil walls) finished with 0.5 mm Galvanised Steel,floor panels clad on both sides with 2 mm Galvanized Steel coated withBitumen/Hot tar (or provided with a polyethylene sheet to act as aterproofing)

#### DOORS

Doors shall be 100 mm thick insulated doors flush with wall panels, hinged as shown in the layouts. Doors supplied complete with all hardware including; 1.5 mm thick 600 mm high Stainless Steel kick plates on both sides of door, cam lift-type self-closing door hinges, observation window, door strip heater, indicator panel with man-inside push-button audio-visual alarm, high temperature audio-visual alarm, foot operated treadle, built-in cylindrical lock, keys, padlock arrangement and panic exit device operating from inside cold room. Bottom of door provided with sweeping rubber wiper sealing gasket to ensure seal with floor.

#### ACCESSORIES

Unit shall be furnished with pressure relief port, jamb protection, see through strip curtains behind the doors and interior vapour proof room lights as shown in the layouts.

#### **EVAPORATORS**

Slim-line evaporator coil fan with electric defrost and both alarms, indicators etc. Shall be of approved make

#### COMPRESSOR

Type of compressor (hermetic or semi-hermetic) and type of refrigeration System as per BOQ. Compressors shall be of approved make with inverter technology.

#### **INSTALLATION& ASSEMBLY**

Unit installed on a recessed floor pad with quarry stone on setting bed. When assembled all panels shall be locked in place with tongue in groove cam locks. When installed, the internal civil work tiled floor inside the cold room shall be Flush and in line with outside finished kitchen floor level, suitable for trolley Movement inside.

After assembly of panels, Cold Room supplier shall ensure the following:-All internal horizontal and vertical corners between joints of panels shall be sealed closed with silicon sealant, as part of Cold Room Supplier's scope of work.

All resultant exposed 900 gaps on the exterior, between Cold Room panel and finished floor level and all resultant exposed gaps between Cold Room wall panels and adjoining 900 civil walls and civil structural columns shall be sealed closed thru S.S angles, properly grouted/ anchored to ensure a clean hygiene finish, supply and installation of S.S angles to be part of scope of work of Cold Room supplier

Cold Room supplier shall also ensure that all resultant gaps above the Cold Room between the Cold Room ceiling panel and the adjacent false ceiling level shall be sealed closed with false ceiling panels flush with outside face of Cold Room, fixing of false ceiling panels by false ceiling contractor. In the event that false ceiling is not being provided in any part of kitchen, the resultant exposed gaps above the Cold Room between the Cold Room ceiling panel and the underside of soffit of roof slab shall be closed/ sealed with ½" thick gypsum board flush with outside face of Cold Room, fixing of gypsum board shall be by other agency but executed under supervision by Cold Room Supplier.

During fixing of slim-line evaporator coils, Cold Room supplier shall ensure a clearance height of 1905 mm clear below the condensate drain outlet and shall position the evaporator coil as indicated in the plan attached. Condensate outlet shall be suitably taken out of wall panel and punctured thru civil wall as the case may be, and piped to F.D. and terminated at 50 mm above the F.D., piping to be suitably S.S clamped, F.D. location has been indicated in the plan attached.

#### NOTE:-

Contractor will be required to submit assembly/ installation drawings with Details separately for each Cold Room ordered for review and approval prior to manufacture. and indicate the requirements of plinths depressions, drains, etc. required to be provided by others.

Drawings should indicate the room Layout Plan, sizes, finishes, sections drawings thru Cold Room door, section drawings thru evaporator coil, all relevant dimensions, location of control panels, layout

plan showing location of condensing units with sizes, electrical data etc.

ТҮРЕ	: PRE FABRICATED-MODULAR
INSULATION THICKNESS	: POLY-URETHANE-FOAM (PUF) 60 MM for cooler/100mm for
	: freezer
K-FACTOR (THERMAL CONDUCTIVIT)	: 0.22
U-FACTOR (HEAT TRANSFER COEFFICIENT)	: 0.019 –0.022
	3
DENSITY	: 40 KG/M
LOCKING b/w WALL-WALL PANEL	: CAM LOCKED
CORNER PANEL	: SINGLE PIECE PRE-FABRICATED STRUCTURE
	PUFF SLABS (Finished with
FLOOR	: 20mm kota stone)
	<b>a</b>
DIMENSIONAL VARIATION	: < 2%
CLOSED CELL CONTENTS	: >=97%
	20 MM FOR EASE OF OPENING
CAM LOCKS DIAMETER	: & CLOSING
	CLOSING

PUF MATERIAL	:	R-141A (CFC FREE AGENT) BLOW FOAM
Structural Stability Of PUF	:	WITHIN 2% OF INITIAL SIZE AFTER 48 HRS OF FOAMING > 150 PSI UNDER EXTREME
Skin Adhesion	:	HOT & COLD CONDITIONS
Digital Temp Indicator	:	A S CONTROLLER
Accessories	:	POSI-SEAL DOOR CLOSURE, AS CONTROLLER

### III. LPG INSTALLATIONS & PIPING

#### LP Gas Pipeline System Specifications

General:

#### Scope of work:

a. Kitchen equipment contractor shall provide location drawings for all necessary holes and/or openings in the kitchen walls which may be required for the proper installation of the gas pipeline and get it approved from IITM, Pune before execution at site.

#### **b.** Pre execution-coordination:

i) Kitchen contractor shall make a schematic drawing of the plan for LP gas pipeline system to be executed and obtained necessary approval from the gas agencies. Any observations shall be incorporated and amended drawing issued for execution at site.

ii) The work should be taken up at site after getting necessary approval.

#### c. Post execution-coordination :

i) " As Built " drawing of the plan as executed for LP gas pipeline system after successful commissioning of the system shall be submitted to IITM, Pune.

ii) After the commissioning of the system pressure test certificate along with as built schematic layout shall be forwarded with the sanction request letter from the client to Indian Oil Company short listed.

iii) The LPG contractor shall demonstrate do's and don'ts to the operation team for smooth operations.

Design Parameters:

As issued from the office of the design consultant as follows:

Each individual range will have two manifolds, one for pilot and the other for main burner. Hence pipeline shall have provision for low and high pressure regulation. Slam shut off valve are an important feature of the pipeline. Manifold system to have automatic change over facility.

Flame arrestor, smoke detectors to be provided in the pipeline.

#### IV EXHAUST SYSTEM - TECHNICAL SPECIFICATIONS

#### Details for exhaust only hoods of SS:

- Hoods to be fabricated in 20 SWG SS sheet and TIG welded for seamless finish facilitates easy maintenance of the surface.
- Tube Light fitting with suitable thermal protection for the lamps incorporated within the hoods to provide minimum 450 LUX on the cooking range.
- Front overhang to capture maximum cooking effluent exhaust air.
- Condensate drain tray with detachable drain collector pan.
- Staggered baffled type Oil eliminators with minimum pressure losses and large surface contact area to increase the capture of effluent and easily cleanable, 20 SWG frames and 20 SWG SS, louvers.
- Suitable flanged cutout for quick connection to the extract duct.

#### **Details for Duct:**

- Duct design to suit optimum velocity for minimum pressure loss and low sound level
- Ducting shall be fabricated in GI sheet of 22 SWG; material used will be of LFQ Jindal TATA.
- For ducts of greater than 30"x30" the flanges shall be of 35 X35 X 3 mm thk MS angle.
- 8 mm GI rods and painted MS angles of 35x35x3mm thick at an interval of two meters shall be used to suspend the ducting.
- Duct joint to be bolted together with gasket for air tight seals.

#### Details for Blower (Exhaust)

- Centrifugal backward inclined SISW blower with suitable high static pressure to create the required intake velocities and over come the pressure loss at the inlet of filters and ducts.
- Type: SISW Centrifugal blower. (Motor outside the effluent air stream.)
- Impeller: Backward inclined, non over loading type. ( smaller motor)
- Drive: Mounted directly on motor shaft. (slip losses and lesser maintenance)
- Dynamically balanced to provide a vibration free operation.
- Construction:
  - Casing: in 3 mm thick MS sheet with suitable angle reinforcement. Impeller: in 5 mm thick MS sheet
  - Finish: With two coats of red oxide primer and top coat exterior durable paint. Fan Speed: Not exceeding 1000 RPM.
- Control Panel: Wall mounted incorporated with suitable starter of make siemens/L&T with single phase prevention.

#### **Details for Scrubber**

Scrubber to be constructed in MS sheet of 14 SWG and The contaminated exhaust fumes enters through the side and an downstream spray is used to saturate air as it enters the scrubber which cools the air and there by condensing the oil fumes , water vapour, and washes the suspended particulate matter. The air is forced at right angle towards the water tank where it impinges with the turbulent water surface and is cleaned further then moves thru the PVC mist eliminators. The water is recalculated continuously.

Students Hostel

INDIAN INSTITUTE OF TROPICAL METEOROLOGY, PASHAN, PUNE-411 008

### KITCHEN EQUIPMENT AND HVAC WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD, AT IMD COLONY, PASHAN, PUNE

Tender No. IITM/CE/SHB/Kitchen/2015-16/11

### **REFERENCE BOQ**

	INDIAN INSTITUTE OF TROPICAL METEOROLOGY (IITM), PUNE									
	STUDENTS HOSTEL AT IMD COLONY									
	SUMMARY FOR KITCHEN EQUIPMENT AND HVAC WORKS									
SR.NO	DESCRIPTION	AMOUNT								
1	Kitchen Equipment Works									
2	2 Kitchen HVAC									
	TOTAL COST									

NOTE:- ALL ELECTRICAL AND MECHANICAL ITEMS SHALL BE FIVE STAR RATED

	INDIAN INSTITUTE OF TROPICAL METEOROLOGY -IITM , PUNE STUDENTS HOSTEL KITCHEN EQUIPMENT WORKS										
	S	TUDEN	ITS HOS	STEL KITCHE	EN EQUIPM	ENT WORK	S				
SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image		
	207.000						In Rs.	In Rs.			
1	<b>POT WASH</b> <b>Supply, Installation and comissioning of SS POT RACK-PW01:</b> Unit to be provided with three (3) shelves, starting at 150 mm and then at equidistant, The uprights should be made of 32 mm dia SWG 16 SS 304 pipe. The top sides of the uprights should be sealed and properly rounded. Shelves should be constructed with 25 mm dia SS pipe of 16 SWG (304) with internal grid of 19 mm dia SS pipe at 100 mm spacing. Four numbers, 38 mm SWG 16 (304) SS tubular legs with adjustable bullet feet. <b>[L x B x H=1200X600X1500]</b> <b>Remark:Custom Fabricated</b>	1	Each								
2	Supply, Installation and comissioning of LOW PLATFORM TABLE FOR POT WASH PW 02 :The unit should be made of SS Square pipe structure of size 30 x 30 mm x 16 swg SS 304 with adjustable bullet feet and supporting cross bars at every 100 mm space. [L x B x H=1200X600X450] Remark:Custom Fabricated	1	Each								
	Supply, Installation and comissioning of FLUSHING HOSE UNIT - INDUSTRIAL / SPRING LOADED RECOIL (OPTIONAL) PW03 : Indian equivalent of electrolux model - MRM15 [ Remark: Indian - Bought Out]	1	Each								
	Supply, Installation and comissioning of HEAVY DUTY PLASTIC DUST BINS ON CASTORS WITH LIDS MIS 01 : NEELKAMAL OR SINTEX - 200 LTRS [Remark:Indian - Bought Out]	6	Each								
	STORES										
5	Supply, Installation and comissioning of SS STORAGE RACK ST 01 : Unit to be provided with four (4) shelves, starting at 150 mm and then at equidistant, constructed with 38 mm dia SS pipe of 16 SWG (304). 35X35X3 mm thick SS angle frame under support. 18 SWG (304) SS shelf double beaded on all sides. Four numbers SS legs with adjustable bullet feet. [L x B x H=1200X600X1800] Remark:Custom Fabricated	4	Each								
6	Supply, Installation and comissioning of AIR CURTAIN ST 02 : Centrally mounted heavy duty motor high velocity and CFM industrial air curtain. Suggested company - Acme Environment control systems or Almonard. Door opening of 2400 mm wide and 2400mm high (to be verified at site) [L x B x H=1800 mm long] Remark:Indian Bought Out	1	Each								

				TROPICAL					
<u> </u>		STUDEN	ITS HOS	STEL KITCH	EN EQUIPM	ENT WORK	5		
SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes] In Rs.	Total Amount	Reference Image
7	<ul> <li>Supply, Installation and comissioning of PLATFORM TROLLEYS : Unit to be constructed of SWG 16 (304) SS double beaded on all sides on 35X35X3 mm SS angle welded framework.</li> <li>SWG 16 (304) SS, 1 ½ inch dia pipe handle fixed to body with SWG 14 (304) SS angular support.</li> <li>Four numbers 150 mm dia all swivel heavy duty rubberized castors to take loads of 150 kgs. Two of the wheels to have locking arrangement. [LxBxH=1050x600x900] Remark:Custom Fabricated</li> </ul>	2	Each				in Ks.	In Rs.	
8	Supply, Installation and comissioning of ELECTRONIC WEIGHING SCALE ST 03 : Capacity 0f 300 kgs. Unit should have SS Platform of size 750 x 750 mm with a digital instrument panel connected on a vertical stand with a backlit display (Minimum calibration 50 grams). It should be provided with a 5 amp. power cord of minimum 1 <sup>1</sup> / <sub>2</sub> meter length having a battery backup. Brands - ISI specified brand / approved by weights and Measures department. Remark:Indian Bought Out	1	Each						
9	Supply, Installation and comissioning of ELECTRONIC TABLE TOP WEIGHING SCALE ST 04 : Capacity 0f 20 kgs. Unit should have SS Tray a digital instrument panel connected on a vertical stand with a backlit display (Minimum calibration 10 grams). It should be provided with a 5 amp. power cord of minimum 1½ meter length having a battery backup. Brands - ISI specified brand / approved by weights and Measures department. Remark:Indian Bought Out	1	Each						
10	Supply, Installation and comissioning of SS WORK TABLE WITH UNDERSHELVES ST 05 : Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 38X38X3 mm SS angle welded framework. Top sheet to be sound deadend. One. 18 SWG (304) SS bottom shelf, starting at 150 mm height and the next shelf at equidistance. Refer drawing for raised splash back. Four numbers SS tubular legs with adjustable bullet feet. [L x B x H=750X600X850+150] Remark:Custom Fabricated	1	Each						
	MAIN KITCHEN								
11	Supply, Installation and comissioning of TILTING WET GRINDER WITH STARTER MK 01 :Capacity 10 ltrs. Tilting model with complete SS construction including the lid and the casing. Brand Rishab - Trident, Cosmos or Rajalakshmi or equivalent / Appropriate starter to be provided with the equipment [L x B x H= 500 x 660 x 1080 mm] Remark: Indian - Bought Out	1	Each						

				TROPICAL					
		STUDEN	IS HOS	STEL KITCHI	EN EQUIPM	ENT WORK	5		
SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image
12	Supply, Installation and comissioning of POTATO PEELER MK 02 : 7 KG / COSMOS OR EQUIVALENT INDIAN MAKE [L x B x H=610X610X920]Remark: Indian - Bought Out	1	Each				In Rs.	In Rs.	
13	Supply, Installation and comissioning of INSTANT WET MASALA GRINDER /PULVERISER MK 04: 20 KG PER HOUR / TRIDENT BRAND OR EQUIVALENT. [L x B x H=510X800X1500] Remark: Indian - Bought Out	1	Each						
14	Supply, Installation and comissioning of TILTING BOILING PAN - 100 LTR - LPG MK 03 : DIRECT HEATING - 100 LTRS - ELECTROLUX OR BONNET OR NAYATI Remark: Imported	2	Each						
15	Supply, Installation and comissioning of HIGH PRESSURE SINGLE BURNER RANGE MK 05 : SWG 18 (304) SS on both sides with air vents. SWG 16 (304) SS on top with front turned down and cut out to receive one gratings. 35X35X3 mm SS angular framework fully welded. One 400X400 heavy duty cast iron removable vessel rest. One T-35 burner (72000 BTU per hour) with pilot and controls. One, SWG 20 (304) SS spillage tray with SS strip handle. Manifold - ½ inch dia provided on both sides. Four (4) nos SS legs with adjustable feet. No splash back. [L x B x H=750X750X600] Remark : Custom Fabricated		Each						
16	Supply, Installation and comissioning of SLAP TABLE WITH UNDERSHELVES MK 06 : 25 mm thick granite top on 3mm thick marine ply. sitting on SWG 16 (304) SS channel frame with SWG 12 SS corner pieces. SWG 18 (304) SS shelf at 150 mm from FFL double beaded on all sides. 38 mm dia SWG 16 (304) SS pipe legs with adjustable feet. [L x B x H=900X600X850] Remark: Custom Fabricated	1	Each						
17	Supply, Installation and comissioning of TANDOOR (CHARCOL) -MK 07 : The framework should be made of 25 x 25 SWG 14 boxed welded angles, and should be angle reinforced on all sides and bottom and intermediate positions. Exterior of base reinforced with heavy gauge MS inverted channel framework on all sides and suitable to fix castors. OUTER BODY-16 gauge SS Sheets with 25mm thk Mineral Wool insulation all around. INNER BODY - 3mm thk MS Sheets. POT - Earthen Pot (Suitable Size). ASH OUTLET - Provide Insulated door on hinges & latch(Size 6"x6" opening). [L x B x H=900X900X850] Remark: Custom Fabricated	1	Each						

		STUDER				ENT WORK	5		
SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image
18	Supply, Installation and comissioning of DOUGH KNEADER MK 08 : The frame structure to be made of MS with proper paint. Should be of heavy duty construction. The spiral arm, the bowl and the protection grid should be of SS 304. It should have a guard around the bowl and should have a protection device which will stop the machine when the grid is lifted. The movement transmission should be through pulley and belt. The electric system should comply with all standard safety rules. 1.5 HP, 3 phase – two speed motor like Crompton or equivalent with DOL starter to be provided. It should have two separate timer for two different speeds. BERJAYA I/BSP-SM50D [L x B x H=20 kg Dough Capacity / 1020x590x1170] Remark: Imported	1	Each				In Rs.	In Rs.	
19	Supply, Installation and comissioning of SLAP TABLE WITH UNDERSHELVES MK 09 : 25 mm thick granite top on 3mm thick marine ply. sitting on SWG 16 (304) SS channel frame with SWG 12 SS corner pieces. SWG 18 (304) SS shelf at 150 mm from FFL double beaded on all sides. 38 mm dia SWG 16 (304) SS pipe legs with adjustable feet. [L x B x H=1200X600X850] Remark: Custom Fabricated.	1	Each						
20	Supply, Installation and comissioning of IDLI STEAMER / STAND - SELF STEAM GENERATING - LPG MK 10 : Body to be constructed of SWG 16 (304) SS, on a SS tubular stand. Steam inlet on one side. SS Steam control valves to be provided. Four number doors with rubber beading and locking facility. drip tary in the front. SS die pressed idli trays to steam idlis - total of 120 idlis at a time. Provide additional set of Trays with the machine. Four numbers, SS tubular legs with adjustable bullet feet <b>Remark : Custom</b> <b>Fabricated.</b>	1	Each						
21	Supply, Installation and comissioning of BULK FRYER MK11/12 : Body to be constructed of SWG 18 (304) SS on both sides with air vents and front with control panel. 35X35X3 mm SS angular framework fully welded. SWG 16 (304) SS on top with front turned down and cut out to receive 1 fryer bowl and a oil drip hole. Provide a receptacle for oil drip from top sheet. One nos. SS frier bowl. One T-50 burner (1,00,000 btu/hr). Manifold - ½ inch dia provided on both sides. SWG 20 (304) SS spillage tray with SS strip handle. 16 SWG , 38mm dia SS pipe legs with adjustable bullet feet. [L x B x H=750X750X750] Remark: Custom Fabricated.	2	Each						

	STUDENTS HOSTEL KITCHEN EQUIPMENT WORKS										
SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image		
22	Supply, Installation and comissioning of TAWA MK 13/15: 16 SWG SS top with 150 mm high raised splash on rear, returned 25 mm & down 12 mm. Both sides of top rolled down 50 mm flush with body cladding. Front of worktop bull nosed. Worktop to over hang the base body by 50mm from front and 75mm at rear. SWG 18 (304) SS on all sides with air vents on both sides. On fully welded SS angle frame. Cooking top of 20 mm thick polished SS plate with 75 mm raised rear and side edges with grease collecting trough in front and grease collecting drawer. Two V-1050 burners (40.000 bu/hr) with one pilot and control valve. 16 SWG , 38mm dia SS pipe legs with adjustable nylon bullet. [L x B x H=1200x600x850+150] Remark: Custom Fabricated.	2	Each				In Rs.	In Rs.			
23	Supply, Installation and comissioning of SPREADER TABLE / 2 UNDERSHELVES MK 14/16 : Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 38X38X3 mm SS angle welded framework. Top sheet to be sound deadend. One, 18 SWG (304) SS bottom shelf, starting at 150 mm height and the next shelf at equidistance. Refer drawing for raised splash back. Four numbers SS tubular legs with adjustable bullet feet. [L x B x H= 600X600X850+150] Remark: Custom Fabricated.	2	Each								
24	Supply, Installation and comissioning of SS WORK TABLE WITH UNDERSHELVES MK 17: Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 38X38X3 mm SS angle welded framework. Top sheet to be sound deadend. One. 18 SWG (304) SS bottom shelf, starting at 150 mm height and the next shelf at equidistance. Refer drawing for raised splash back. Four numbers SS tubular legs with adjustable bullet feet. [L x B x H=1500X600X850+150] Remark: Custom Fabricated.	2	Each								
25	Supply, Installation and comissioning of SS WORK TABLE WITH UNDERSHELVES MK 18 : Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 38X38X3 mm SS angle welded framework. Top sheet to be sound deadend. One. 18 SWG (304) SS bottom shelf, starting at 150 mm height and the next shelf at equidistance. Refer drawing for raised splash back. Four numbers SS tubular legs with adjustable bullet feet. [L x B x H=1200X600X850+150] Remark: Custom Fabricated.	2	Each								
26	Supply, Installation and comissioning of VEG PROCESSOR MK 18 A : Automatic vegetable processor. To process 60 kgs per hour with multiple selection of blades for different cuts. Six different blades to slice / dice / grate and shred to be supplied with the machine. Machine to have inbuilt safety mechanisms. Suggested Brand - Robot Coupe / Halde OR Equivalent Remark: Imported.	1	Each								

	INDIAN INSTITUTE OF TROPICAL METEOROLOGY -IITM , PUNE STUDENTS HOSTEL KITCHEN EQUIPMENT WORKS										
	5	STUDEN	ITS HOS	STEL KITCH	EN EQUIPM	ENT WORK	S				
SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image		
27	Supply, Installation and comissioning of SS WORK TABLE WITH SINK MK 19: Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 38X38X3 mm SS angle welded framework. Bowl size 450X450X250 deep integral with top sheet - check the drawing for position of the bowl. In the center 50 mm dia BSP drain coupling, hot and cold water faucet, deck mounted. Splash back 150 mm on rear / side.(AS PER DRAWING). 18 SWG (304) SS bottom shelf starting at 150 mm. Four numbers SS tubular legs with adjustable bullet feet. [L x B x H= 1500X600X850+150] Remark: Custom Fabricated.	1	Each				In Rs.	In Rs.			
28	Supply, Installation and comissioning of HAND WASH UNIT / SOAP DISPENSER / DUST BIN MK 20: Wall mounted SS sink with soap dispenser and towel rack. Top construction of SWG 16 sheet. Front and both sides turned up 12 mm and turned down 40 mm and in 12 mm. Rear turned up 150 mm, returned 25 mm and down 12 mm. 350 mm x 350 mm x 200 mm deep sink bowl of SWG 16. 38 mm dia waste pipe. Single spot deck mounted water faucet. SS 16 SWG wall brackets secured to top with acron SS nuts and bolts. Paper towel dispenser / soap dispenser and chef;s cap stand [L x B x H=450X450] Remark: Custom Fabricated.	1	Each								
29	Supply, Installation and comissioning of CHEST FREEZER MK 21: Body to be made of 20 SWG (304) SS, as also the rear cladding. All interiors to be of SS. One door, exterior clad with 18 SWG (304) SS, with handles, locking arrangements and gasket. 2 inch thick PUF all round15 C to -20 C. Complete with controls, digital thermometer, built in stablizer with time delay auto start. Compressor to be housed on one side, provided with 1 inch diameter waste outlet and removable SS perforated false bottom and side – out dip tray below waste outlet. All sides to be tilted towards waste outlet to remove excess water [L x B x H= 1000X750X850] Remark: Refrigeration India.	1	Each								
30	Supply, Installation and comissioning of SPLIT DOOR VERTICAL REFRIGERATOR - 4 HALF DOOR MK 22: 1100 ltrs / The refrigerated compartment designed to 2/1 GN pans / Suitable to operate in ambient temperature up to +43 °C / Temperature range: -2 to +10 °C / Fully automatic defrost / self closing door / HCF [L x B x H= 1240X750X2000] Remark: Refrigeration India.	1	Each								
	NON VEG PREP										

				TROPICAL					
	5	TUDEN	TS HOS	TEL KITCH	EN EQUIPM	ENT WORK	S		
SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image
31	Supply, Installation and comissioning of CHEST FREEZER NV 01 :Body to be made of 20 SWG (304) SS, as also the rear cladding. All interiors to be of SS. One door, exterior clad with 18 SWG (304) SS, with handles, locking arrangements and gasket. 2 inch thick PUF all round15 C to -20 C. Complete with controls, digital thermometer, built in stablizer with time delay auto start. Compressor to be housed on one side, provided with 1 inch diameter waste outlet and removable SS perforated false bottom and side – out dip tray below waste outlet. All sides to be tilted towards waste outlet to remove excess water [L x B x H=1200X750X850] Remark: Refeigeration Indian.	1	Each				In Rs.	In Rs.	
32	SPARE NUMBER NV 02 Supply, Installation and comissioning of 2 TANK SINK TABLE NV 02 : Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 35X35X3 mm SS angle welded framework. 2 sink of size 450 x 450 x 300 deep integral with top sheet with 38mm dia drain coupling. Imported pressurized spray unit to be wall mo [LxBxH : 2000x650x850+150]	1	Each						
33	Supply, Installation and comissioning of SS WORK TABLE WITH UNDERSHELVES NV 03 :Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 38X38X3 mm SS angle welded framework. Top sheet to be sound deadend. One. 18 SWG (304) SS bottom shelf, starting at 150 mm height and the next shelf at equidistance. Refer drawing for raised splash back. Four numbers SS tubular legs with adjustable bullet feet. [L x B x H=1800X600X850-150] Remark: Custom Fabricated.	1	Each						
34	Supply, Installation and comissioning of HIGH PRESSURE SINGLE BURNER RANGE NV 04 : SWG 18 (304) SS on both sides with air vents. SWG 16 (304) SS on top with front turned down and cut out to receive one gratings. 35X35X3 mm SS angular framework fully welded. One 400X400 heavy duty cast iron removable vessel rest. One T-35 burner (72000 BTU per hour) with pilot and controls. One, SWG 20 (304) SS spillage tray with SS strip handle. Manifold - ½ inch dia provided on both sides. Four (4) nos SS legs with adjustable feet. No splash back. [L x B x H=750X750X600] Remark: Custom Fabricated.	1	Each						
35	Supply, Installation and comissioning of HAND WASH UNIT / SOAP DISPENSER / DUST BIN NV 05 : Wall mounted SS sink with soap dispenser and towel rack. Top construction of SWG 16 sheet. Front and both sides turned up 12 mm and turned down 40 mm and in 12 mm. Rear turned up 150 mm, returned 25 mm and down 12 mm. 350 mm x 350 mm x 200 mm deep sink bowl of SWG 16. 38 mm dia waste pipe. Single spot deck mounted water faucet. SS 16 SWG wall brackets secured to top with acron SS nuts and bolts. Paper towel dispenser / soap dispenser and chef;s cap stand [L x B x H=450X450] Remark: Custom Fabricated. DISH WASH	1	Each						

	INDIAN INSTITUTE OF TROPICAL METEOROLOGY -IITM, PUNE STUDENTS HOSTEL KITCHEN EQUIPMENT WORKS										
		STUDEN	ITS HOS	STEL KITCH		ENT WORK	5				
SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image		
36	Supply, Installation and comissioning of SOILED DISH LANDING TABLE WITH GARBAGE CHUTE DW 01 : Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to welded SS angle frame. ½ inch raised marine edges. Waste chute - One no. 6 inch diameter with rubber edges on left (confirm with the drawing) hand side 175 mm from the side edges. 25 mm dia drain outlet on the left hand side corner connected to waste outlet with lever handle. Four numbers, SS tubular legs with adjustable bullet feet. Side and rear cross bracing support to give a clear front to move in waste bin under the table. [L x B x H=1900X600X850] Remark: Custom Fabricated.	1	Each				In Rs.	in Rs.			
37	Supply, Installation and comissioning of PRE WASH SINKDW 02 : Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 38X38X3 mm SS angle welded framework. Bowl size 450X450X250 deep integral with top sheet - check the drawing for position of the bowl. In the center 38mm dia BSP drain coupling, hot and cold water faucet, deck mounted. Splash back 150 mm on rear / side.(AS PER DRAWING). 18 SWG (304) SS bottom shelf starting at 150 mm. Four numbers SS tubular legs with adjustable bullet feet. Fabricated to assist free movement of standard dish wash rack. To be provided with imported hand held spray unit. T&S brand. Other details as per general specifications. [L x B x H=1100X650X850+150] Remark: Custom Fabricated.	1	Each								
38	Supply, Installation and comissioning of HAND HELD PRESSURE SPRAY - INDUSTRIAL - T & S or Equivalent	1	Each								
39	Supply, Installation and comissioning of HOOD TYPE DISH WASH MACHINE / WITH PRESSURE PUMP IF REQUIRED DW 03 : Automatic hood type dishwasher (corner type operation) with a speed of 50-60 racks per hour. Suitable models from Meiko or Hobart. With 6 extra racks. Suitable water softener to be provided with the machine. Detergent dosing & Rinse agent dosing pumps to be included in the quote. OR EQUIVALENT MODEL FROM HOBART / WINTERHALTER. Remark : Imported.	1	Each								
40	Supply, Installation and comissioning of WATER SOFTENER- 1500 LTR per regeneration capacity / less than 40 ppm quality water output / Suggested Make - European WaterCare Systems - Model AT 10/M [L x B x H= 640X275X450] Remark: Imported.	1	Each								
41	Supply, Installation and comissioning of EXTRA DISH WASH RACKS - Plate Racks - CAMBRO OR EQUIVALENT Remark: Indian Bought out.	6	Each								

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		STUDEN	ITS HOS	STEL KITCHI	EN EQUIPM	ENT WORK	S		
SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image
	Supply, Installation and comissioning of Cutlery Racks - CAMBRO OR EQUIVALENT Remark: Indian Bought out.	3	Each				In Rs.	In Rs.	
	Supply, Installation and comissioning of Glass Racks - CAMBRO OR EQUIVALENT Remark: Indian Bought out.	3	Each						
44	Supply, Installation and comissioning of DISH WASH EXIT TABLE DW 04 : Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 35X35X3 mm SS angle welded framework. Top sheet to be sound deadend. Fabricated to fit the standard dish wash rack movement. Four numbers, SS tubular legs with cross supports and adjustable bullet feet. 150 mm rear splash back wherever possible. [L x B x H=1000X650X850+150] Remark: Custom Fabricated.	1	Each						
	Supply, Installation and comissioning of TABLE ON CASTORS DW 05 :To be constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 35X35X3 mm SS angle welded framework. Top sheet to be sound deadend. One undershelf, 18 SWG (304) SS bottom shelf, starting at 150 mm height. Four numbers, heavy duty GI castors with rubber wheels of 100 mm dia. Two wheels should have locking arrangement. [L x B x H=1200X600X850] Remark: Custom Fabricated.	1	Each						<b>F</b>
	SERVERY & DINING								

	INDIAN INSTITUTE OF TROPICAL METEOROLOGY -IITM , PUNE STUDENTS HOSTEL KITCHEN EQUIPMENT WORKS										
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SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image		
46	Supply, Installation and comissioning of BAINE MARIE - HEATED SER 02 : Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to welded SS angle frame, with cut out to fit in five rectangular 1/1 and two 1/2 gastronom containers. Gastronom containers to be 200 mm deep with lids. The tank of the baine marie should be provided with an online connection with a ball valve of 15 mm dia and a drain valve of 15 mm dia. 10 mm thick acrylic clear sneeze guard on top of the food counter at 600 mm height, resting on 25mm dia SWG 16 (304) SS pipe upright and SS frame. SWG 18 (304) SS sheet covering on three sides. 18 SWG (304) SS bottom shelf starting at 150 mm. Thermostatically controlled 3KW heating element with rotary ON/OFF switch with light indicator on the side. Water sensor to be provided in the unit to prevent heating element getting damaged due to lack of water. The unit should have 2 mtr supply cord with industrial plug. Six numbers SS legs with adjustable bullet feet. The tray rail should be made of 19 mm dia SS pipe with required support at equal intervals. [L x B x H=2100X675+300X850+600] Remark: Custom Fabricated.	1	Each				In Rs.	In Rs.			
47	Supply, Installation and comissioning of AMBIENT BAINE MARIE SER 03 : Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to welded SS angle frame, with cut out to fit in one rectangular 1/1 and three 1/3 gastronom containers. Gastronom containers 200 mm deep with lids. 10 mm thick acrylic clear sneeze guard on top of the food counter at 600 mm height, resting on 25mm dia SWG 16 (304) SS pipe upright and SS frame. SWG 18 (304) SS sheet covering on three sides. 18 SWG (304) SS bottom shelf starting at 150 mm. Ambient counter – no heating. Four numbers SS legs with adjustable bullet feet. The tray rail should be made of 19 mm dia SS pipe with required support at equal intervals. [L x B x H=900X675+300X850+600] Remark: Custom Fabricated.	1	Each								
48	Supply, Installation and comissioning of BAINE MARIE SIDE TABLE SER 01 : Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to welded SS angle frame. SWG 18 (304) SS sheet covering on three sides. 18 SWG (304) SS bottom shelf starting at 150 mm and the next shelf at equidistant from the top. Four numbers SS legs with adjustable bullet feet. The tray rail should be made of 19 mm dia SS pipe with required support at equal intervals.[L x B x H=900X675+300X850] Remark: Custom Fabricated.	1	Each								

	INDIAN INSTITUTE OF TROPICAL METEOROLOGY -IITM , PUNE STUDENTS HOSTEL KITCHEN EQUIPMENT WORKS										
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SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image		
49	Supply, Installation and comissioning of WATER COOLER SIDE TABLE SER 04 : Construction specification same as equipment number 13 but with 3 undershelves - bottom at 150 mm and the other 2 equidistant from each other. Shelves to be provided with drain holes. [L x B x H=900X600X1200] Remark: Custom Fabricated.	1	Each				In Rs.	In Rs.			
	Supply, Installation and comissioning of WATER COOLER - WITH RO AND UV FILTER - 80 LTR CAPACITY SER 05 : AQUAGUARD PURECHILL 80 PSS RO [L x B x H=650X450X1350] Remark:Indian Bought out.	1	Each								
	MISCELLANEOUS Supply, Installation and comissioning of MASALA TROLLEY : The unit										
51	Supply, Installation and comissioning of MASALA TROLLEY: The unit should be like a table trolley designed with SWG 16 (304) SS top, double beaded on all sides, secured to SS angle frame, with cut out to fit in inserts of 8 round containers to hold spices. Containers should of SS 304, removable of size 150 mm dia and 150 mm deep with individual lids. Unit to be fitted with heavy duty noise free castors of 100 mm dia with two castors having locking facility. The trolley should have 25 mm dia SWG 16 SSS 304 pipe handles on both sides. One undershelf of SWG 18 SSS 304 at the bottom at 150 mm from FFL.[L x B x H=900X600X800] Remark: Custom Fabricated.	1	Each								
52	Supply, Installation and comissioning of SS UTILITY TROLLEY: Three (3) tray type shelves of SWG 16 (304) SS, to be reinforced with channels of SWG 16 (304) SS. All three shelves to be equidistant. 32 mm dia SWG 16 (304) SS pipes to extend on top as handle at 100 mm clear height from the top shelf. 100 mm dia all s [L x B x H=950X600X1000] Remarks : Custom Fabricated.	2	Each								
53	Supply, Installation and comissioning of DRAIN GRATING / TROUGH / TROUGH OUTLET (VERTICAL OR HORIZONTAL - AS PER SITE CONDITION)Removable S.S Grating of 304 0f suitable size with 25 mm height / Grating with hairline finishing / Grating with 5mm thick for outside ring, 3mmthick for interior section / Grating has to be slip-resistant for one side, Plain on the others / 70 mm Trough - MAKE ACO OR SSS (VIANEN) OR SIMILAR [L x B x H=650x350x70] Remark: Custom Fabricated.	10	Each								
	Supply, Installation and comissioning of INSECTOCUTORS : Company - Pest Control India - Model SPIDER [L x B x H=445x142x140] Remark Indian Bought Out.	7	Each								

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		STUDE	NTS HOS	STEL KITCH	EN EQUIPM	ENT WORK	S		
SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image
55	Supply, Installation and comissioning of SS EDGE GUARDS : SS angles to be grouted to the wall edges. Each angle to be 1500 mm long. Quantity indicated is approximate [L x B x H=SS ANGLE 0F 50 x 50 X 1.5 mm thick] Remark: Custom Fabricated.	20	Each				In Rs.	In Rs.	
56	Supply, Installation and comissioning of STEAM CLEANER : KARCHER SG 4/4 - Universal steam cleaner for commercial application. 2-tank system with all standard accessories / Steam pressure - 4 bar. Remark : Imported	1	Each						
	EXHAUST HOODS Supply, Installation and comissioning of EXHAUST HOOD - GENERAL SPECS : It shall be constructed of 18 swg SS and shall be box type in front, rear & sides raised up and turned at 90 degree. It shall have a 75 mm wide gutter running along the perimeter for oil collection with removable oil plug. From approx. 150 mm above the grease gutter at the rear, there shall be a framework at 45° made of 20 swg SS. The framework shall be provided with 500 x 500 x 50 mm thick removable grease filters. The filters shall have an outer frame constructed of 18 swg SS. To the frame, 25 x30x 25 mm "C" type 20 swg SS channels shall be welded, which will form a baffle for air movement. The filters closed. The filters should be easily removable & washable. The filters and framework shall be provided with weep holes for draining of oil. Approx. 300 mm above the grease gutter in front, there shall be provided a 18 swg SS frame, welded to the top and inside of the front side.								
	Appropriate numbers of Flashed incandescent, with heat toughened glass, lights, diffusing glass, to provide 600 lux of light through-out the hood / Wiring in heat proof conduits / To be suspended on ceiling with hanger rods / Height/Exhaust /Fresh air duct Collar size, shape & Qty. to verify at site/coordinate HVAC consultants. The sheet used in the fabrication of the unit shall be free from warps, dents and other imperfections and all edges shall be smooth. The construction should be welded and not rivetted.								
A	HOOD OVER TANDOOR - H 01 : [L x B x H=1200X1050X600] Remark:Custom Fab	1	Each						
В	HOOD OVER TAWA- H02: [L x B x H= 3300X900X600 ] Remark:Custom Fab	1	Each						
с	HOOD OVER IDLI STEAMER - H 03 : [L x B x H=1000X750X600 ] Remark: Custom Fabricated.	1	Each						

				TROPICAL					
		STUDEN	ITS HOS	STEL KITCHI	EN EQUIPM	ENT WORK	S		
SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image
D	HOOD OVER BOILING KETTLE & BURNER - H 04 : [L x B x H= 1000X750X600 ] Remark:Custom Fab	1	Each				In Rs.	In Rs.	
E	HOOD OVER NON VEG BURNER - H 05 : [L x B x H= 1050X1200X600 ] Remark: Custom Fabricated.	1	Each						
F	HOOD OVER DISH WASH MACHINE - H 06 : [L x B x H=900X900X600 ] Remark: Custom Fabricated.	1	Each						
G	EXHAUST VENT REQUIRED FOR SERVERY COUNTERS	1	Each						
	GAS BANK								
57	Supply, Installation and comissioning of MANIFOLD & LPG LINING : The pipes shall be of MS seamless schedule 40 or TATA 'C' class ERW pipe. The main pipeline should be of 2" dia with respective ball valve. The pipeline should have seamless schedule 40 pipe fittings such as Tee, Elbow and other fittings up to 1" dia and the pipe from 1 "" dia should be hydraulically bent. There should be two numbers of manifold (each with the specified number of cylinder adaptors) made of seamless schedule 40 pipes with required fittings like NRV, cylinder adaptor (click on type) with flexible pipe of 3' of United make. There should be an isolation ball valve in both the manifold to operate the manifold individually. There should be a main gas shut off valve inside and outside the gas bank to isolate the LPG supply in case of emergency. The main pipeline should be a pressure gauge with a needle control valve installed inside the kitchen. The entire gas pipe line should be clamped properly with MS clamps on the wall. Once the entire pipe line is completed the same needs to be pressure tested. 2 BANKS OF (6+6) CYLINDERS EACH [ LxBxH = approximately 150 mtrs of pipe line]	1	Each						
58	Supply, Installation and comissioning of LPG CONSUMPTION METER: Commercial Gas flow meter from Maharashtra Multi distributors limited. Suitable model for the gas pressure on our line. G 4 Matrix Model [ Remark:Indian Bought Out]	1	Each						-

	INDIAN INSTITUTE OF TROPICAL METEOROLOGY -IITM , PUNE STUDENTS HOSTEL KITCHEN EQUIPMENT WORKS										
		STUDEN	II S HOS	SIEL KIICH	EN EQUIPM		5				
SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image		
59	Supply, Installation and comissioning of GAS (LPG) LEAKAGE DETECTION SYSTEM : Flameproof sensing modules with Digital Display showing % of leak, Controller with Graphic LCD Display, 3 level alarm thresholds and all sensors addressable expandable upto 60 sensors. output for Automatic Shut off, BMS Connectivity. No. of sensors to be determined by size of the kitchen and Gas Bank. Make - Gas Vigil Technologies (CE Certified) / Model - GV 108 (Digital) - KITCHEN - 06 SENSORS (approximately) / GAS BANK 2 SENSORS TOTAL = 8 SENSORS [Remark:Indian Bought Out].	8	Each				In Rs.	In Rs.			
60	Supply and installation and commisioning of fully automatic continuous composting machine Kwik composter model KC 100 with coposting capacity of 100 Kg per day with suitable exhaust blower with activated carbon filter with connected load 1.5 HP of size height 1660 x width 1420 x length 3310 or equivalent[ Remark:Indian Bought Out]	1	Each								
61	Supplying ,erecting testing and commissioning of Dumb waiter for the capacity of 150 kg from the approved vendor including all civil work. [ Remark:Indian Bought Out].	1	Each								
	TOTAL AMOUNT [Rs.]										

	ST	UDEN	TS HOSTEL K		AC WORKS					
	1		BoQ of HV				1			
				Su	pply		Installation			
Description	Qty.	Unit	Basic Rate	Vat %	Rate Including tax	Amount	Basic Rate	Service tax %	Rate Including tax	Amount
Dry scrubber unit for kitchen exhaust										
Supply installation testing and commissioning of Industrial grade electrostatic air cleaner for collection of dry and wet particles like dust, oil mist, cooking fumes upto 95% efficiency and filtering particles upto 0.01 microns. Necessary control panel to be part of the unit with VFD for fan. Construction of unit shall be double skin 25 mm thick PUF, 0.6 MM thick pre coated GI on external finish and 0.6 mm thick plain GI inner finish, forward curved DIDW fan , TEFC motor IP-55 suitable for VFD. permissible DB level 70 DB to 75 DB										
7500 CFM / 65 mm SP	1	Nos								
Make : HPS / Nutech										
Supply installation testing and commissioning of Industrial grade electrostatic air cleaner for collection of dry and wet particles like dust, oil mist, cooking fumes upto 95% efficiency EFF-1 and filtering particles upto 0.01 microns. Necessary control panel to be part of the unit with VFD of fan motor.	U.R	No								
	Dry scrubber unit for kitchen exhaust         Supply installation testing and commissioning of Industrial grade electrostatic air cleaner for collection of dry and wet particles like dust, oil mist, cooking fumes upto 95% efficiency and filtering particles upto 0.01 microns. Necessary control panel to be part of the unit with VFD for fan. Construction of unit shall be double skin 25 mm thick PUF, 0.6 MM thick pre coated GI on external finish and 0.6 mm thick plain GI inner finish, forward curved DIDW fan , TEFC motor IP-55 suitable for VFD. permissible DB level 70 DB to 75 DB         7500 CFM / 65 mm SP         Make : HPS / Nutech         Supply installation testing and commissioning of Industrial grade electrostatic air cleaner for collection of dry and wet particles like dust, oil mist, cooking fumes upto 95% efficiency EFF-1 and filtering particles upto 0.01 microns.	Dry scrubber unit for kitchen exhaust         Supply installation testing and commissioning of Industrial grade electrostatic air cleaner for collection of dry and wet particles like dust, oil mist, cooking fumes upto 95% efficiency and filtering particles upto 0.01 microns. Necessary control panel to be part of the unit with VFD for fan. Construction of unit shall be double skin 25 mm thick PUF, 0.6 MM thick pre coated GI on external finish and 0.6 mm thick plain GI inner finish, forward curved DIDW fan , TEFC motor IP-55 suitable for VFD. permissible DB level 70 DB to 75 DB         7500 CFM / 65 mm SP       1         Make : HPS / Nutech	Dry scrubber unit for kitchen exhaust         Supply installation testing and commissioning of Industrial grade electrostatic air cleaner for collection of dry and wet particles like dust, oil mist, cooking fumes upto 95% efficiency and filtering particles upto 0.01 microns. Necessary control panel to be part of the unit with VFD for fan. Construction of unit shall be double skin 25 mm thick PUF, 0.6 MM thick pre coated GI on external finish and 0.6 mm thick plain GI inner finish, forward curved DIDW fan , TEFC motor IP-55 suitable for VFD. permissible DB level 70 DB to 75 DB         7500 CFM / 65 mm SP       1         Nos       Make : HPS / Nutech         Supply installation testing and commissioning of Industrial grade electrostatic air cleaner for collection of dry and wet particles like dust, oil mist, cooking fumes upto 95% efficiency EFF-1 and filtering particles upto 0.01 microns. Necessary control panel to be part of the unit with VFD of	Image: Construction of the second	Image: Normal StateImage: Normal StateDry scrubber unit for kitchen exhaustImage: Normal StateSupply installation testing and commissioning of Industrial grade electrostatic air cleaner for collection of dry and wet particles like dust, oil mist, cooking fumes upto 95% efficiency and filtering particles upto 0.01 microns. Necessary control panel to be part of the unit with VFD for fan. Construction of unit shall be double skin 25 mm thick PUF, 0.6 MW thick pre coated GI on external finish and 0.6 mm thick plain GI inner finish, forward curved DIDW fan , TEFC motor IP-55 suitable for VFD. permissible DB level 70 DB to 75 DB1Nos7500 CFM / 65 mm SP1NosSupply installation testing and commissioning of Industrial grade electrostatic air cleaner for collection of dry and wet particles like dust, oil mist, cooking fumes upto 95% efficiency EFF-1 and filtering particles upto 0.01 microns. Necessary control panel to be part of the unit with VFD ofNo	Image: construction of understring and commissioning of Industrial grade electrostatic air cleaner for collection of dry and wet particles like dust, oil mist, cooking fumes upto 95% efficiency and filtering particles upto 0.01 microns. Necessary control panel to be part of the unit with VFD for fan. Construction of unit shall be double skin 25 mm thick PUF, 0.6 MM thick pre coated GI on external finish and 0.6 mm thick plain GI inner finish, forward curved DIDW fan , TEFC motor IP-55 suitable for VFD. permissible DB level 70 DB to 75 DB1Nos7500 CFM / 65 mm SP1Nos	DescriptionQty.UnitBasic RateVat %Including taxAmountImage: Construction of the second of th	DescriptionQty.UnitBasic RateVat %Including taxAmountBasic RateImage: Image:	DescriptionQty.UnitBasic RateVat %Including taxAmountBasic RateService tax %Image: Construction of the state of	DescriptionQty.UnitBasic RateVat %Including taxAmountBasic RateService tax %Including taxImage: Control particlesImage: Control

Sr. No.	Description	Qty.	Unit	Basic Rate	Vat %	Rate Including tax	Amount	Basic Rate	Service tax %	Rate Including tax	Amount
2	Inline exhaust fan for pot wash / store									-	
	400 CFM / 10 mm SP	1	No								
	600 CFM / 10 mm SP	1	No								
	Make : Kruger / Systemsaire / Ostenberg/Siemens									-	
3	Supply installation testing and commissioning of Fresh air Cabinet type fans with filters as per specifications for kitchen fresh air supply. All necessary angles, supports for installation to be included. Make - Kruger / Systemsaire										
a	3000 CFM / 40 MM SP Cabinet type centrifugal fan with motor with prefilter -20 microns.( Height of unit should not exceed 500 mm )	2	Nos								
b	4000 CFM / 40 MM SP Cabinet type centrifugal fan with motor with prefilter -20 microns.( Height of unit should not exceed 500 mm )	U.R	Nos								
4	Supply and installation of GSS ducting of 120 GSM as per IS 655 construction standards inclusive of angle supports, necessary angle flanges, threaded rods, nut bolts, gaskets										
a	24 G	125	sqm								
	22 G	75	sqm								
5	Supply and installation of Aluminium grilles with VCD	5	sqm								
6	Supply and installation of GI Volume control dampers	3	sqm								
7	Supply and installation of PVC pipe high grade for pot wash / store exhaust application										
	160 dia	20	mtr								
	110 dia	20	mtr								
	Disc valve 100 dia	8	Nos								

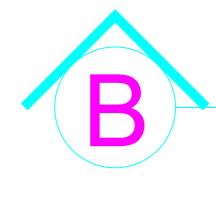
8       Supply. Installation, Testing & Commissioning of the Fire and Smoke Dampers (FS) Installed in supply air / exhaust and smoke Dampers (FS) Installed in supply air / exhaust and smoke Dampers (FS) Installed in supply air / exhaust Dampers (FS) Installed PM (FR) (FR) (FR) (FR) (FR) (FR) (FR) (FR)	Sr. No.	Description	Qty.	Unit	Basic Rate	Vat %	Rate Including tax	Amount	Basic Rate	Service tax %	Rate Including tax	Amount
and terminations, using XLPE insulated PVC sheathed steel       tape/wire armoured underground aluminium conductor       tape/wire armoured underground aluminium conductor         cables of following sizes from panel to fan including       including connections from starters to motors on suitable       supports as required including connections on both sides         supports as required.       50       Mtr       Image: Starter Start		and Smoke Dampers (FSD) installed in supply air / exhaust air duct when they pass through kitchen walls. The Dampers shall be motor operated with atleast 90 minutes fire rating as per UL 5555 - Class II for fire and smoke management rated for 90 min. as tested by CBRI Roorkee, India. Fusible Link should be rated for 72oC and UL Stamped. Each FSD shall be of multi leaf type, low leakage and shall be tested in the factory and will be certified by the manufacturer in form of the test certificate. Each FSD shall be supplied with matching sleeve (factory supply) and set of retaining angles for installation on wall / slab. The wall where ducts pass to be properly sealed with fire stop ( non combustible	2	sqm								
3X1.5 YWY copper       50       Mtr       Image: Comparison of the symptotic control of the symptot control of the symptot control of the symptot contrelevel contr		and terminations, using XLPE insulated PVC sheathed steel tape/wire armoured underground aluminium conductor cables of following sizes from panel to fan including interconnections from starters to motors on suitable supports as requried including connections on both sides										
Image: Construction of the state of the		3X4 YWY copper	50	Mtr								
Weatherproof Start /Stopself Locable type push button IP		3X1.5 YWY copper	50	Mtr								
		Weatherproof Start / Stopself Locable type push button IP	1	Nos								
GRAND TOTAL	-	TOTAL SUPPLY AND INSTALLATION	I									
GRAND TOTAL												
		GRAND TOTAL						l				

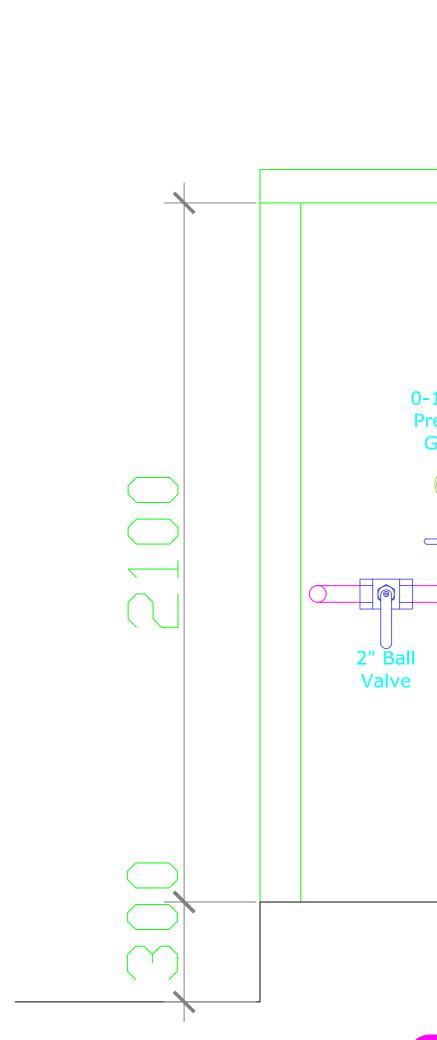
INDIAN INSTITUTE OF TROPICAL METEOROLOGY, PASHAN, PUNE-411 008

KITCHEN EQUIPMENT AND HVAC WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD, AT IMD COLONY, PASHAN, PUNE

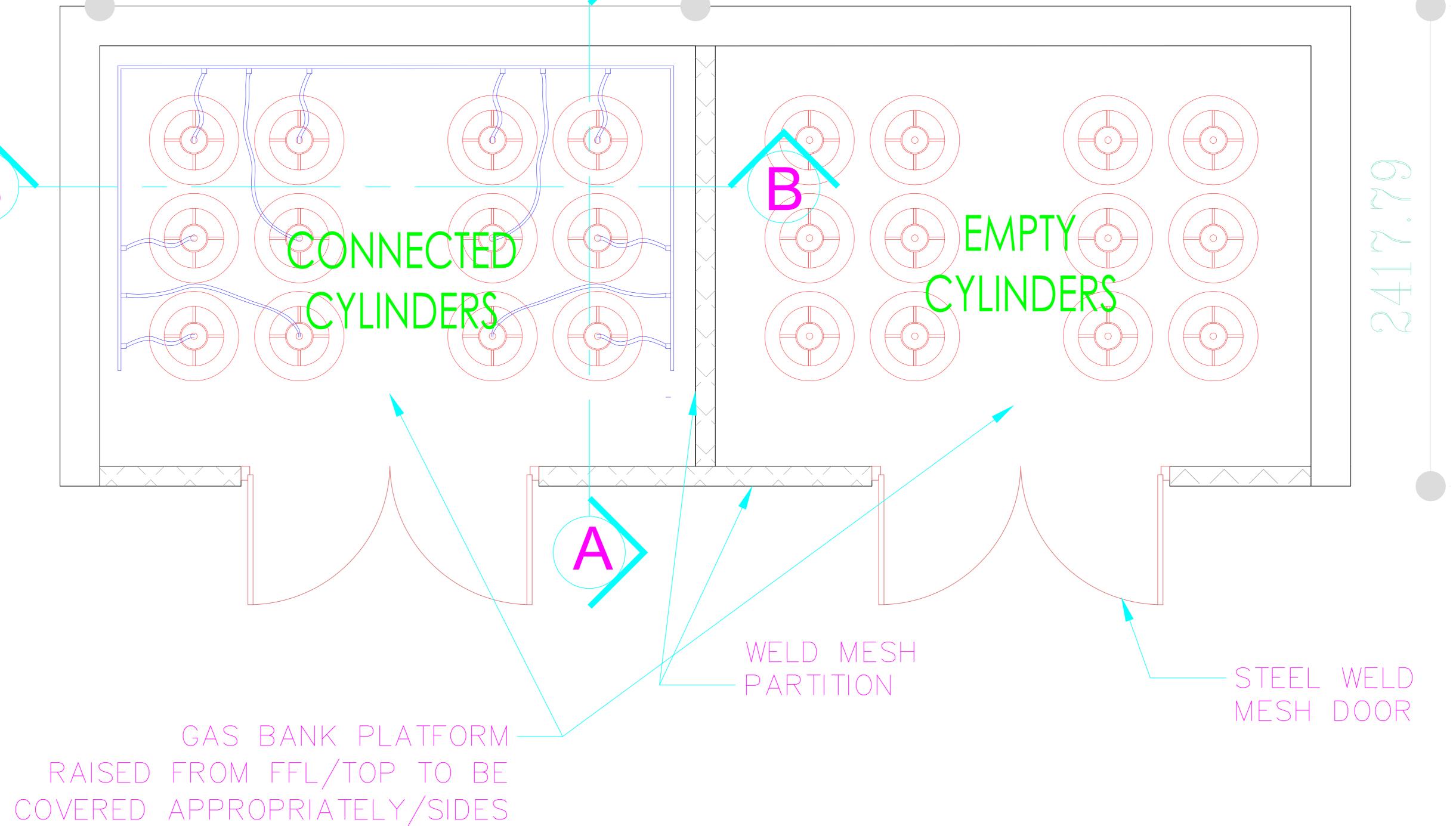
Tender No. IITM/CE/SHBK/2015-16/11

## **TENDER DRAWINGS**





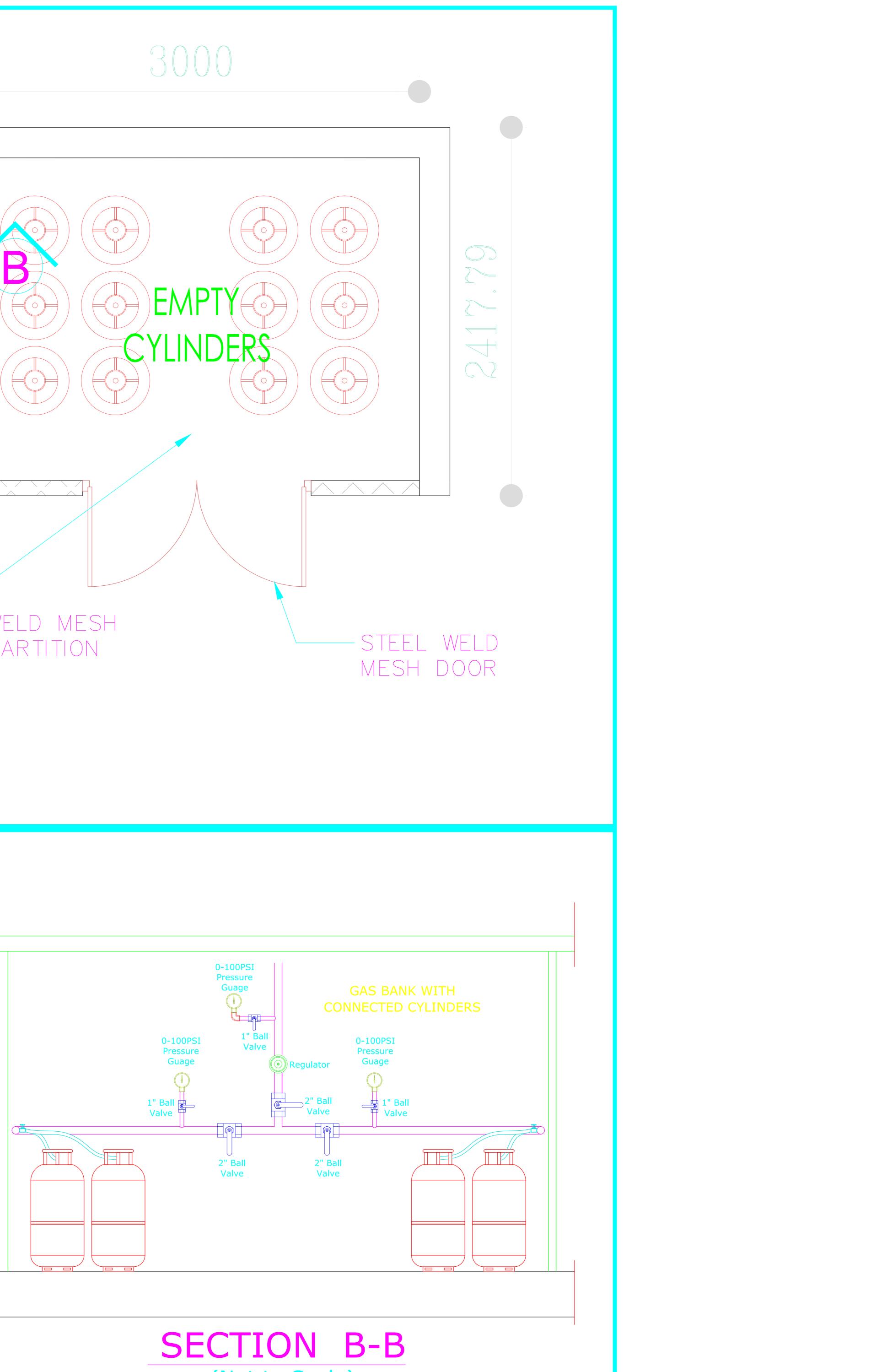
# 3000



TO BE COVERED WITH WELD MESH.

	_	
D-100PSI Pressure		
Guage		
1" Ball		
1" Ball Valve		
3x2 Cylinder		
3x2 Cylinder Manifold		

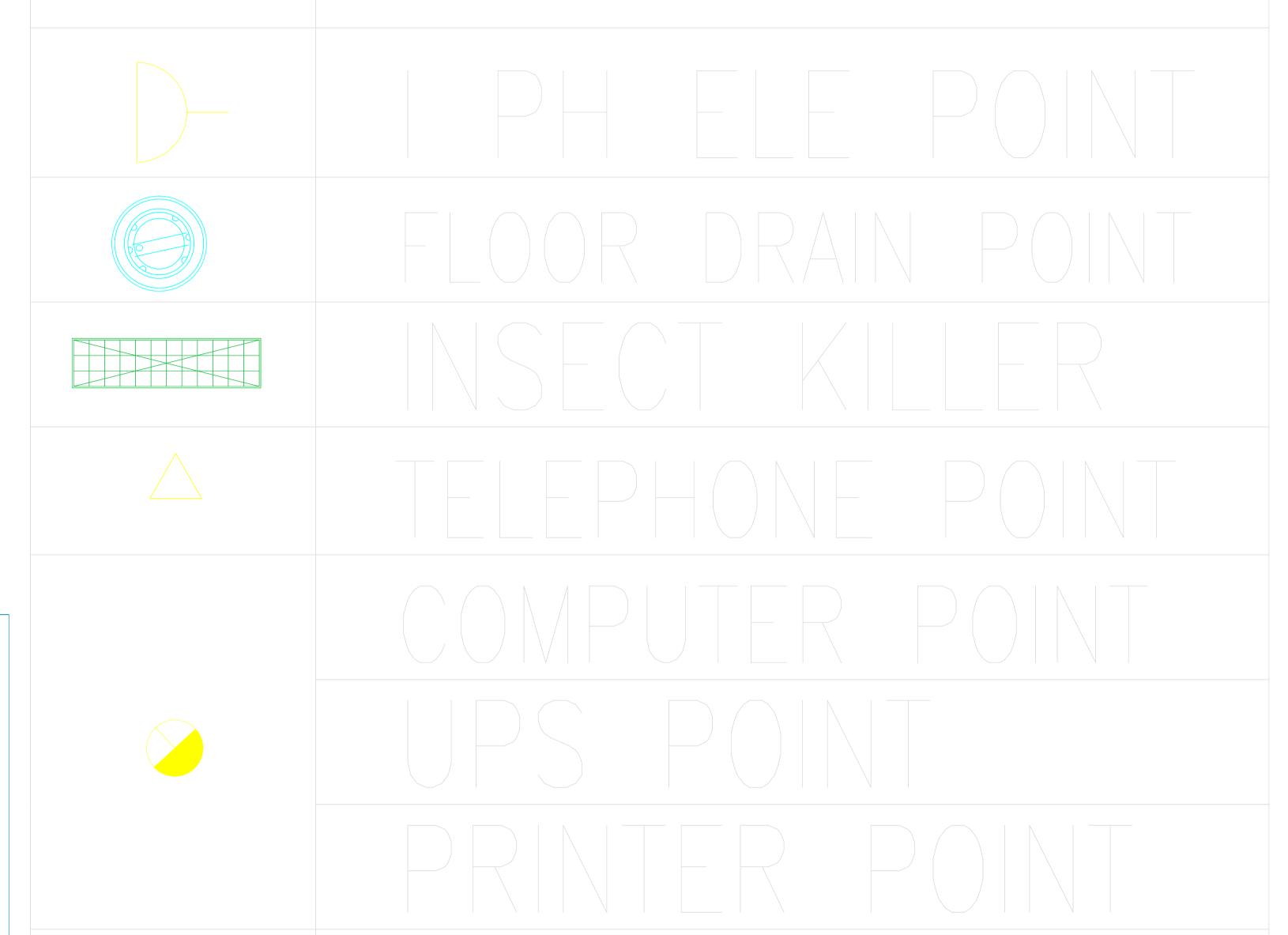


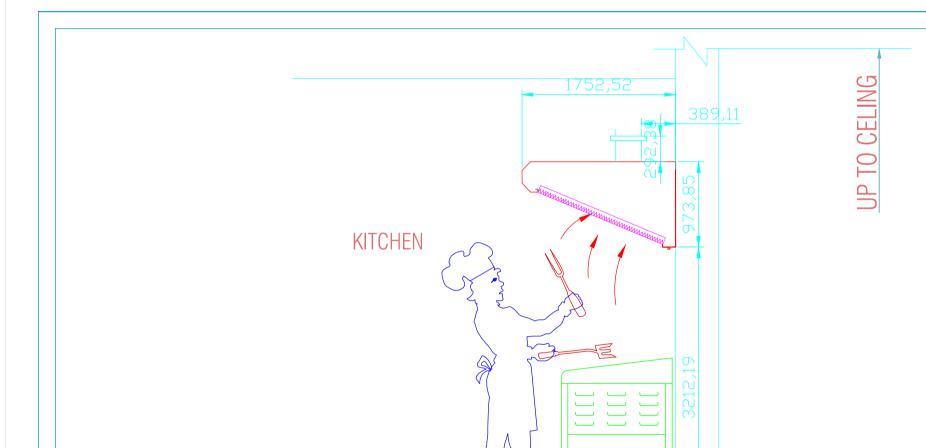




LEGEND: (Not to scale) <u>C</u> – CW <u>@</u> 450 MM FFL\* (H) - HW @ 450 MM FFL\* O – DRAIN O ON FFL\* \* HEIGHTS UNLESS OTHERWISE SPECIFIED  $\rightarrow$ 

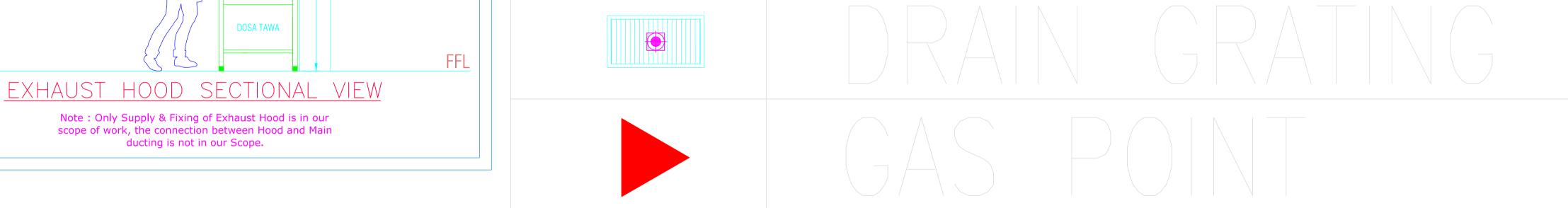


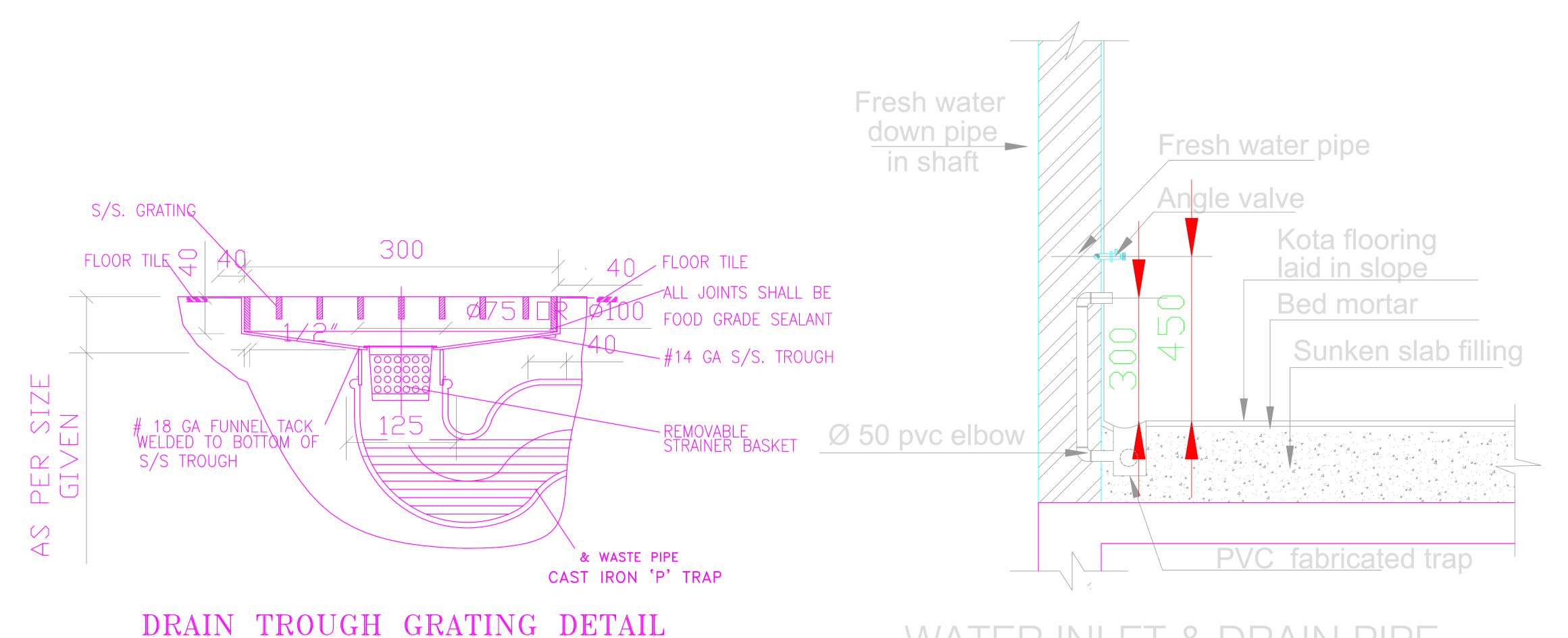




ducting is not in our Scope.

FFL



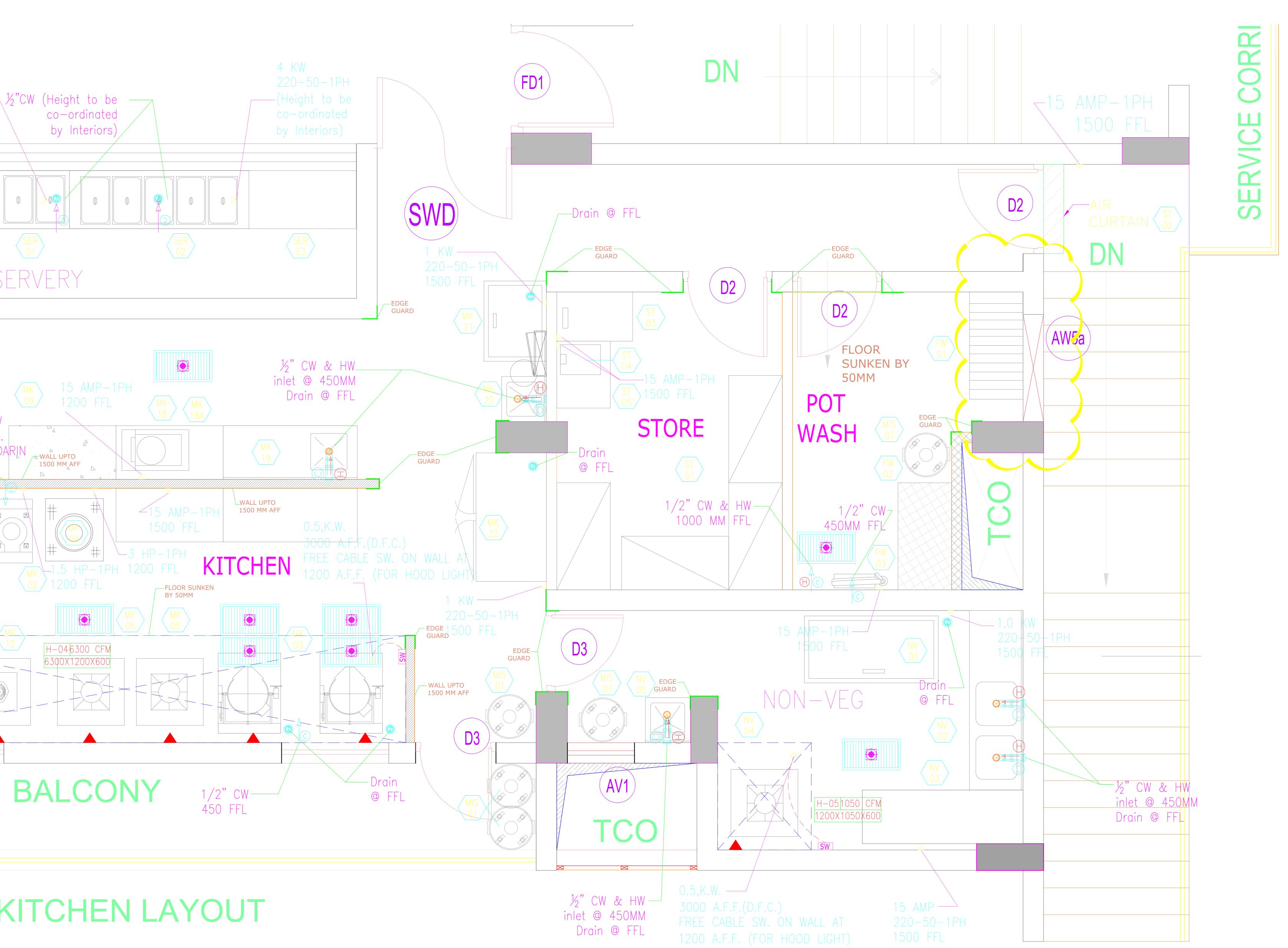


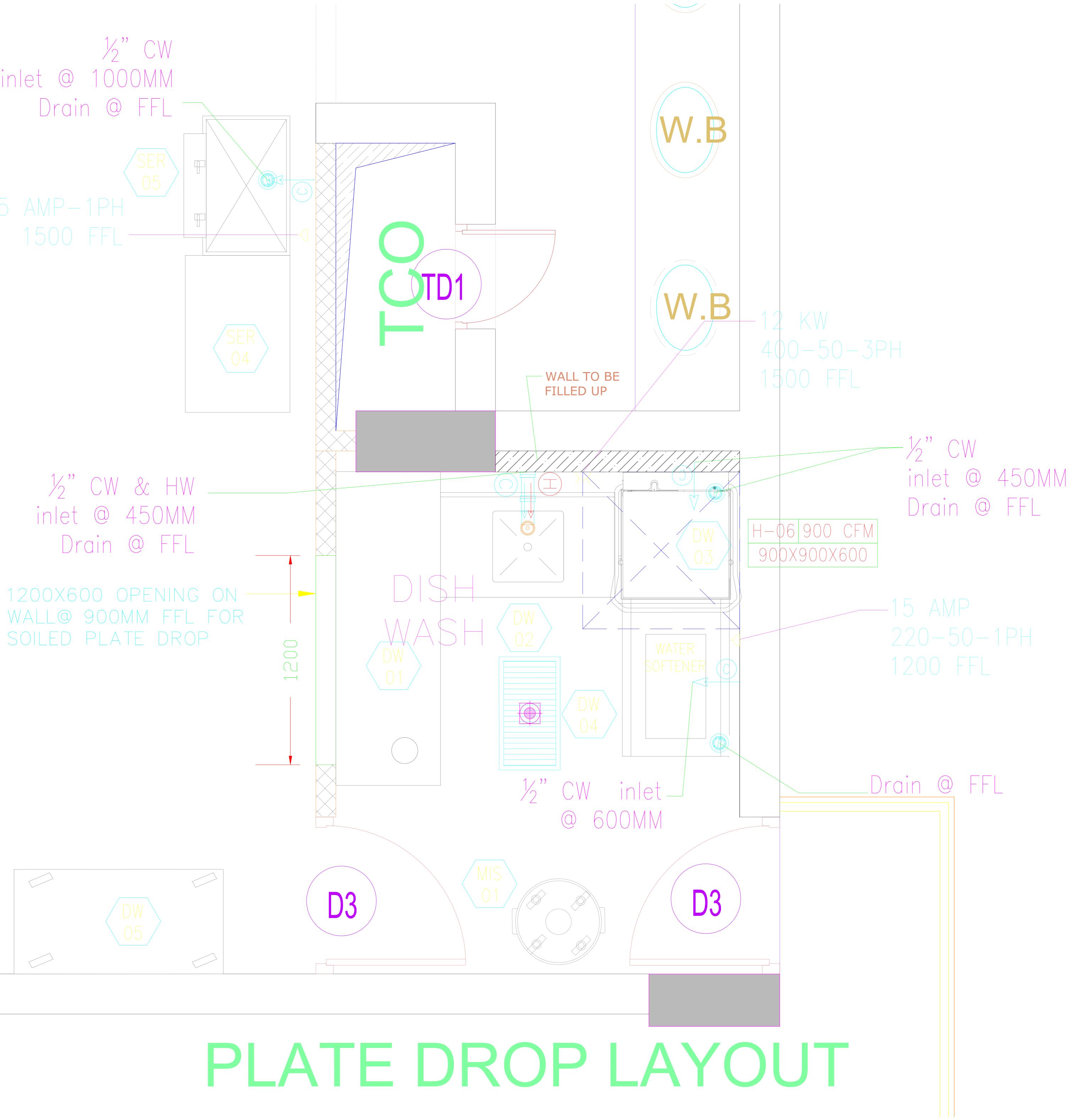
# WATER INLET & DRAIN PIPE SECTION DETAILS FOR KITCHEN SINK

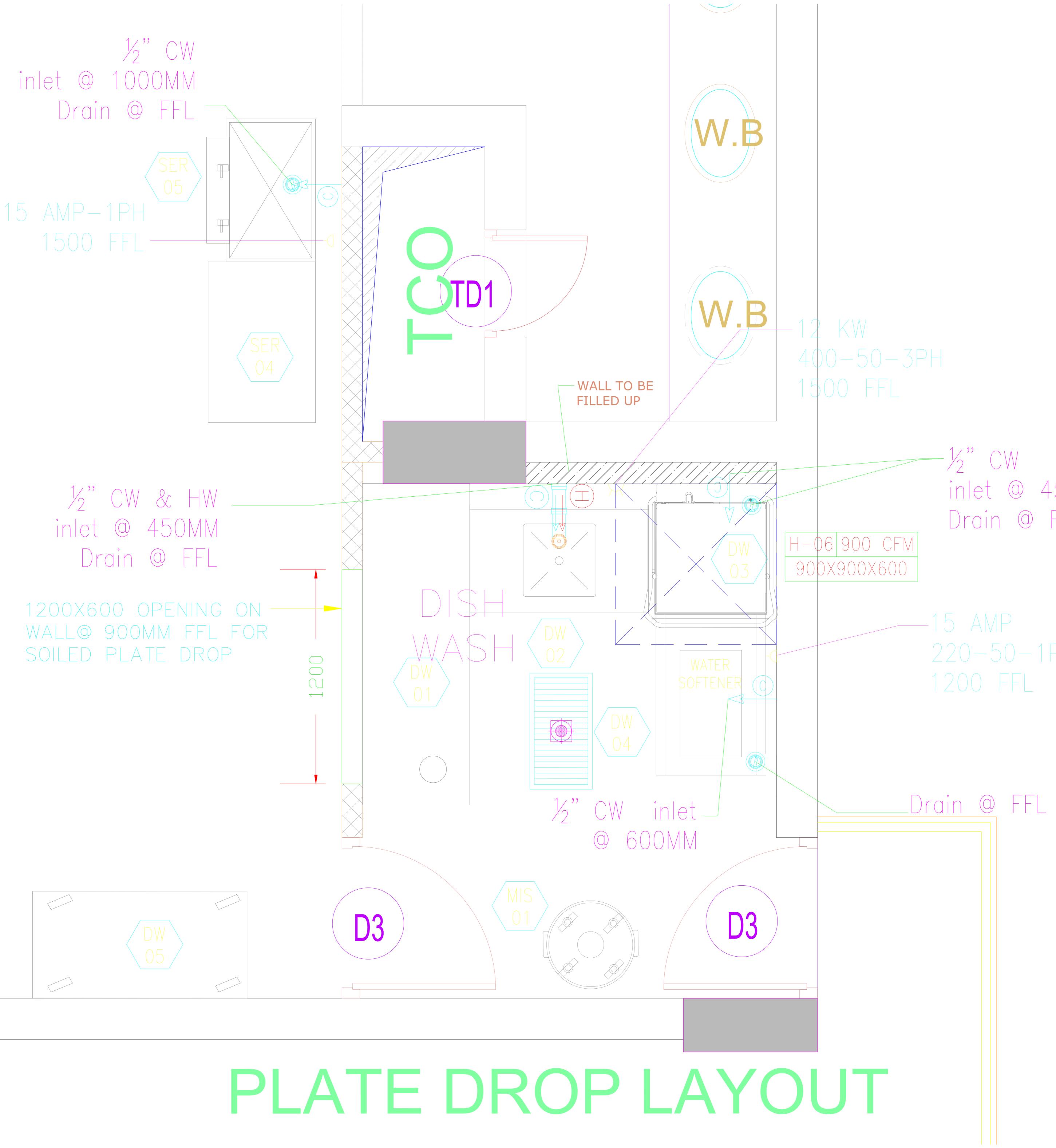
# (Height to be co-ordinated H-011200 CFM 1200X1050X600 \_\_\_\_\_MK \_\_\_` \_\_\_\_\_ $\triangleleft$ . / SERVERY \_\_\_\_\_ $\geq$ $\searrow$ H-023300 CFM 3300X900X600 EDGE GUARD 'CW inl∉t @ № MKOOOMM \_\_\_\_ $\square$ 1000X750X600 **EDGE GUARD** $\searrow$ MK D3 EDGE GUARD -1PH-**V** (AW5) AV1 AC.OU TCO

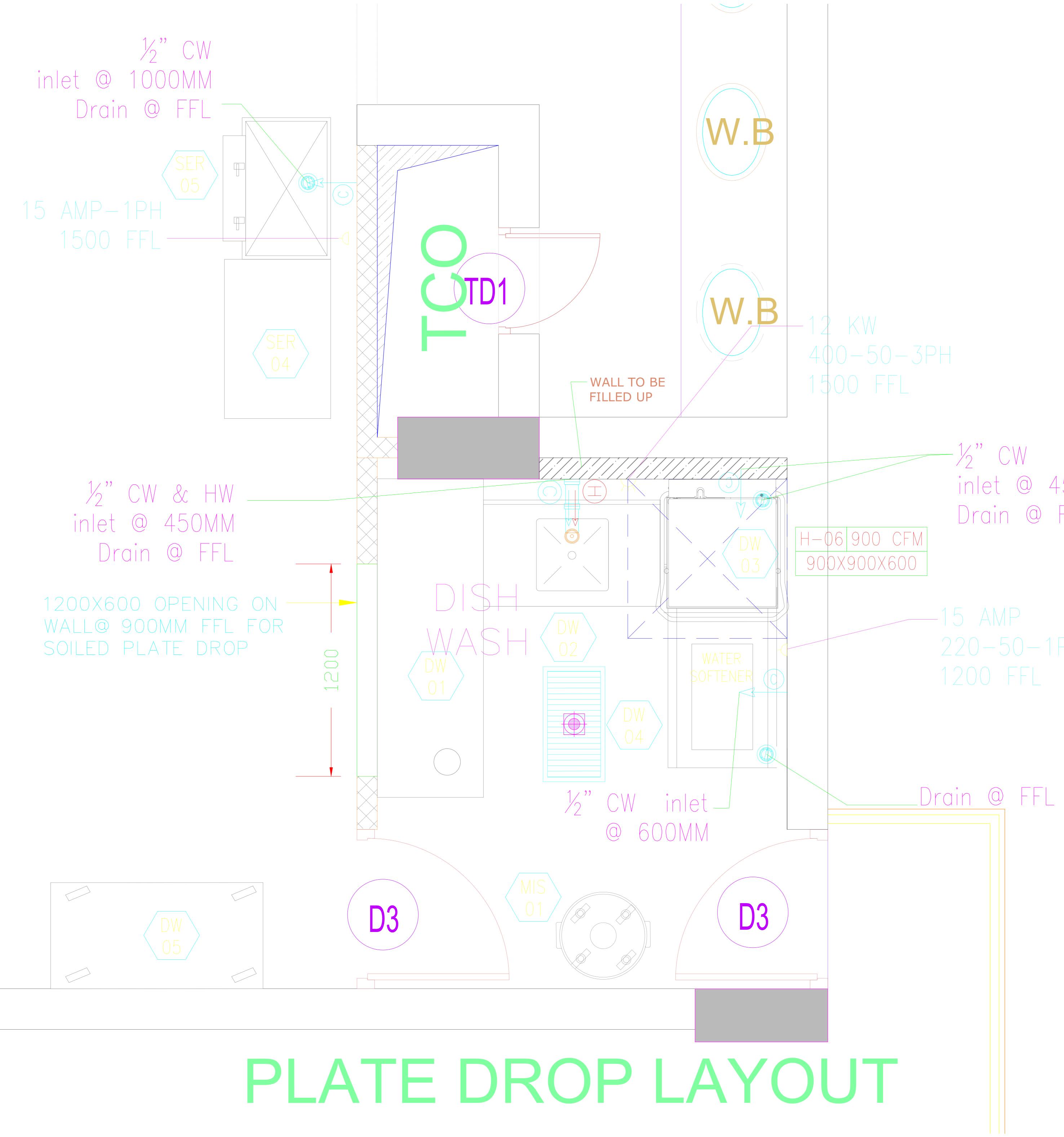
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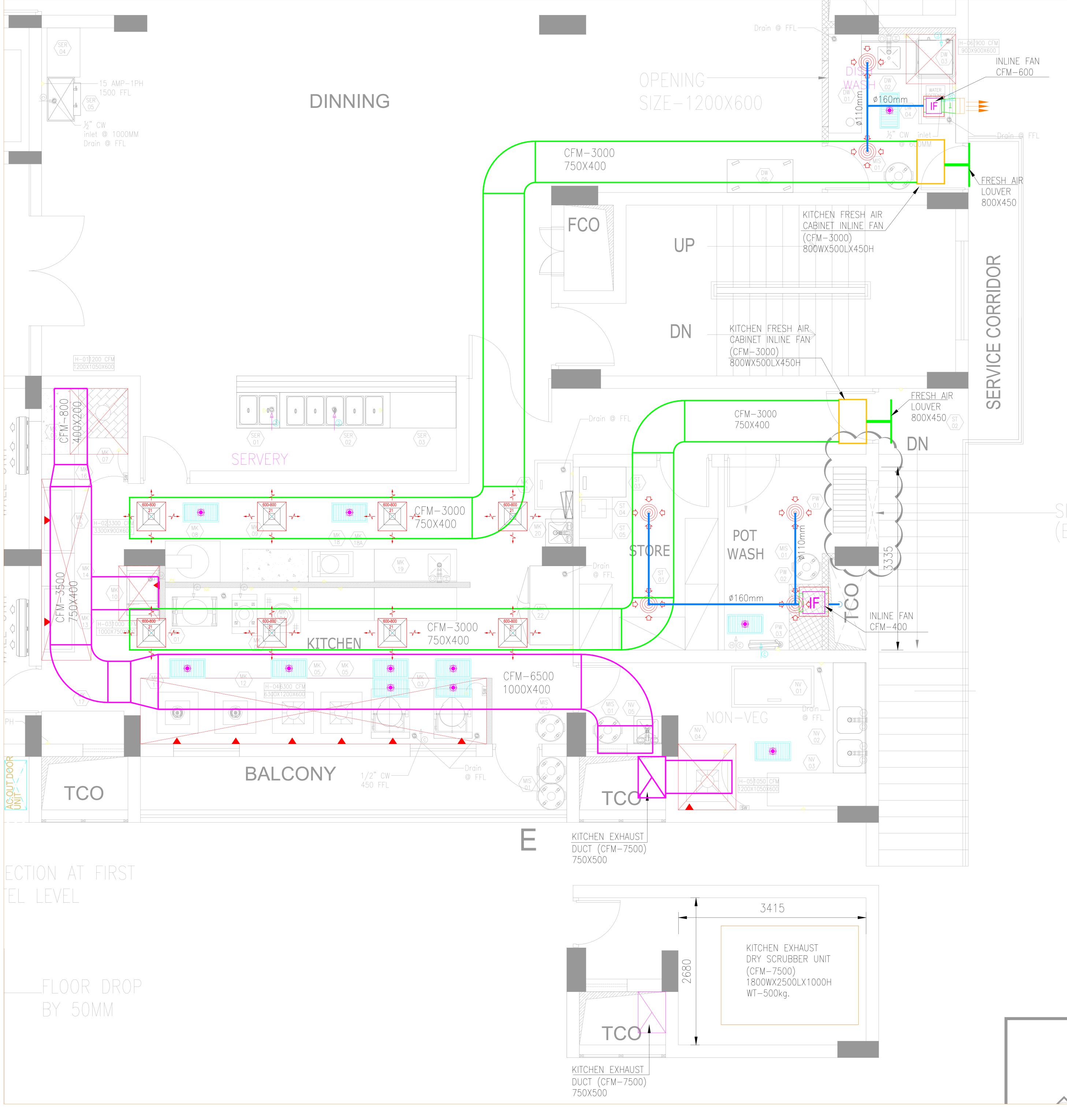
# MAIN KITCHEN LAYOUT

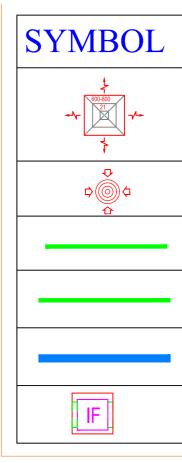












DESCRIPTION
SUPPLY AIR DIFFUSER
DISC VALVE
FRESH AIR DUCT
FRESH AIR LOUVER
UPVC PIPE FOR EXHUST AIR
INLINE FAN

Students Hostel

INDIAN INSTITUTE OF TROPICAL METEOROLOGY, PASHAN, PUNE-411 008

KITCHEN EQUIPMENT AND HVAC WORKS FOR STUDENT/TRAINEE HOSTEL BUILDING FOR IITM AND IMD, AT IMD COLONY, PASHAN, PUNE

Tender No. IITM/CE/SHBK/2015-16/11

## **COMMERCIAL BID**

### Vol-II

	INDIAN INSTITUTE OF TROPICAL METEOROLOGY (IITM), PUNE									
	STUDENTS HOSTEL AT IMD COLONY									
	SUMMARY FOR KITCHEN EQUIPMENT AND HVAC WORKS									
SR.NO	SR.NO DESCRIPTION AMOUNT									
1	Kitchen Equipment Works									
2	Kitchen HVAC									
	TOTAL COST									

NOTE:- ALL ELECTRICAL AND MECHANICAL ITEMS SHALL BE FIVE STAR RATED

				TROPICAL					
	S	TUDEN	ITS HOS	STEL KITCHE	EN EQUIPM	ENT WORK	S		
SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image
	207.000						In Rs.	In Rs.	
1	<b>POT WASH</b> <b>Supply, Installation and comissioning of SS POT RACK-PW01:</b> Unit to be provided with three (3) shelves, starting at 150 mm and then at equidistant, The uprights should be made of 32 mm dia SWG 16 SS 304 pipe. The top sides of the uprights should be sealed and properly rounded. Shelves should be constructed with 25 mm dia SS pipe of 16 SWG (304) with internal grid of 19 mm dia SS pipe at 100 mm spacing. Four numbers, 38 mm SWG 16 (304) SS tubular legs with adjustable bullet feet. <b>[L x B x H=1200X600X1500]</b> <b>Remark:Custom Fabricated</b>	1	Each						
2	Supply, Installation and comissioning of LOW PLATFORM TABLE FOR POT WASH PW 02 :The unit should be made of SS Square pipe structure of size 30 x 30 mm x 16 swg SS 304 with adjustable bullet feet and supporting cross bars at every 100 mm space. [L x B x H=1200X600X450] Remark:Custom Fabricated	1	Each						
	Supply, Installation and comissioning of FLUSHING HOSE UNIT - INDUSTRIAL / SPRING LOADED RECOIL (OPTIONAL) PW03 : Indian equivalent of electrolux model - MRM15 [ Remark: Indian - Bought Out]	1	Each						
	Supply, Installation and comissioning of HEAVY DUTY PLASTIC DUST BINS ON CASTORS WITH LIDS MIS 01 : NEELKAMAL OR SINTEX - 200 LTRS [Remark:Indian - Bought Out]	6	Each						
	STORES								
5	Supply, Installation and comissioning of SS STORAGE RACK ST 01 : Unit to be provided with four (4) shelves, starting at 150 mm and then at equidistant, constructed with 38 mm dia SS pipe of 16 SWG (304). 35X35X3 mm thick SS angle frame under support. 18 SWG (304) SS shelf double beaded on all sides. Four numbers SS legs with adjustable bullet feet. [L x B x H=1200X600X1800] Remark:Custom Fabricated	4	Each						
6	Supply, Installation and comissioning of AIR CURTAIN ST 02 : Centrally mounted heavy duty motor high velocity and CFM industrial air curtain. Suggested company - Acme Environment control systems or Almonard. Door opening of 2400 mm wide and 2400mm high (to be verified at site) [L x B x H=1800 mm long] Remark:Indian Bought Out	1	Each						

INDIAN INSTITUTE OF TROPICAL METEOROLOGY -IITM , PUNE									
STUDENTS HOSTEL KITCHEN EQUIPMENT WORKS									
SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image
7	Supply, Installation and comissioning of PLATFORM TROLLEYS : Unit to be constructed of SWG 16 (304) SS double beaded on all sides on 35X35X3 mm SS angle welded framework. SWG 16 (304) SS, 1 ½ inch dia pipe handle fixed to body with SWG 14 (304) SS angular support. Four numbers 150 mm dia all swivel heavy duty rubberized castors to take loads of 150 kgs. Two of the wheels to have locking arrangement. [LxBxH= 1050x600x900] Remark:Custom Fabricated	2	Each				In Rs.	In Rs.	
8	Supply, Installation and comissioning of ELECTRONIC WEIGHING SCALE ST 03 : Capacity 0f 300 kgs. Unit should have SS Platform of size 750 x 750 mm with a digital instrument panel connected on a vertical stand with a backlit display (Minimum calibration 50 grams). It should be provided with a 5 amp. power cord of minimum 1½ meter length having a battery backup. Brands - ISI specified brand / approved by weights and Measures department. Remark:Indian Bought Out	1	Each						
9	Supply, Installation and comissioning of ELECTRONIC TABLE TOP WEIGHING SCALE ST 04 : Capacity 0f 20 kgs. Unit should have SS Tray a digital instrument panel connected on a vertical stand with a backlit display (Minimum calibration 10 grams). It should be provided with a 5 amp. power cord of minimum 1½ meter length having a battery backup. Brands - ISI specified brand / approved by weights and Measures department. Remark:Indian Bought Out	1	Each						
10	Supply, Installation and comissioning of SS WORK TABLE WITH UNDERSHELVES ST 05 : Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 38X38X3 mm SS angle welded framework. Top sheet to be sound deadend. One. 18 SWG (304) SS bottom shelf, starting at 150 mm height and the next shelf at equidistance. Refer drawing for raised splash back. Four numbers SS tubular legs with adjustable bullet feet. [L x B x H=750X600X850+150] Remark:Custom Fabricated	1	Each						
	MAIN KITCHEN								
11	Supply, Installation and comissioning of TILTING WET GRINDER WITH STARTER MK 01 :Capacity 10 ltrs. Tilting model with complete SS construction including the lid and the casing. Brand Rishab - Trident, Cosmos or Rajalakshmi or equivalent / Appropriate starter to be provided with the equipment [L x B x H= 500 x 660 x 1080 mm] Remark: Indian - Bought Out	1	Each						

				TROPICAL					
		STUDEN	IS HOS	STEL KITCHI	EN EQUIPM	ENT WORK	5		
SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image
12	Supply, Installation and comissioning of POTATO PEELER MK 02 : 7 KG / COSMOS OR EQUIVALENT INDIAN MAKE [L x B x H=610X610X920]Remark: Indian - Bought Out	1	Each				In Rs.	In Rs.	
13	Supply, Installation and comissioning of INSTANT WET MASALA GRINDER /PULVERISER MK 04: 20 KG PER HOUR / TRIDENT BRAND OR EQUIVALENT. [L x B x H=510X800X1500] Remark: Indian - Bought Out	1	Each						
14	Supply, Installation and comissioning of TILTING BOILING PAN - 100 LTR - LPG MK 03 : DIRECT HEATING - 100 LTRS - ELECTROLUX OR BONNET OR NAYATI Remark: Imported	2	Each						
15	Supply, Installation and comissioning of HIGH PRESSURE SINGLE BURNER RANGE MK 05 : SWG 18 (304) SS on both sides with air vents. SWG 16 (304) SS on top with front turned down and cut out to receive one gratings. 35X35X3 mm SS angular framework fully welded. One 400X400 heavy duty cast iron removable vessel rest. One T-35 burner (72000 BTU per hour) with pilot and controls. One, SWG 20 (304) SS spillage tray with SS strip handle. Manifold - ½ inch dia provided on both sides. Four (4) nos SS legs with adjustable feet. No splash back. [L x B x H=750X750X600] Remark : Custom Fabricated		Each						
16	Supply, Installation and comissioning of SLAP TABLE WITH UNDERSHELVES MK 06 : 25 mm thick granite top on 3mm thick marine ply. sitting on SWG 16 (304) SS channel frame with SWG 12 SS corner pieces. SWG 18 (304) SS shelf at 150 mm from FFL double beaded on all sides. 38 mm dia SWG 16 (304) SS pipe legs with adjustable feet. [L x B x H=900X600X850] Remark: Custom Fabricated	1	Each						
17	Supply, Installation and comissioning of TANDOOR (CHARCOL) -MK 07 : The framework should be made of 25 x 25 SWG 14 boxed welded angles, and should be angle reinforced on all sides and bottom and intermediate positions. Exterior of base reinforced with heavy gauge MS inverted channel framework on all sides and suitable to fix castors. OUTER BODY-16 gauge SS Sheets with 25mm thk Mineral Wool insulation all around. INNER BODY - 3mm thk MS Sheets. POT - Earthen Pot (Suitable Size). ASH OUTLET - Provide Insulated door on hinges & latch(Size 6"x6" opening). [L x B x H=900X900X850] Remark: Custom Fabricated	1	Each						

		STUDER				ENT WORK	5		
SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image
18	Supply, Installation and comissioning of DOUGH KNEADER MK 08 : The frame structure to be made of MS with proper paint. Should be of heavy duty construction. The spiral arm, the bowl and the protection grid should be of SS 304. It should have a guard around the bowl and should have a protection device which will stop the machine when the grid is lifted. The movement transmission should be through pulley and belt. The electric system should comply with all standard safety rules. 1.5 HP, 3 phase – two speed motor like Crompton or equivalent with DOL starter to be provided. It should have two separate timer for two different speeds. BERJAYA I/BSP-SM50D [L x B x H=20 kg Dough Capacity / 1020x590x1170] Remark: Imported	1	Each				In Rs.	In Rs.	
19	Supply, Installation and comissioning of SLAP TABLE WITH UNDERSHELVES MK 09 : 25 mm thick granite top on 3mm thick marine ply. sitting on SWG 16 (304) SS channel frame with SWG 12 SS corner pieces. SWG 18 (304) SS shelf at 150 mm from FFL double beaded on all sides. 38 mm dia SWG 16 (304) SS pipe legs with adjustable feet. [L x B x H=1200X600X850] Remark: Custom Fabricated.	1	Each						
20	Supply, Installation and comissioning of IDLI STEAMER / STAND - SELF STEAM GENERATING - LPG MK 10 : Body to be constructed of SWG 16 (304) SS, on a SS tubular stand. Steam inlet on one side. SS Steam control valves to be provided. Four number doors with rubber beading and locking facility. drip tary in the front. SS die pressed idli trays to steam idlis - total of 120 idlis at a time. Provide additional set of Trays with the machine. Four numbers, SS tubular legs with adjustable bullet feet <b>Remark : Custom</b> <b>Fabricated.</b>	1	Each						
21	Supply, Installation and comissioning of BULK FRYER MK11/12 : Body to be constructed of SWG 18 (304) SS on both sides with air vents and front with control panel. 35X35X3 mm SS angular framework fully welded. SWG 16 (304) SS on top with front turned down and cut out to receive 1 fryer bowl and a oil drip hole. Provide a receptacle for oil drip from top sheet. One nos. SS frier bowl. One T-50 burner (1,00,000 btu/hr). Manifold - ½ inch dia provided on both sides. SWG 20 (304) SS spillage tray with SS strip handle. 16 SWG , 38mm dia SS pipe legs with adjustable bullet feet. [L x B x H=750X750X750] Remark: Custom Fabricated.	2	Each						

		STUDER	ITS HOS	STEL KITCH	EN EQUIPI	ENT WORK	5		
SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image
22	Supply, Installation and comissioning of TAWA MK 13/15: 16 SWG SS top with 150 mm high raised splash on rear, returned 25 mm & down 12 mm. Both sides of top rolled down 50 mm flush with body cladding. Front of worktop bull nosed. Worktop to over hang the base body by 50mm from front and 75mm at rear. SWG 18 (304) SS on all sides with air vents on both sides. On fully welded SS angle frame. Cooking top of 20 mm thick polished SS plate with 75 mm raised rear and side edges with grease collecting trough in front and grease collecting drawer. Two V-1050 burners (40.000 bu/hr) with one pilot and control valve. 16 SWG , 38mm dia SS pipe legs with adjustable nylon bullet. [L x B x H=1200x600x850+150] Remark: Custom Fabricated.	2	Each				In Rs.	In Rs.	
23	Supply, Installation and comissioning of SPREADER TABLE / 2 UNDERSHELVES MK 14/16 : Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 38X38X3 mm SS angle welded framework. Top sheet to be sound deadend. One, 18 SWG (304) SS bottom shelf, starting at 150 mm height and the next shelf at equidistance. Refer drawing for raised splash back. Four numbers SS tubular legs with adjustable bullet feet. [L x B x H= 600X600X850+150] Remark: Custom Fabricated.	2	Each						
24	Supply, Installation and comissioning of SS WORK TABLE WITH UNDERSHELVES MK 17: Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 38X38X3 mm SS angle welded framework. Top sheet to be sound deadend. One. 18 SWG (304) SS bottom shelf, starting at 150 mm height and the next shelf at equidistance. Refer drawing for raised splash back. Four numbers SS tubular legs with adjustable bullet feet. [L x B x H=1500X600X850+150] Remark: Custom Fabricated.	2	Each						
25	Supply, Installation and comissioning of SS WORK TABLE WITH UNDERSHELVES MK 18 : Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 38X38X3 mm SS angle welded framework. Top sheet to be sound deadend. One. 18 SWG (304) SS bottom shelf, starting at 150 mm height and the next shelf at equidistance. Refer drawing for raised splash back. Four numbers SS tubular legs with adjustable bullet feet. [L x B x H=1200X600X850+150] Remark: Custom Fabricated.	2	Each						
26	Supply, Installation and comissioning of VEG PROCESSOR MK 18 A : Automatic vegetable processor. To process 60 kgs per hour with multiple selection of blades for different cuts. Six different blades to slice / dice / grate and shred to be supplied with the machine. Machine to have inbuilt safety mechanisms. Suggested Brand - Robot Coupe / Halde OR Equivalent Remark: Imported.	1	Each						

	INDIAN INSTITUTE OF TROPICAL METEOROLOGY -IITM , PUNE STUDENTS HOSTEL KITCHEN EQUIPMENT WORKS										
	5	STUDEN	ITS HOS	STEL KITCH	EN EQUIPM	ENT WORK	S				
SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image		
27	Supply, Installation and comissioning of SS WORK TABLE WITH SINK MK 19: Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 38X38X3 mm SS angle welded framework. Bowl size 450X450X250 deep integral with top sheet - check the drawing for position of the bowl. In the center 50 mm dia BSP drain coupling, hot and cold water faucet, deck mounted. Splash back 150 mm on rear / side.(AS PER DRAWING). 18 SWG (304) SS bottom shelf starting at 150 mm. Four numbers SS tubular legs with adjustable bullet feet. [L x B x H= 1500X600X850+150] Remark: Custom Fabricated.	1	Each				In Rs.	In Rs.			
28	Supply, Installation and comissioning of HAND WASH UNIT / SOAP DISPENSER / DUST BIN MK 20: Wall mounted SS sink with soap dispenser and towel rack. Top construction of SWG 16 sheet. Front and both sides turned up 12 mm and turned down 40 mm and in 12 mm. Rear turned up 150 mm, returned 25 mm and down 12 mm. 350 mm x 350 mm x 200 mm deep sink bowl of SWG 16. 38 mm dia waste pipe. Single spot deck mounted water faucet. SS 16 SWG wall brackets secured to top with acron SS nuts and bolts. Paper towel dispenser / soap dispenser and chef;s cap stand [L x B x H=450X450] Remark: Custom Fabricated.	1	Each								
29	Supply, Installation and comissioning of CHEST FREEZER MK 21: Body to be made of 20 SWG (304) SS, as also the rear cladding. All interiors to be of SS. One door, exterior clad with 18 SWG (304) SS, with handles, locking arrangements and gasket. 2 inch thick PUF all round15 C to -20 C. Complete with controls, digital thermometer, built in stablizer with time delay auto start. Compressor to be housed on one side, provided with 1 inch diameter waste outlet and removable SS perforated false bottom and side – out dip tray below waste outlet. All sides to be tilted towards waste outlet to remove excess water [L x B x H= 1000X750X850] Remark: Refrigeration India.	1	Each								
30	Supply, Installation and comissioning of SPLIT DOOR VERTICAL REFRIGERATOR - 4 HALF DOOR MK 22: 1100 ltrs / The refrigerated compartment designed to 2/1 GN pans / Suitable to operate in ambient temperature up to +43 °C / Temperature range: -2 to +10 °C / Fully automatic defrost / self closing door / HCF [L x B x H= 1240X750X2000] Remark: Refrigeration India.	1	Each								
	NON VEG PREP										

	INDIAN INSTITUTE OF TROPICAL METEOROLOGY -IITM , PUNE STUDENTS HOSTEL KITCHEN EQUIPMENT WORKS										
	5	TUDEN	TS HOS	TEL KITCH	EN EQUIPM	ENT WORK	S				
SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image		
31	Supply, Installation and comissioning of CHEST FREEZER NV 01 :Body to be made of 20 SWG (304) SS, as also the rear cladding. All interiors to be of SS. One door, exterior clad with 18 SWG (304) SS, with handles, locking arrangements and gasket. 2 inch thick PUF all round15 C to -20 C. Complete with controls, digital thermometer, built in stablizer with time delay auto start. Compressor to be housed on one side, provided with 1 inch diameter waste outlet and removable SS perforated false bottom and side – out dip tray below waste outlet. All sides to be tilted towards waste outlet to remove excess water [L x B x H=1200X750X850] Remark: Refeigeration Indian.	1	Each				In Rs.	In Rs.			
32	SPARE NUMBER NV 02 Supply, Installation and comissioning of 2 TANK SINK TABLE NV 02 : Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 35X35X3 mm SS angle welded framework. 2 sink of size 450 x 450 x 300 deep integral with top sheet with 38mm dia drain coupling. Imported pressurized spray unit to be wall mo [LxBxH : 2000x650x850+150]	1	Each								
33	Supply, Installation and comissioning of SS WORK TABLE WITH UNDERSHELVES NV 03 :Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 38X38X3 mm SS angle welded framework. Top sheet to be sound deadend. One. 18 SWG (304) SS bottom shelf, starting at 150 mm height and the next shelf at equidistance. Refer drawing for raised splash back. Four numbers SS tubular legs with adjustable bullet feet. [L x B x H=1800X600X850-150] Remark: Custom Fabricated.	1	Each								
34	Supply, Installation and comissioning of HIGH PRESSURE SINGLE BURNER RANGE NV 04 : SWG 18 (304) SS on both sides with air vents. SWG 16 (304) SS on top with front turned down and cut out to receive one gratings. 35X35X3 mm SS angular framework fully welded. One 400X400 heavy duty cast iron removable vessel rest. One T-35 burner (72000 BTU per hour) with pilot and controls. One, SWG 20 (304) SS spillage tray with SS strip handle. Manifold - ½ inch dia provided on both sides. Four (4) nos SS legs with adjustable feet. No splash back. [L x B x H=750X750X600] Remark: Custom Fabricated.	1	Each								
35	Supply, Installation and comissioning of HAND WASH UNIT / SOAP DISPENSER / DUST BIN NV 05 : Wall mounted SS sink with soap dispenser and towel rack. Top construction of SWG 16 sheet. Front and both sides turned up 12 mm and turned down 40 mm and in 12 mm. Rear turned up 150 mm, returned 25 mm and down 12 mm. 350 mm x 350 mm x 200 mm deep sink bowl of SWG 16. 38 mm dia waste pipe. Single spot deck mounted water faucet. SS 16 SWG wall brackets secured to top with acron SS nuts and bolts. Paper towel dispenser / soap dispenser and chef;s cap stand [L x B x H=450X450] Remark: Custom Fabricated. DISH WASH	1	Each								

	INDIAN INSTITUTE OF TROPICAL METEOROLOGY -IITM , PUNE STUDENTS HOSTEL KITCHEN EQUIPMENT WORKS											
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SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image			
36	Supply, Installation and comissioning of SOILED DISH LANDING TABLE WITH GARBAGE CHUTE DW 01 : Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to welded SS angle frame. ½ inch raised marine edges. Waste chute - One no. 6 inch diameter with rubber edges on left (confirm with the drawing) hand side 175 mm from the side edges. 25 mm dia drain outlet on the left hand side corner connected to waste outlet with lever handle. Four numbers, SS tubular legs with adjustable bullet feet. Side and rear cross bracing support to give a clear front to move in waste bin under the table. [L x B x H=1900X600X850] Remark: Custom Fabricated.	1	Each				In Rs.	in Rs.				
37	Supply, Installation and comissioning of PRE WASH SINKDW 02 : Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 38X38X3 mm SS angle welded framework. Bowl size 450X450X250 deep integral with top sheet - check the drawing for position of the bowl. In the center 38mm dia BSP drain coupling, hot and cold water faucet, deck mounted. Splash back 150 mm on rear / side.(AS PER DRAWING). 18 SWG (304) SS bottom shelf starting at 150 mm. Four numbers SS tubular legs with adjustable bullet feet. Fabricated to assist free movement of standard dish wash rack. To be provided with imported hand held spray unit. T&S brand. Other details as per general specifications. [L x B x H=1100X650X850+150] Remark: Custom Fabricated.	1	Each									
38	Supply, Installation and comissioning of HAND HELD PRESSURE SPRAY - INDUSTRIAL - T & S or Equivalent	1	Each									
39	Supply, Installation and comissioning of HOOD TYPE DISH WASH MACHINE / WITH PRESSURE PUMP IF REQUIRED DW 03 : Automatic hood type dishwasher (corner type operation) with a speed of 50-60 racks per hour. Suitable models from Meiko or Hobart. With 6 extra racks. Suitable water softener to be provided with the machine. Detergent dosing & Rinse agent dosing pumps to be included in the quote. OR EQUIVALENT MODEL FROM HOBART / WINTERHALTER. Remark : Imported.	1	Each									
40	Supply, Installation and comissioning of WATER SOFTENER- 1500 LTR per regeneration capacity / less than 40 ppm quality water output / Suggested Make - European WaterCare Systems - Model AT 10/M [L x B x H= 640X275X450] Remark: Imported.	1	Each									
41	Supply, Installation and comissioning of EXTRA DISH WASH RACKS - Plate Racks - CAMBRO OR EQUIVALENT Remark: Indian Bought out.	6	Each									

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SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image
	Supply, Installation and comissioning of Cutlery Racks - CAMBRO OR EQUIVALENT Remark: Indian Bought out.	3	Each				In Rs.	In Rs.	
	Supply, Installation and comissioning of Glass Racks - CAMBRO OR EQUIVALENT Remark: Indian Bought out.	3	Each						
44	Supply, Installation and comissioning of DISH WASH EXIT TABLE DW 04 : Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 35X35X3 mm SS angle welded framework. Top sheet to be sound deadend. Fabricated to fit the standard dish wash rack movement. Four numbers, SS tubular legs with cross supports and adjustable bullet feet. 150 mm rear splash back wherever possible. [L x B x H=1000X650X850+150] Remark: Custom Fabricated.	1	Each						
	Supply, Installation and comissioning of TABLE ON CASTORS DW 05 :To be constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 35X35X3 mm SS angle welded framework. Top sheet to be sound deadend. One undershelf, 18 SWG (304) SS bottom shelf, starting at 150 mm height. Four numbers, heavy duty GI castors with rubber wheels of 100 mm dia. Two wheels should have locking arrangement. [L x B x H=1200X600X850] Remark: Custom Fabricated.	1	Each						<b>F</b>
	SERVERY & DINING								

	INDIAN INSTITUTE OF TROPICAL METEOROLOGY -IITM , PUNE STUDENTS HOSTEL KITCHEN EQUIPMENT WORKS									
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SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image	
46	Supply, Installation and comissioning of BAINE MARIE - HEATED SER 02 : Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to welded SS angle frame, with cut out to fit in five rectangular 1/1 and two 1/2 gastronom containers. Gastronom containers to be 200 mm deep with lids. The tank of the baine marie should be provided with an online connection with a ball valve of 15 mm dia and a drain valve of 15 mm dia. 10 mm thick acrylic clear sneeze guard on top of the food counter at 600 mm height, resting on 25mm dia SWG 16 (304) SS pipe upright and SS frame. SWG 18 (304) SS sheet covering on three sides. 18 SWG (304) SS bottom shelf starting at 150 mm. Thermostatically controlled 3KW heating element with rotary ON/OFF switch with light indicator on the side. Water sensor to be provided in the unit to prevent heating element getting damaged due to lack of water. The unit should have 2 mtr supply cord with industrial plug. Six numbers SS legs with adjustable bullet feet. The tray rail should be made of 19 mm dia SS pipe with required support at equal intervals. [L x B x H=2100X675+300X850+600] Remark: Custom Fabricated.	1	Each				In Rs.	In Rs.		
47	Supply, Installation and comissioning of AMBIENT BAINE MARIE SER 03 : Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to welded SS angle frame, with cut out to fit in one rectangular 1/1 and three 1/3 gastronom containers. Gastronom containers 200 mm deep with lids. 10 mm thick acrylic clear sneeze guard on top of the food counter at 600 mm height, resting on 25mm dia SWG 16 (304) SS pipe upright and SS frame. SWG 18 (304) SS sheet covering on three sides. 18 SWG (304) SS bottom shelf starting at 150 mm. Ambient counter – no heating. Four numbers SS legs with adjustable bullet feet. The tray rail should be made of 19 mm dia SS pipe with required support at equal intervals. [L x B x H=900X675+300X850+600] Remark: Custom Fabricated.	1	Each							
48	Supply, Installation and comissioning of BAINE MARIE SIDE TABLE SER 01 : Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to welded SS angle frame. SWG 18 (304) SS sheet covering on three sides. 18 SWG (304) SS bottom shelf starting at 150 mm and the next shelf at equidistant from the top. Four numbers SS legs with adjustable bullet feet. The tray rail should be made of 19 mm dia SS pipe with required support at equal intervals.[L x B x H=900X675+300X850] Remark: Custom Fabricated.	1	Each							

				INDIAN INSTITUTE OF TROPICAL METEOROLOGY -IITM , PUNE STUDENTS HOSTEL KITCHEN EQUIPMENT WORKS												
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SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image							
49	Supply, Installation and comissioning of WATER COOLER SIDE TABLE SER 04 : Construction specification same as equipment number 13 but with 3 undershelves - bottom at 150 mm and the other 2 equidistant from each other. Shelves to be provided with drain holes. [L x B x H=900X600X1200] Remark: Custom Fabricated.	1	Each				In Rs.	In Rs.								
	Supply, Installation and comissioning of WATER COOLER - WITH RO AND UV FILTER - 80 LTR CAPACITY SER 05 : AQUAGUARD PURECHILL 80 PSS RO [L x B x H=650X450X1350] Remark:Indian Bought out.	1	Each													
	MISCELLANEOUS Supply, Installation and comissioning of MASALA TROLLEY : The unit															
51	Supply, Installation and comissioning of MASALA TROLLEY: The unit should be like a table trolley designed with SWG 16 (304) SS top, double beaded on all sides, secured to SS angle frame, with cut out to fit in inserts of 8 round containers to hold spices. Containers should of SS 304, removable of size 150 mm dia and 150 mm deep with individual lids. Unit to be fitted with heavy duty noise free castors of 100 mm dia with two castors having locking facility. The trolley should have 25 mm dia SWG 16 SSS 304 pipe handles on both sides. One undershelf of SWG 18 SSS 304 at the bottom at 150 mm from FFL.[L x B x H=900X600X800] Remark: Custom Fabricated.	1	Each													
52	Supply, Installation and comissioning of SS UTILITY TROLLEY: Three (3) tray type shelves of SWG 16 (304) SS, to be reinforced with channels of SWG 16 (304) SS. All three shelves to be equidistant. 32 mm dia SWG 16 (304) SS pipes to extend on top as handle at 100 mm clear height from the top shelf. 100 mm dia all s [L x B x H=950X600X1000] Remarks : Custom Fabricated.	2	Each													
53	Supply, Installation and comissioning of DRAIN GRATING / TROUGH / TROUGH OUTLET (VERTICAL OR HORIZONTAL - AS PER SITE CONDITION)Removable S.S Grating of 304 0f suitable size with 25 mm height / Grating with hairline finishing / Grating with 5mm thick for outside ring, 3mmthick for interior section / Grating has to be slip-resistant for one side, Plain on the others / 70 mm Trough - MAKE ACO OR SSS (VIANEN) OR SIMILAR [L x B x H=650x350x70] Remark: Custom Fabricated.	10	Each													
	Supply, Installation and comissioning of INSECTOCUTORS : Company - Pest Control India - Model SPIDER [L x B x H=445x142x140] Remark Indian Bought Out.	7	Each													

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SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image
55	Supply, Installation and comissioning of SS EDGE GUARDS : SS angles to be grouted to the wall edges. Each angle to be 1500 mm long. Quantity indicated is approximate [L x B x H=SS ANGLE 0F 50 x 50 X 1.5 mm thick] Remark: Custom Fabricated.	20	Each				In Rs.	In Rs.	
56	Supply, Installation and comissioning of STEAM CLEANER : KARCHER SG 4/4 - Universal steam cleaner for commercial application. 2-tank system with all standard accessories / Steam pressure - 4 bar. Remark : Imported	1	Each						
	EXHAUST HOODS Supply, Installation and comissioning of EXHAUST HOOD - GENERAL SPECS : It shall be constructed of 18 swg SS and shall be box type in front, rear & sides raised up and turned at 90 degree. It shall have a 75 mm wide gutter running along the perimeter for oil collection with removable oil plug. From approx. 150 mm above the grease gutter at the rear, there shall be a framework at 45° made of 20 swg SS. The framework shall be provided with 500 x 500 x 50 mm thick removable grease filters. The filters shall have an outer frame constructed of 18 swg SS. To the frame, 25 x30x 25 mm "C" type 20 swg SS channels shall be welded, which will form a baffle for air movement. The filters closed. The filters should be easily removable & washable. The filters and framework shall be provided with weep holes for draining of oil. Approx. 300 mm above the grease gutter in front, there shall be provided a 18 swg SS frame, welded to the top and inside of the front side.								
	Appropriate numbers of Flashed incandescent, with heat toughened glass, lights, diffusing glass, to provide 600 lux of light through-out the hood / Wiring in heat proof conduits / To be suspended on ceiling with hanger rods / Height/Exhaust /Fresh air duct Collar size, shape & Qty. to verify at site/coordinate HVAC consultants. The sheet used in the fabrication of the unit shall be free from warps, dents and other imperfections and all edges shall be smooth. The construction should be welded and not rivetted.								
A	HOOD OVER TANDOOR - H 01 : [L x B x H=1200X1050X600] Remark:Custom Fab	1	Each						
В	HOOD OVER TAWA- H02: [L x B x H= 3300X900X600 ] Remark:Custom Fab	1	Each						
с	HOOD OVER IDLI STEAMER - H 03 : [L x B x H=1000X750X600 ] Remark: Custom Fabricated.	1	Each						

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SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image
D	HOOD OVER BOILING KETTLE & BURNER - H 04 : [L x B x H= 1000X750X600 ] Remark:Custom Fab	1	Each				In Rs.	In Rs.	
E	HOOD OVER NON VEG BURNER - H 05 : [L x B x H= 1050X1200X600 ] Remark: Custom Fabricated.	1	Each						
F	HOOD OVER DISH WASH MACHINE - H 06 : [L x B x H=900X900X600 ] Remark: Custom Fabricated.	1	Each						
G	EXHAUST VENT REQUIRED FOR SERVERY COUNTERS	1	Each						
	GAS BANK								
57	Supply, Installation and comissioning of MANIFOLD & LPG LINING : The pipes shall be of MS seamless schedule 40 or TATA 'C' class ERW pipe. The main pipeline should be of 2" dia with respective ball valve. The pipeline should have seamless schedule 40 pipe fittings such as Tee, Elbow and other fittings up to 1" dia and the pipe from 1 "" dia should be hydraulically bent. There should be two numbers of manifold (each with the specified number of cylinder adaptors) made of seamless schedule 40 pipes with required fittings like NRV, cylinder adaptor (click on type) with flexible pipe of 3' of United make. There should be an isolation ball valve in both the manifold to operate the manifold individually. There should be a main gas shut off valve inside and outside the gas bank to isolate the LPG supply in case of emergency. The main pipeline should be a pressure gauge with a needle control valve installed inside the kitchen. The entire gas pipe line should be clamped properly with MS clamps on the wall. Once the entire pipe line is completed the same needs to be pressure tested. 2 BANKS OF (6+6) CYLINDERS EACH [ LxBxH = approximately 150 mtrs of pipe line]	1	Each						
58	Supply, Installation and comissioning of LPG CONSUMPTION METER: Commercial Gas flow meter from Maharashtra Multi distributors limited. Suitable model for the gas pressure on our line. G 4 Matrix Model [ Remark:Indian Bought Out]	1	Each						-

	INDIAN INSTITUTE OF TROPICAL METEOROLOGY -IITM , PUNE STUDENTS HOSTEL KITCHEN EQUIPMENT WORKS										
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SLNO	DESCRIPTION	Qtty	Unit	Basic Unit Rate	VAT %	Service Tax %	Rate (Basic +Taxes]	Total Amount	Reference Image		
59	Supply, Installation and comissioning of GAS (LPG) LEAKAGE DETECTION SYSTEM : Flameproof sensing modules with Digital Display showing % of leak, Controller with Graphic LCD Display, 3 level alarm thresholds and all sensors addressable expandable upto 60 sensors. output for Automatic Shut off, BMS Connectivity. No. of sensors to be determined by size of the kitchen and Gas Bank. Make - Gas Vigil Technologies (CE Certified) / Model - GV 108 (Digital) - KITCHEN - 06 SENSORS (approximately) / GAS BANK 2 SENSORS TOTAL = 8 SENSORS [Remark:Indian Bought Out].	8	Each				In Rs.	In Rs.			
60	Supply and installation and commisioning of fully automatic continuous composting machine Kwik composter model KC 100 with coposting capacity of 100 Kg per day with suitable exhaust blower with activated carbon filter with connected load 1.5 HP of size height 1660 x width 1420 x length 3310 or equivalent[ Remark:Indian Bought Out]	1	Each								
61	Supplying ,erecting testing and commissioning of Dumb waiter for the capacity of 150 kg from the approved vendor including all civil work. [ Remark:Indian Bought Out].	1	Each								
	TOTAL AMOUNT [Rs.]										

	ST	UDEN	TS HOSTEL K		AC WORKS						
BoQ of HVAC Works											
				Su	pply		Installation				
Description	Qty.	Unit	Basic Rate	Vat %	Rate Including tax	Amount	Basic Rate	Service tax %	Rate Including tax	Amount	
Dry scrubber unit for kitchen exhaust											
Supply installation testing and commissioning of Industrial grade electrostatic air cleaner for collection of dry and wet particles like dust, oil mist, cooking fumes upto 95% efficiency and filtering particles upto 0.01 microns. Necessary control panel to be part of the unit with VFD for fan. Construction of unit shall be double skin 25 mm thick PUF, 0.6 MM thick pre coated GI on external finish and 0.6 mm thick plain GI inner finish, forward curved DIDW fan , TEFC motor IP-55 suitable for VFD. permissible DB level 70 DB to 75 DB											
7500 CFM / 65 mm SP	1	Nos									
Make : HPS / Nutech											
Supply installation testing and commissioning of Industrial grade electrostatic air cleaner for collection of dry and wet particles like dust, oil mist, cooking fumes upto 95% efficiency EFF-1 and filtering particles upto 0.01 microns. Necessary control panel to be part of the unit with VFD of fan motor.	U.R	No									
	Dry scrubber unit for kitchen exhaust         Supply installation testing and commissioning of Industrial grade electrostatic air cleaner for collection of dry and wet particles like dust, oil mist, cooking fumes upto 95% efficiency and filtering particles upto 0.01 microns. Necessary control panel to be part of the unit with VFD for fan. Construction of unit shall be double skin 25 mm thick PUF, 0.6 MM thick pre coated GI on external finish and 0.6 mm thick plain GI inner finish, forward curved DIDW fan , TEFC motor IP-55 suitable for VFD. permissible DB level 70 DB to 75 DB         7500 CFM / 65 mm SP         Make : HPS / Nutech         Supply installation testing and commissioning of Industrial grade electrostatic air cleaner for collection of dry and wet particles like dust, oil mist, cooking fumes upto 95% efficiency EFF-1 and filtering particles upto 0.01 microns.	Dry scrubber unit for kitchen exhaust         Supply installation testing and commissioning of Industrial grade electrostatic air cleaner for collection of dry and wet particles like dust, oil mist, cooking fumes upto 95% efficiency and filtering particles upto 0.01 microns. Necessary control panel to be part of the unit with VFD for fan. Construction of unit shall be double skin 25 mm thick PUF, 0.6 MM thick pre coated GI on external finish and 0.6 mm thick plain GI inner finish, forward curved DIDW fan , TEFC motor IP-55 suitable for VFD. permissible DB level 70 DB to 75 DB         7500 CFM / 65 mm SP       1         Make : HPS / Nutech	Dry scrubber unit for kitchen exhaust         Supply installation testing and commissioning of Industrial grade electrostatic air cleaner for collection of dry and wet particles like dust, oil mist, cooking fumes upto 95% efficiency and filtering particles upto 0.01 microns. Necessary control panel to be part of the unit with VFD for fan. Construction of unit shall be double skin 25 mm thick PUF, 0.6 MM thick pre coated GI on external finish and 0.6 mm thick plain GI inner finish, forward curved DIDW fan , TEFC motor IP-55 suitable for VFD. permissible DB level 70 DB to 75 DB         7500 CFM / 65 mm SP       1         Nos       Make : HPS / Nutech         Supply installation testing and commissioning of Industrial grade electrostatic air cleaner for collection of dry and wet particles like dust, oil mist, cooking fumes upto 95% efficiency EFF-1 and filtering particles upto 0.01 microns. Necessary control panel to be part of the unit with VFD of	Image: Construction of the second	Image: Normal StateImage: Normal StateDry scrubber unit for kitchen exhaustImage: Normal StateSupply installation testing and commissioning of Industrial grade electrostatic air cleaner for collection of dry and wet particles like dust, oil mist, cooking fumes upto 95% efficiency and filtering particles upto 0.01 microns. Necessary control panel to be part of the unit with VFD for fan. Construction of unit shall be double skin 25 mm thick PUF, 0.6 MW thick pre coated GI on external finish and 0.6 mm thick plain GI inner finish, forward curved DIDW fan , TEFC motor IP-55 suitable for VFD. permissible DB level 70 DB to 75 DB1Nos7500 CFM / 65 mm SP1NosSupply installation testing and commissioning of Industrial grade electrostatic air cleaner for collection of dry and wet particles like dust, oil mist, cooking fumes upto 95% efficiency EFF-1 and filtering particles upto 0.01 microns. Necessary control panel to be part of the unit with VFD ofNo	Image: construction of the unit with VFD ofImage: construction of the unit with VFD ofSupply installation testing and commissioning of Industrial grade electrostatic air cleaner for collection of dry and wet particles like dust, oil mist, cooking fumes upto 95% efficiency and filtering particles upto 0.01 microns. Necessary control panel to be part of the unit with VFD of fan. Construction of unit shall be double skin 25 mm thick PUF, 0.6 MM thick pre coated GI on external finish and 0.6 mm thick plain GI inner finish, forward curved DIDW fan , TEFC motor IP-55 suitable for VFD. permissible DB level 70 DB to 75 DB1Nos7500 CFM / 65 mm SP1NosImage: construction of units, cooking fumes upto 95% efficiency EFF-1 and filtering particles upto 0.01 microns. Necessary control panel to be part of the unit with VFD ofImage: No	DescriptionQty.UnitBasic RateVat %Including taxAmountImage: Construction of the second of th	DescriptionQty.UnitBasic RateVat %Including taxAmountBasic RateImage: Image:	DescriptionQty.UnitBasic RateVat %Including taxAmountBasic RateService tax %Image: Construction of the state of	DescriptionQty.UnitBasic RateVat %Including taxAmountBasic RateService tax %Including taxImage: Control particlesImage: Control	

Sr. No.	Description	Qty.	Unit	Basic Rate	Vat %	Rate Including tax	Amount	Basic Rate	Service tax %	Rate Including tax	Amount
2	Inline exhaust fan for pot wash / store									-	
	400 CFM / 10 mm SP	1	No								
	600 CFM / 10 mm SP	1	No								
	Make : Kruger / Systemsaire / Ostenberg/Siemens									-	
3	Supply installation testing and commissioning of Fresh air Cabinet type fans with filters as per specifications for kitchen fresh air supply. All necessary angles, supports for installation to be included. Make - Kruger / Systemsaire										
a	3000 CFM / 40 MM SP Cabinet type centrifugal fan with motor with prefilter -20 microns.( Height of unit should not exceed 500 mm )	2	Nos								
b	4000 CFM / 40 MM SP Cabinet type centrifugal fan with motor with prefilter -20 microns.( Height of unit should not exceed 500 mm )	U.R	Nos								
4	Supply and installation of GSS ducting of 120 GSM as per IS 655 construction standards inclusive of angle supports, necessary angle flanges, threaded rods, nut bolts, gaskets										
а	24 G	125	sqm								
	22 G	75	sqm								
5	Supply and installation of Aluminium grilles with VCD	5	sqm								
6	Supply and installation of GI Volume control dampers	3	sqm								
7	Supply and installation of PVC pipe high grade for pot wash / store exhaust application										
	160 dia	20	mtr								
	110 dia	20	mtr								
	Disc valve 100 dia	8	Nos								

Sr. No.	Description	Qty.	Unit	Basic Rate	Vat %	Rate Including tax	Amount	Basic Rate	Service tax %	Rate Including tax	Amount
	Supply, Installation, Testing & Commissioning of the Fire and Smoke Dampers (FSD) installed in supply air / exhaust air duct when they pass through kitchen walls. The Dampers shall be motor operated with atleast 90 minutes fire rating as per UL 5555 - Class II for fire and smoke management rated for 90 min. as tested by CBRI Roorkee, India. Fusible Link should be rated for 72oC and UL Stamped. Each FSD shall be of multi leaf type, low leakage and shall be tested in the factory and will be certified by the manufacturer in form of the test certificate. Each FSD shall be supplied with matching sleeve (factory supply) and set of retaining angles for installation on wall / slab. The wall where ducts pass to be properly sealed with fire stop ( non combustible material )	2	sqm								
	Supplying and laying of complete cable work with glands and terminations, using XLPE insulated PVC sheathed steel tape/wire armoured underground aluminium conductor cables of following sizes from panel to fan including interconnections from starters to motors on suitable supports as requried including connections on both sides as per specificaitons as required.										
	3X4 YWY copper	50	Mtr								
	3X1.5 YWY copper	50	Mtr								
	Supply Instalaltion Testing and commissioning of LM6 Weatherproof Start /Stopself Locable type push button IP 67	1	Nos								
-	TOTAL SUPPLY AND INSTALLATION										
	GRAND TOTAL										
L	GRAND TOTAL										