

GOVERNMENT OF PAKISTAN  
PAKISTAN ORDNANCE FACTORIES  
**TENDER ENQUIRY**

To

Dear Sir,

Reference: **TENDER ENQUIRY NO. 12-LP-DS(WIL)-CAPT-54, Dated:20-02-2025**

You are requested to submit sealed quotations for the item(s) noted in the Schedule to the Tender. Offer should be sent duly sealed in an envelope. Please note the following instructions for filling the tender: -

**1. SUBMISSION OF TENDER:**

- 1.1 Tenders will be opened at **1000** hours on **12-03-2025** at Bid Centre adjacent to Reception Hall, POF Wah Cantt and must reach at below mentioned address before 30 Minutes of opening time. The tender received late will not be entertained. You may witness the opening of the tender if you so desire. If a representative is deputed, he should bring CNIC in original and a letter of authority from you.
- 1.2 Only one tender should be included in one envelope. The outside of the envelope should be inscribed with: -  
Tender Enquiry No: **12-LP-DS(WIL)-CAPT-54, Dated:20-02-2025**  
Tender to be opened on: **12-03-2025**  
Address as follows: - **DIRECTOR SERVICES, BID CENTER, ADJACENT TO RECEPTION HALL, POF WAH CANTT,**  
Tele: +92-51-9055-21090  
Fax: +92-51-9271400, 9314100
- 1.3 If envelope does not indicate reference of T.E or received late the same may be returned un-opened.
- 1.4 Tender "By Hand" can be delivered at Bid Centre, Reception Hall, POF Wah Cantt.

**2. GENERAL INSTRUCTIONS REGARDING PREPARATION OF QUOTATIONS:**

- 2.1 For materials, the prices should be filled in column 5 and delivery date in column 6 of the schedule to this Tender Enquiry. The undertaking should be signed at the bottom of the Schedule which shall form the Quotation. You may use a separate sheet if necessary. As per PPRA Rule 36(b), single stage –two envelope bidding method will be adopted for "open competitive bidding." Moreover, technical & commercial evaluation of Bids will be carried out strictly as per PPRA Rules and contract (s) will be awarded to the most advantageous bidders (s).
- 2.2 For plant and machinery, you are required to quote in two parts: -  
Part-I **"Technical Offer"**: It should exclusively give technical details and literature / brochures of the offered plant, machinery & equipment; validity date; delivery schedule; and signed undertaking given on the schedule to this Tender Enquiry. It must not indicate price, costs etc.  
Part-II **"Commercial Offer"**: It should indicate the commercial terms e.g., price, terms of payment mode of payment made of supply. Each part should be placed in a separate sealed cover. The envelopes should be inscribed with Part-I "Technical Quotation without price" and part-II "Commercial Quotation with price".
- 2.3 The quotation must remain valid for, at least **120 days** from the date of opening of commercial tenders, extendable if so desired.
- 2.4 The quotation should hold good for any reduced or enhanced quantities without notice.
- 2.5 In the event of non-acceptance of offer, intimation may be given to the Tenderers on their request.
- 2.6 Conditional offers or alternative offers are likely to be ignored.
- 2.7 Quotations should be based on: -  
F.O.R. station of Dispatch basis, i.e., delivered free on rail, inclusive of packing and forwarding charges. The stores will be booked under Military Credit Note, to be provided by the purchaser.  
and/or  
Free delivery at POF's stores at **POF Wah basis**.  
In this case Octroi duty will be payable by the supplier.
- 2.8 Taxes and Duties etc. where applicable, must be shown separately, quoting reference to Registration No. in cases of Sales Tax and relevant authority in the case of others. Offer without these clarifications and inclusive of Taxes and Duties may be ignored.

- 2.9 Taxes and duties levied on or after Tender opening date or on or after the date offer was signed and dispatched will be allowed to include in the offered rates.
- 2.10 "Suppliers will furnish a certificate, issued by Excise & Taxation Deptt, that he has cleared all Professional Tax payable by him" offers received without this certificate will be rejected.
- 2.11 Suppliers will render necessary information regarding hazardous effects on environment, of the materials / products supplied by them, in their quotations and shipping/dispatch documents.
- 2.12 If the requisite information is not furnished on the T.E forms or offer received is not conformity with the requirement of the T.E such offer shall be ignored.

### **3. TENDER FEE**

The tender must be accompanied by a non-refundable fee by means of a crossed postal order / pay order for Rs 500/- in favour of **Director Admin POFs Wah Cantt.**

#### **3.1 TENDER SAMPLE**

Where required, offer must a company tender sample, strictly according to the description and specification given in Tender Enquiry. Offer not accompanied by tender sample will NOT be entertained excepting the established and reputable firms who have either previously satisfactorily supplied the same or similar stores or have submitted an acceptable sample thereof against previous T.E.

### **4. BID MONEY**

- 4.1 A copy of Bid Security should accompany the tender in shape of deposit at call receipt/Pay Order/Banker Cheque from scheduled bank drawn in favour of:  
**DIRECTOR SERVICES**
- 4.2 Bid security instrument in original must be provided on the day/date of tender opening in the Bid Center as under:
  - a. Registered/indexed firms including foreign firms - 2% of quoted value subject to the maximum ceiling of Rs. 0.5 Mn.
  - b. Registered/un-indexed firms including foreign firms - 3% of quoted value subject to the maximum ceiling of Rs. 0.75 Mn.
  - c. Unregistered firms including foreign firms - 5% of quoted value subject to the maximum ceiling of Rs. 1.00 Mn.
  - d. Govt organization/production units/state owned enterprises/welfare projects of Svcs HQ - Rs 0.50 M.
  - e. Bid money will be returned to unsuccessful (less first three lowest quotee firms) bidders on opening of commercial offers.
  - f. Bid money will be returned to successful bidders on submission of performance bond/unconditional B.G.
  - g. Quotation accompanied with less bid money will be accepted on provisional basis for 10 x days after opening of bids. However, the firms are bound to provide/furnish the balance bid money within 10 x days after opening of bid otherwise such quotations will be ignored or rejected.
  - h. Offers received without Bid Security will not be entertained.
  - i. Bid money will be forfeited in case the quotation is withdrawn before the expiry of its validity date.

### **5. ACCEPTANCE OF OFFERS:**

- 5.1.1 The procuring agency may reject all bids or proposals at any time prior to the acceptance of a bid or proposal. The procuring agency shall upon request communicate to any supplier or contractor who submitted a bid or proposal, the grounds for its rejection of all bids or proposals, but is not required to justify those grounds.
- 5.1.2 Procuring agency shall incur no liability, solely by virtue of its invoking sub-rule (1.1) towards suppliers or contractors who have submitted bids or proposals.
- 5.1.3 Notice of the rejection of all bids or proposals shall be given promptly to all suppliers or contractors that submitted bids or proposals.

#### **5.2 PERFORMANCE BOND**

- (a) The successful bidders shall provide Performance bond at the rate, prescribed by POF Board according to the value of contract which shall not exceed 10% of contract value, in the form of a Deposit At Call Receipt from a scheduled Bank; or, an un-conditional Bank Guarantee valid for 12 months (03 months extendable to 12 months in case of cloth items required by Clothing Fy.) after receipt of store in POFs on a prescribed format. The Performance Bond will be in favour of MD WIL POF Wah Cantt. It will be returned on satisfactory completion of the contract.

(b) If the Supplier fails to furnish the Performance Bond within the specified time, such failure will constitute a breach of the contract and the Purchaser shall be entitled to make other arrangements for purchase of the stores at the risk and expense of the Supplier.

5.3 Performance Bond from State owned organizations may be waived off at the discretion of the Purchaser.

**5.4 FAILURE TO SUPPLY THE STORES:**

All deliveries must be completed by the specified date. If the failure to deliver the stores within the scheduled time should have arisen from "Force Majeure", which the Purchaser may admit as reasonable ground for further time, he will allow such additional time as he may consider to have been required by the circumstances of the case. Otherwise, he will be entitled, at his discretion, to cancel the contract; and / or, claim liquidated damages up to 2% but not less than 1% of the contract price of the items and their quantities for each and every month or part of a month, beyond the specified delivery date, during which these may not be delivered, subject to a maximum of 10% of the total contract value of the particular stores which remained unsupplied either in part or in full: or, to purchase, from elsewhere, the unsupplied stores at the risk and cost of the Supplier.

**6. SECURITY OF INFORMATION:**

The tenderer and his employees must not communicate any information relating to the sale/purchase of stores under this enquiry to any person other than the manufacturer or to any press or agent not authorized in writing by POFs to receive it.

Please return the Schedule to the Tender duly signed by the specified date, along with the specifications drawings etc. if any, enclosed herewith - even if you are unable to quote.

**WARNING:** In case the firm abstain from making offers or fail to return/acknowledge the tender form by the specified date on three consecutive occasions, no further tender enquiry may be issued to them and their names would be liable to remove from the approved list.

Yours faithfully,

**DIRECTOR SERVICES**  
Pakistan Ordnance Factories  
Wah Cantt  
Tele + 92-51-905522147  
Fax + 92-51-9271400 & 9314100  
E-mail: [dirser.pof@gmail.com](mailto:dirser.pof@gmail.com)  
[gmpcc\\_services@pof.gov.pk](mailto:gmpcc_services@pof.gov.pk)

**PAKISTAN ORDNANCE FACTORIES**

**SCHEDULE TO TENDER NO. 12-LP-DS(WIL)-CAPT-54, Dated: 20-02-2025**

**(1) FOR MATERIALS**

(1) Item No.	(2) Description with Specs etc. (Complete Package)	(3) Unit	(4) Qty	(5) Price per unit Free delivery at Wah Cantt		(6) Delivery date
				In figures	In words	
i.	Centrifugal Pump (Capacity 300 GPM)	Nos	01			
ii.	Centrifugal Pump (Capacity 110 GPM)	Nos	05			
iii.	Submersible Pump (Capacity 200-250 GPM)	Nos	07			
iv.	SS Water Tank (Capacity 5000 Ltrs)	Nos	01			
v.	SS Water Tank (Capacity 2000 Ltrs)	Nos	02			
vi.	SS Water Tank (Capacity 1000 Ltrs)	Nos	03			
vii.	Complete Supply & installation of Water Supply network in 09 Buildings with a/m Pumps & Tanks at POF Sanjwal.	-	As per Drawing & BOQ			

**(2) For Plant & Machinery:**

Specification: -

- i- Centrifugal Pumps & SS Water Tanks Attached as Annex 'A
- ii- Water Supply Network attached as Annex-"B"
- iii- Drawings attached

**(3) Special Conditions:**

- a. The firm will be responsible for complete Turnkey Project for supply, installation & commissioning of pumps, tanks and water supply network including digging work, foundation & necessary installation.
- b. Project comprises of enormous installation, therefore the firm which will be most advantageous bidder in over all items would be considered. Partial offers are not acceptable. Commercial offers will be as package deal.
- c. The firm can visit the actual site for better understanding of the project and quote accordingly .
- d. The model of pumps should be out of latest production. Detailed specifications of quoted model should be available on manufacturer official website.
- e. Variation in installation of water supply network at site will be accommodated by the firm
- f. No reconditioned / used part / component will be acceptable. In such case, firm will be responsible to replace it with new one.
- g. Population list of same projects in Pakistan is essentially required with complete addresses of users including postal address, email address, telephone number & fax number etc.
- h. Compliance sheet (point-to-point comparison) to T.E is also essentially required as per following format:

S #	POF SPECIFICATION	FIRMS REMARKS / OFFERS.
1.		

**4. Undertaking**

Should our offer be accepted, we hereby undertake to supply the stores/render the services contracted on the basis of General Conditions of Contract embodied in Form POF-1281, and to deposit the performance bond within the prescribed time, failing which it will constitute a breach of contract, and POF will have the right to purchase the stores/services elsewhere at our risk and cost.

Place \_\_\_\_\_  
Date \_\_\_\_\_

Signature of the Tenderer \_\_\_\_\_  
Name \_\_\_\_\_  
Position \_\_\_\_\_  
Address \_\_\_\_\_  
Income Tax G.I.R No. \_\_\_\_\_  
Official stamp.

**TECHNICAL SPECIFICATION OF WATER SUPPLY PUMPS & TANKS**

1.	<b>Type of Pumps</b>	<b>Centrifugal (Item No. i)</b>
2.	Quantity	01 Nos
3.	Capacity	300 GPM
4.	Head	25 - 30 Mtr.
5.	Media	Raw Water
6.	Media Temp	02-32 <sup>o</sup> C
7.	Country of Origin	USA / UK / EU / China / Japan
8.	Warranty / Guarantee	12 Months
9.	Make	<b>KSB, Grundfos, ITT Goulds or Equivalent</b>

1.	<b>Type of Pumps</b>	<b>Centrifugal (Item No. ii)</b>
2.	Quantity	05 Nos
3.	Capacity	110 GPM
4.	Head	25 – 30 Mtr.
5.	Media	Water
6.	Media Temp	15 - 60 <sup>o</sup> C
7.	Country of Origin	USA / UK / EU / China / Japan
8.	Warranty / Guarantee	12 Months
9.	Make	<b>KSB, Grundfos, ITT Goulds or Equivalent</b>

1.	<b>Type of Pumps</b>	<b>Submersible (Item No. iii)</b>
2.	Quantity	07 Nos
3.	Capacity	200 – 250 GPM
4.	Media Temperature	02-32 <sup>o</sup> C
5.	Media	Acidic
6.	Head	15 - 20 Mtr.
7.	Country of Origin	USA / UK / EU / China / Japan
8.	Warranty / Guarantee	12 Months
9.	Make	<b>KSB, Grundfos, ITT Goulds or Equivalent</b>

1.	<b>Type of Tank</b>	<b>Water Storage tank Compatible as per drawings of network (Item No. iv, v, vi)</b>
2.	Specs	Stainless Steel – SS 3 / 6 (Cylindrical / Square), Min. 3MM thick sheet with SS Structure for Strength along with necessary Flanges for input and output lines and top cover with dimension deem necessary for tank cleaning and maintenance
3.	Quantity & Capacity	01 Nos 5000 Ltrs 02 Nos 2000 Ltrs 03 Nos 1000 Ltrs
4.	Warranty / Guarantee	12 Months (leakage and rust)

BOQ OF WATER SUPPLY NETWORK			
Sr #	Description of Store	Size	Qty
1.	G.M Gate Valve	φ 4"	10 Nos
2.		φ 3"	10 Nos
3.		φ 2"	15 Nos
4.		φ 1 1/2"	12 Nos
5.		φ 1"	35 Nos
6.		φ 3/4"	20 Nos
7.		φ 1/2"	20 Nos
8.	S.S Pipe (18 Gauge)	φ 1"	800 RFT
9.	UPVC Pipe (Class D) Master or Equivalent	φ 6"	1650 RFT
10.	G.I Pipe (Medium) China or Equivalent	φ 4"	650 RFT
11.		φ 3"	250 RFT
12.		φ 2"	400 RFT
13.		φ 1 1/2"	200 RFT
14.		φ 1"	730 RFT
15.		φ 3/4"	390 RFT
16.		φ 1/2"	430 RFT
17.	UPVC Tee (Master or Equivalent)	φ 6"	70 Nos
18.	Cross Tee China or Equivalent	φ 4"	02 Nos
19.	G.I Reducing Tee China or Equivalent	φ 4"	20 Nos
20.		φ 3"	20 Nos
21.	G.I Reducing Tee China or Equivalent	4" x 1 1/2"	20 Nos
22.		4" x 1/2"	15 Nos
23.		φ2" x 1"	20 Nos
24.		2" x 3/4"	15 Nos
25.		φ1" x 1/2"	20 Nos
26.	UPVC Elbow Class D Master or Equivalent	φ 6"	80 Nos
27.	G.I Elbow China or Equivalent	φ 2"	35 Nos
28.		φ 1"	80 Nos
29.		φ 3/4"	40 Nos
30.		φ 1/2"	50 Nos
31.	G.I Reducing Elbow China or Equivalent	4" x 1 1/2"	25 Nos
32.		4" x 1/2"	25 Nos
33.		3" x 1 1/2"	15 Nos
34.		3" x 1/2"	15 Nos
35.		φ2" x 1"	15 Nos
36.		φ2" x 3/4"	15 Nos
37.		φ1" x 1/2"	15 Nos
38.	UPVC Socket Class D (Master or Equivalent)	φ 6"	130 Nos
39.	Socket China or Equivalent	φ 4"	50 Nos
40.		φ 3"	30 Nos
41.		φ 2"	50 Nos
42.		φ 1 1/2"	30 Nos
43.		φ 1"	80 Nos
44.		φ 3/4"	50 Nos
45.		φ 1/2"	40 Nos

46.	Union China or Equivalent	φ 4"	15 Nos
47.		φ 3"	15 Nos
48.		φ 2"	30 Nos
49.		φ 1 1/2"	20 Nos
50.		φ 1"	80 Nos
51.		φ 3/4"	15 Nos
52.		φ 1/2"	20 Nos
53.		φ 1 1/2"	15 Nos
54.	Body Nipple China or Equivalent	φ 1"	50 Nos
55.		φ 3/4"	30 Nos
56.		φ 1/2"	30 Nos
57.		φ 6" (CI)	30 Nos
58.	Strainer China or Equivalent	φ 4" (CI)	2 Nos
59.		φ 2" (CI)	5 Nos
60.		φ 1" (Brass)	3 Nos
61.		φ 3/4" Brass	2 Nos
62.	Water Flow Meter (Mechanical)	φ 4"	1 Nos
63.		φ 2"	3 Nos
64.		φ 1"	2 Nos
65.		φ 3/4"	2 Nos
66.	Wall Clamps for Pipe Thread Bundle Pump (Head 70ft)	φ 4"	80 Nos
67.		φ 3"	10 Nos
68.		φ 2"	70 Nos
69.		φ 1"	200 Nos
70.	Thread Bundle	-	100 Nos

## **TERMS & CONDITIONS**

### **1. SAFETY**

Pumps should be equipped/ provided with all suitable safety gadgets/accessories including pressure gauges according to latest international safety standards.

### **2. SPARES:**

Firm will ensure provision of all spares for 10 years after successful installation (clearance of FAT).

### **3. CLIMATIC CONDITIONS**

- i. Ambient Temperature: = 0°C to 46°C
- ii. Relative Humidity = 25 to 90 %
- iii. Earthquake Value = 6.5 on Rector scale

### **4. PRELIMINARY INSPECTION:**

- a. Preliminary inspection of the stores will be carried out by POF team at supplier premises before dispatch / delivery at POF Sanjwal.
- b. Inspection facilities such as tools, test equipment / testing material etc. will be provided by the supplier in accordance with the relevant specification.
- c. Rejected stores will be removed and replaced with the acceptable stores by the Supplier at his own expense, within a specified time.

### **5. INSTALLATION, COMMISSIONING AND TRIAL RUN**

- i. Installation, commissioning and trial run of the water supply network at POF Sanjwal shall be responsibility of the supplier / firm. The firm will be responsible to provide complete installation material, accessories including pipe/pipe fittings along with the pumps and tanks.
- ii. Any equipment, machinery and tooling required during the installation of water supply network will be provided by the supplier at its own end.

### **6. FINAL ACCEPTANCE TEST (FAT)**

- a. Final acceptance test of the complete network at each building will be carried out for 03 x working days at POF Sanjwal. All parameters regarding quality, quantity and performance etc. will be observed recorded and ensured as per required specification.

**7. TECHNICAL SUPPORT**

- i. The manufacturers should have backup facilities i.e. after sales services, engineers / technicians, availability of spares and proper workshops in Pakistan. Detail of workshop to be shared in technical quotation.
- ii. The supplier shall confirm that after handing over of the pumps, there shall be technical support available for at least 10 years as & when required by the purchaser.

**8. DOCUMENTATION**

- i. 03 x Sets of relevant operational and maintenance manuals along with final network drawings / literature / documents in English language.

**9. WARRANTY GUARANTEE**

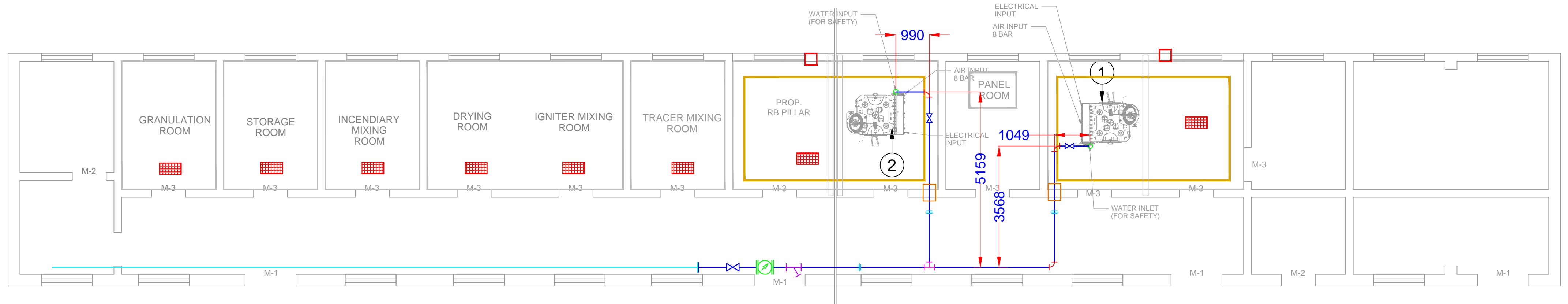
- i. The pumps, tanks and water supply network shall be accepted on supplier's warranty/guarantee with regard to quality subject to these being technically checked/tested by the purchaser. The supplier shall render warranty/guarantee certificate in duplicate to the purchaser.
- ii. This warranty / guarantee shall be binding on the supplier for a period of 12 months reckoning from successful FAT at POF Sanjwal site.
- iii. In case the stores on checking / test after receipt at site are found not conforming strictly to the relevant specification and other particulars are found damaged during transit, the supplier shall immediately replace the rejected / damaged stores by acceptable Stores, free of cost, and without any obligation to the purchaser. Rejected / damaged stores shall be disposed off by the supplier under his own arrangements.
- iv. The supplier shall warrant the good quality of all equipment supplied against all defects or failures due to faulty design, material or workmanship.
- v. The supplier shall also provide warranty for meeting the requisite quality of products. In case of any deficiency in term of quality of products, all related expenditure to fulfil commitment shall be borne by the supplier.

**10. PAYMENT TERMS FOR WATER SUPPLY NETWORK**

- i. 20% advance payment against equal amount of Bank Guarantee.
- ii. 40% payment on receipt / acceptance of store at POF Sanjwal.
- iii. 40% payment after installation, commissioning and successful Final Acceptance Test of Water Supply network / store against each building / shop at POF Sanjwal.
- iv. Part payment / Part supply is allowed.
- v. Payment of duties / taxes including professional tax (where applicable) must be supported by proof of having paid these to concern Govt. Taxation Deptt.



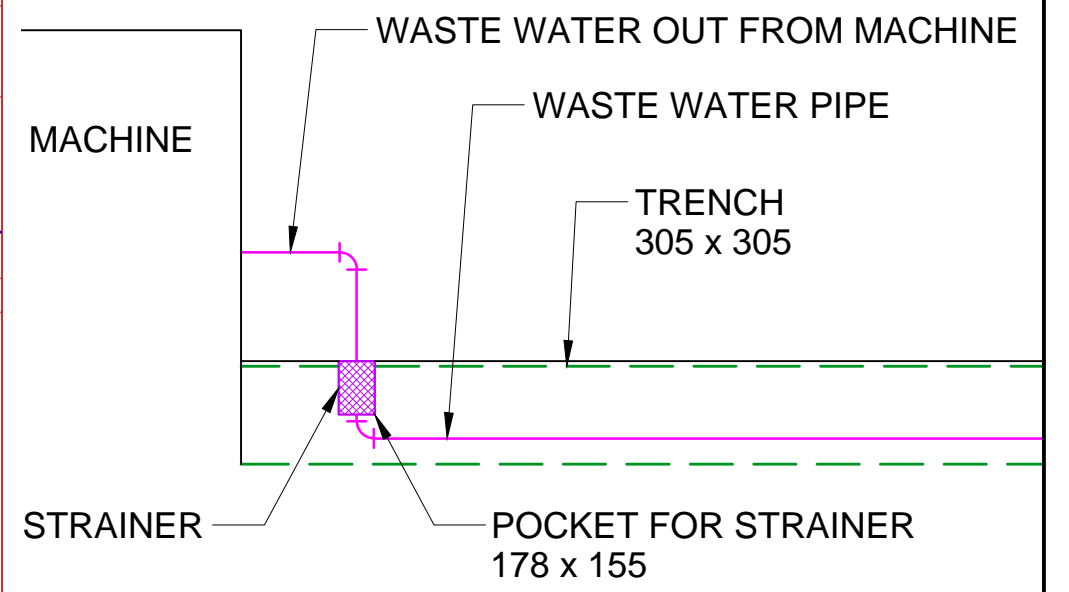
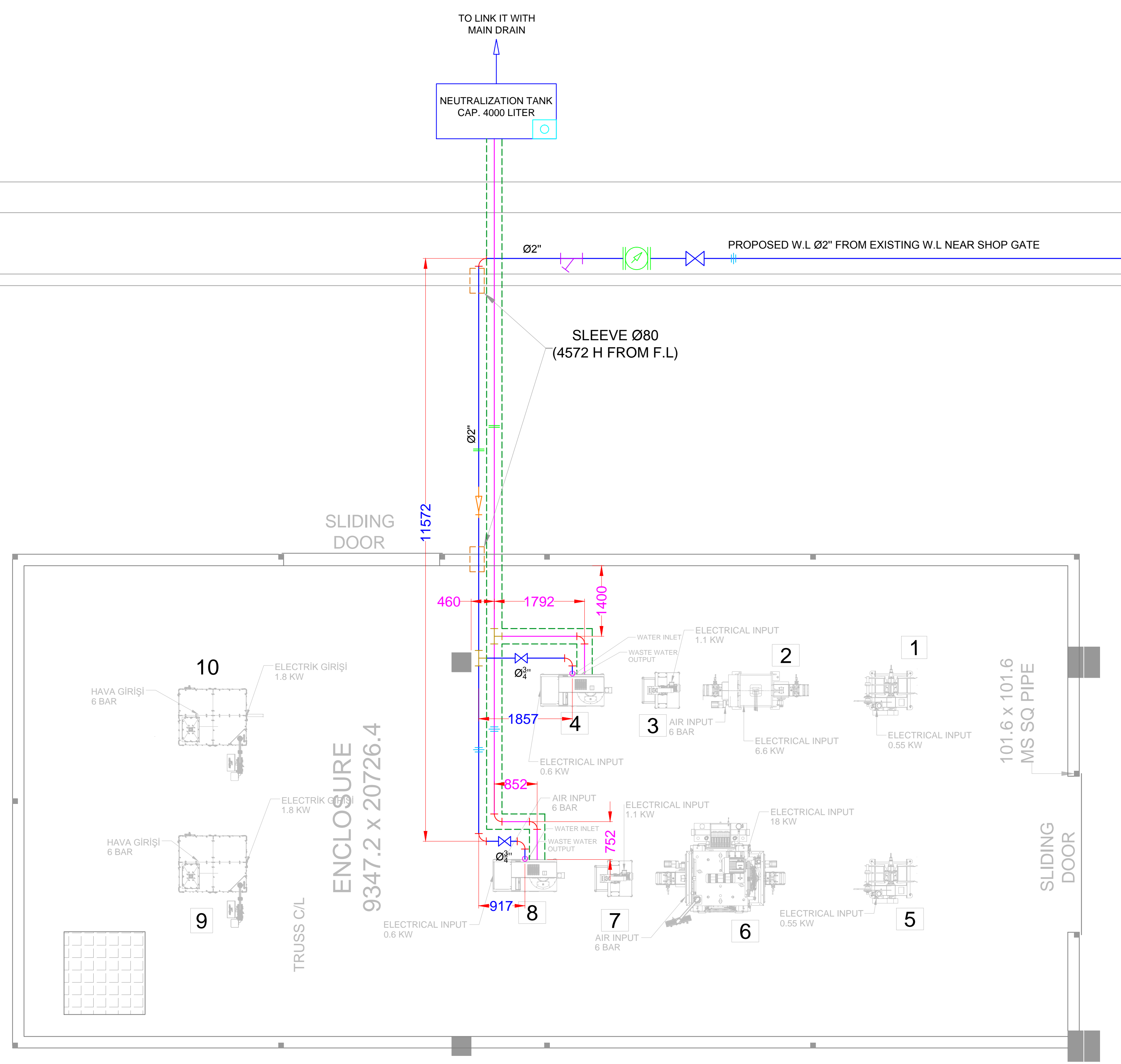
# WATER & TRENCH LAYOUT FOR 205 SHOP-12.7MM PLANT POF SANJWAL



**KEY:-**

- EXISTING WATER LINE —
- PROPOSED WATER LINE (G.I PIPE SCHEDULE 40) —
- GATE VALVE ⋈
- WATER FLOW METER ⊗
- STRAINER ⊥
- UNION =
- ELBOW DOWN ⤵

# WATER & TRENCH LAYOUT FOR **B-22** SHOP-12.7MM PLANT POF SANJWAL

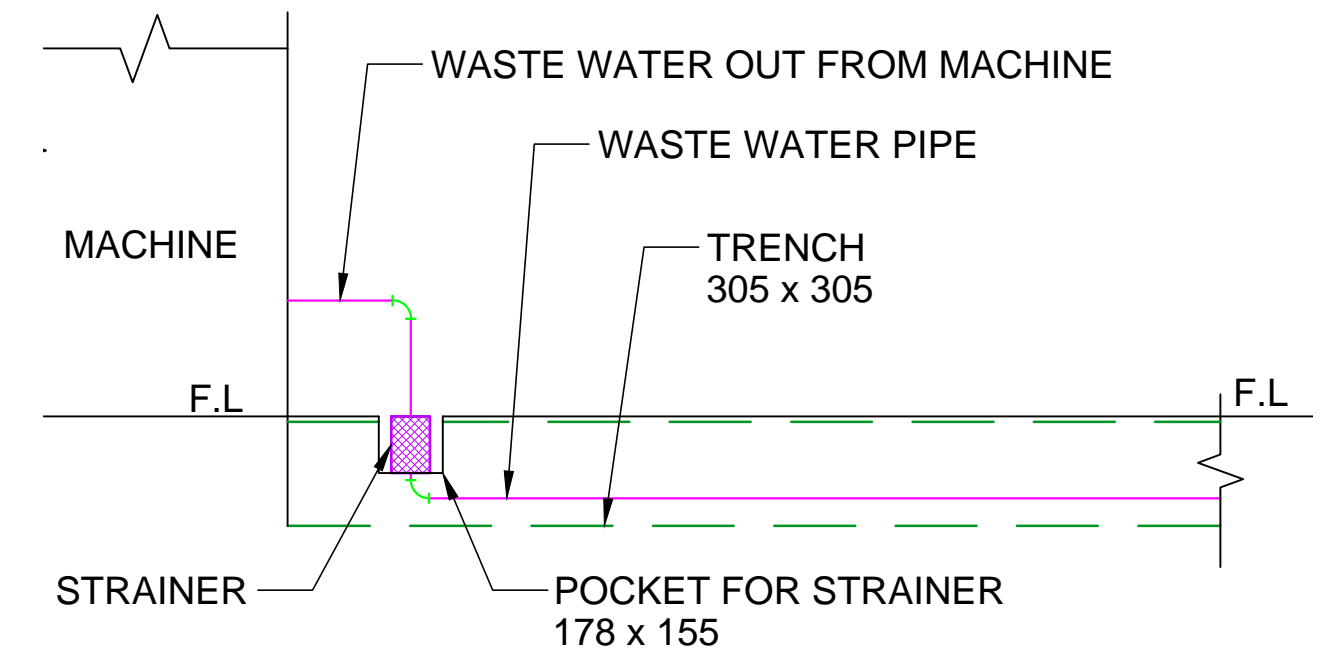
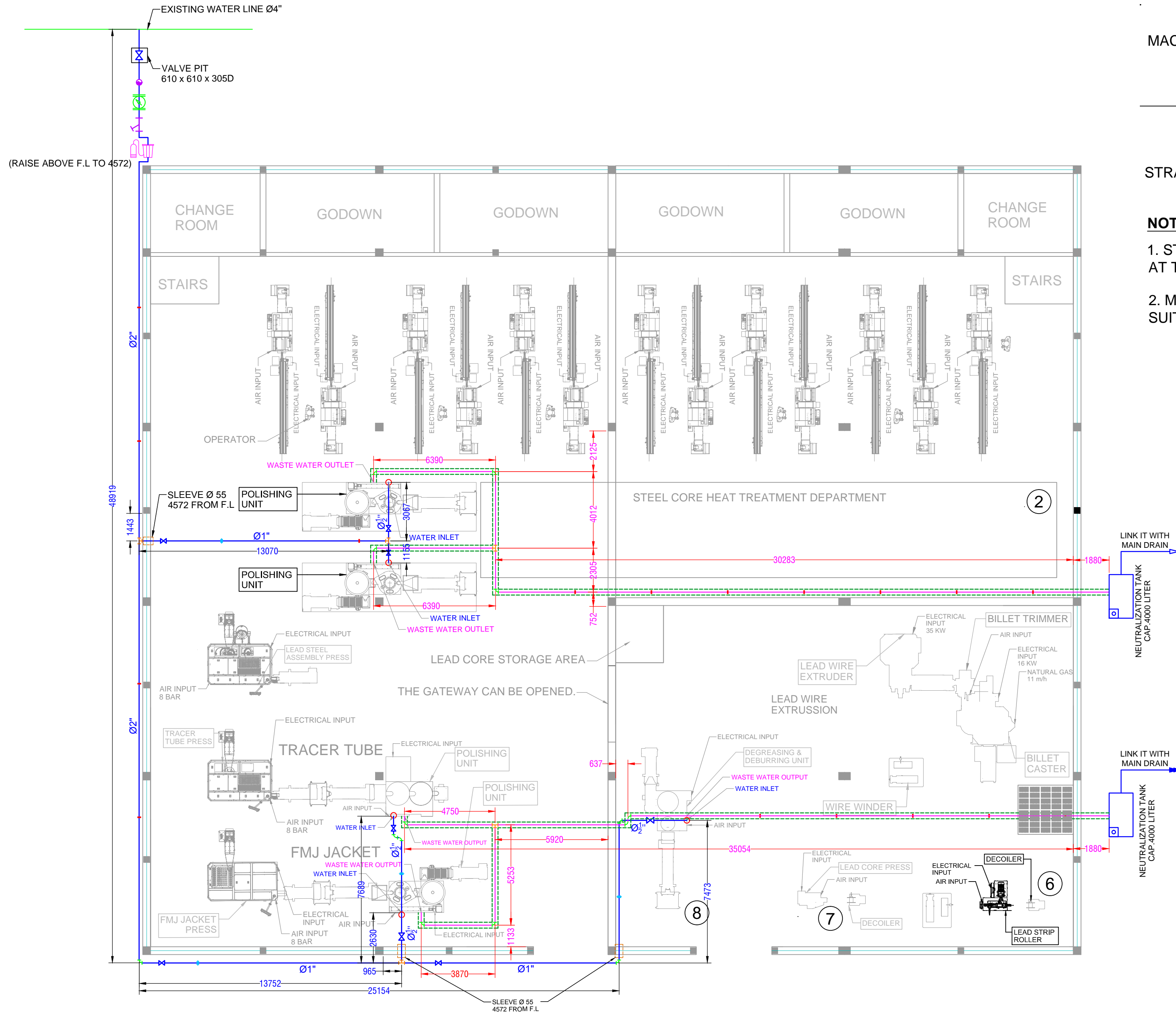


**DETAIL FOR WASTE WATER STRAINER**

**KEY:**

- WATER LINE (G.I PIPE SCHEDULE 40) —
- GM. GATE VALVE ⋈
- WATER FLOW METER ⊗
- WASTE WATER TRENCH (305 x 305)mm ---
- WASTE WATER LINE (UPVC PIPE Ø6") —
- STRAINER ⊏
- SUBMERSIBLE PUMP 200-250 GPM □
- TEE ⊥
- UNION ⊕
- ELBOW ⌒
- SOCKET ⊕
- ELBOW DOWN ⌒
- REDUCER 2" x 3/4" ⌒

# WATER & TRENCH LAYOUT FOR E-20 SHOP-12.7MM PLANT POF SANJWAL



**NOTE:**

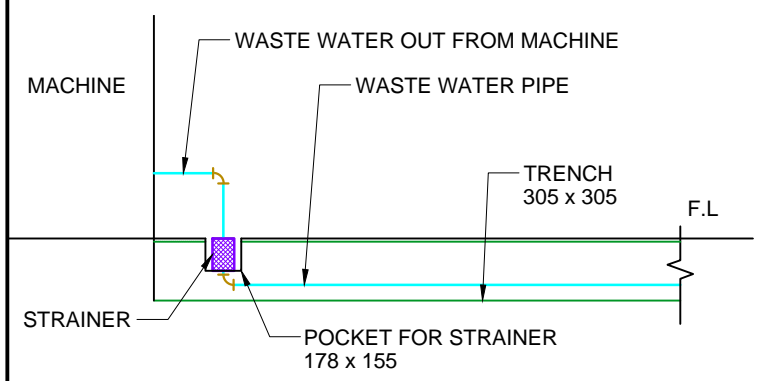
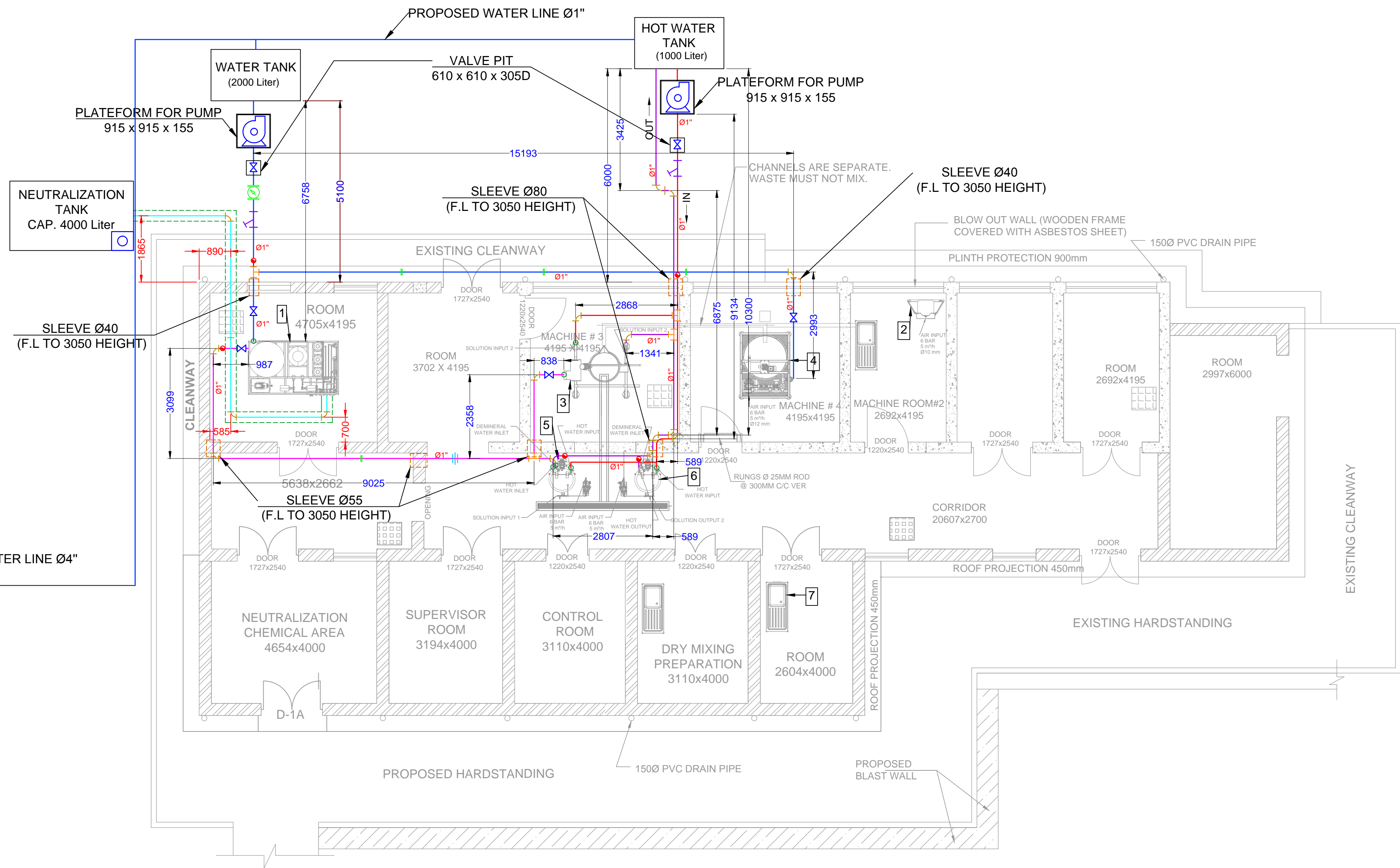
1. STRAINER TO BE INSTALLED ONLY AT THE OPENING FOR WASTE WATER
2. MAIN HOLE / P-TRAPS ARE REQUIRED AT SUITABLE PLACES ON WASTE WATER LINE

### DETAIL FOR WASTE WATER STRAINER

**KEY:-**

- WATER LINE (G.I PIPE SCHEDULE 40) ———
- WASTE WATER TRENCH (305 x 305)mm - - - - -
- WASTE WATER LINE (UPVC PIPE Ø6") ———
- GM GATE VALVE ⊗
- WATER FLOW METER ⊗
- STRAINER ⊗
- SOFTENING UNIT (200 liter/min) ⊗
- ELBOW UP ⌒
- ELBOW DOWN ⌒
- SOCKET ⊕
- UNION ⊕
- ELBOW ⌒
- TEE ⊕
- SUBMERSIBLE PUMP (02 x 200-250 GPM) ⊗

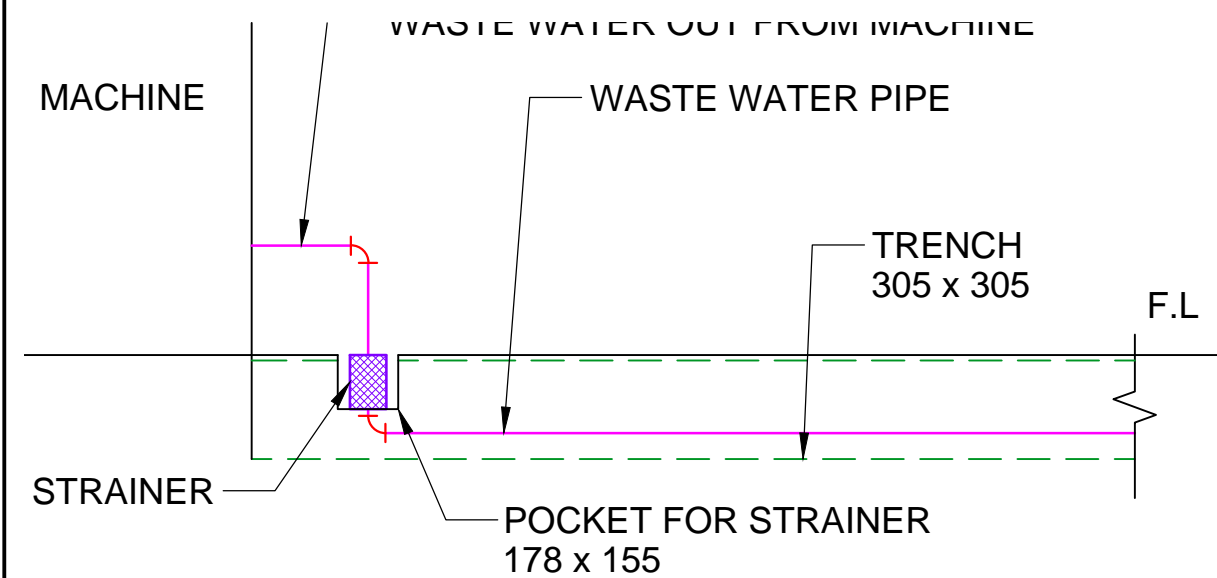
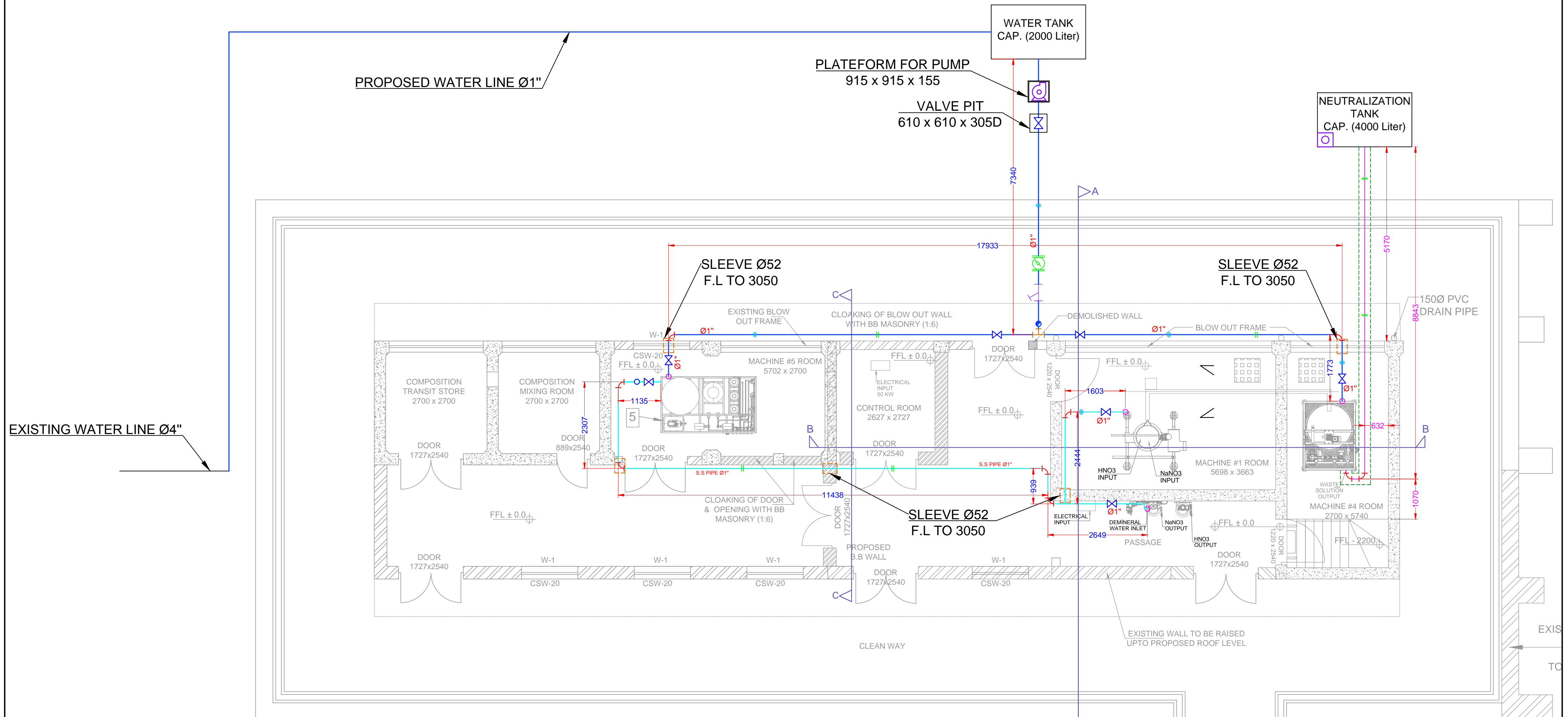
# WATER LAYOUT OF G-101 SHOP POF SANJWAL FACTORY



**NOTE:**  
 1. STRAINER TO BE INSTALLED ONLY AT THE OPENING FOR WASTE WATER  
 2. MAIN HOLE / P-TRAPS ARE REQUIRED AT SUITABLE PLACES ON WASTE WATER LINE  
**DETAIL FOR WASTE WATER STRAINER**

<b>KEY:</b>			
RAW WATER LINE (G.I PIPE SCHEDULE 40)	—	GATE VALVE	
DEMIN WATER LINE (S.S PIPE)	—	WATER FLOW METER	
HOT WATER INLET (S.S PIPE)	—	STRAINER	
HOT WATER OUTLET (S.S PIPE)	—	UNION	
WASTE WATER LINE (UPVC PIPE Ø6")	—	SOCKET	
WASTE WATER TRENCH (305 x 305)mm	—	ELBOW	
SUBMERSIBLE PUMP 200-250 GPM		TEE	
CENTRIFUGAL PUMP 110 GPM		ELBOW UP	
ELBOW DOWN			

# WATER LAYOUT OF G-102 SHOP POF SANJWAL FACTORY



**NOTE:**

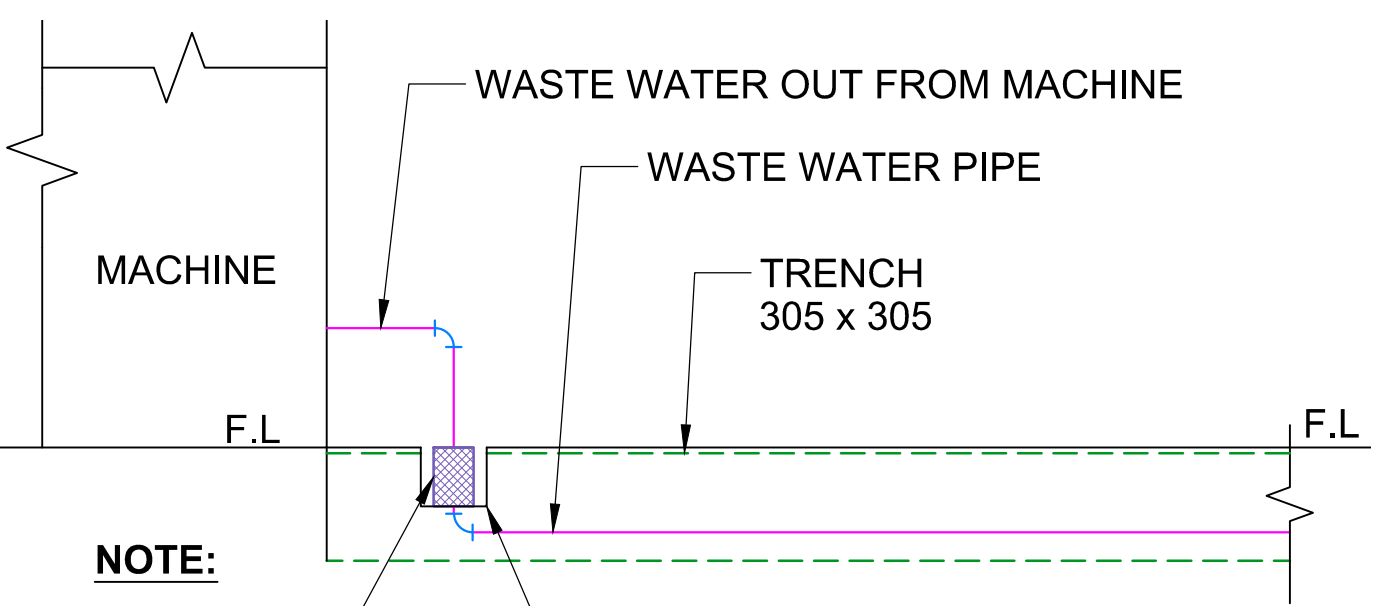
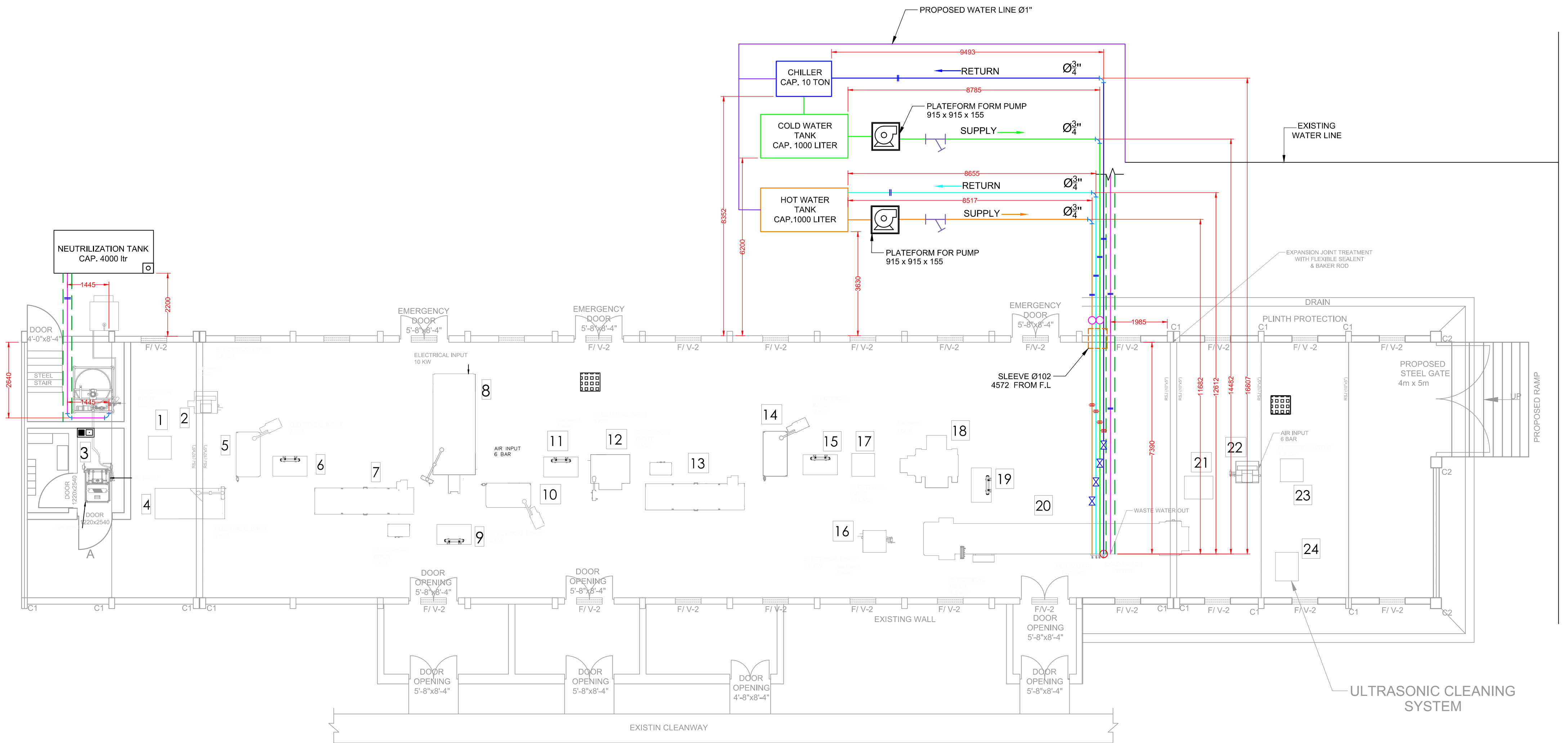
1. STRAINER TO BE INSTALLED ONLY AT THE OPENING FOR WASTE WATER
2. MAIN HOLE / P-TRAPS ARE REQUIRED AT SUITABLE PLACES ON WASTE WATER LINE

**DETAIL FOR WASTE WATER STRAINER**

**KEY:**

RAW WATER LINE (G.I PIPE SCHEDULE 40)		UNION	
DEMIN WATER LINE (S.S PIPE)		SOCKET	
WASTE WATER LINE (UPVC PIPE Ø6")		ELBOW	
WASTE WATER TRENCH (305 x 305)mm		TEE	
G.M GLOBE VALVE		STRAINER	
FLOW METER		ELBOW UP	
CENTRIFUGAL PUMP 110 GPM		ELBOW DOWN	
		SUBMERSIBLE PUMP 200-250 GPM	

# WATER & TRENCH LAYOUT FOR G-23 SHOP-12.7MM PLANT POF SANJWAL

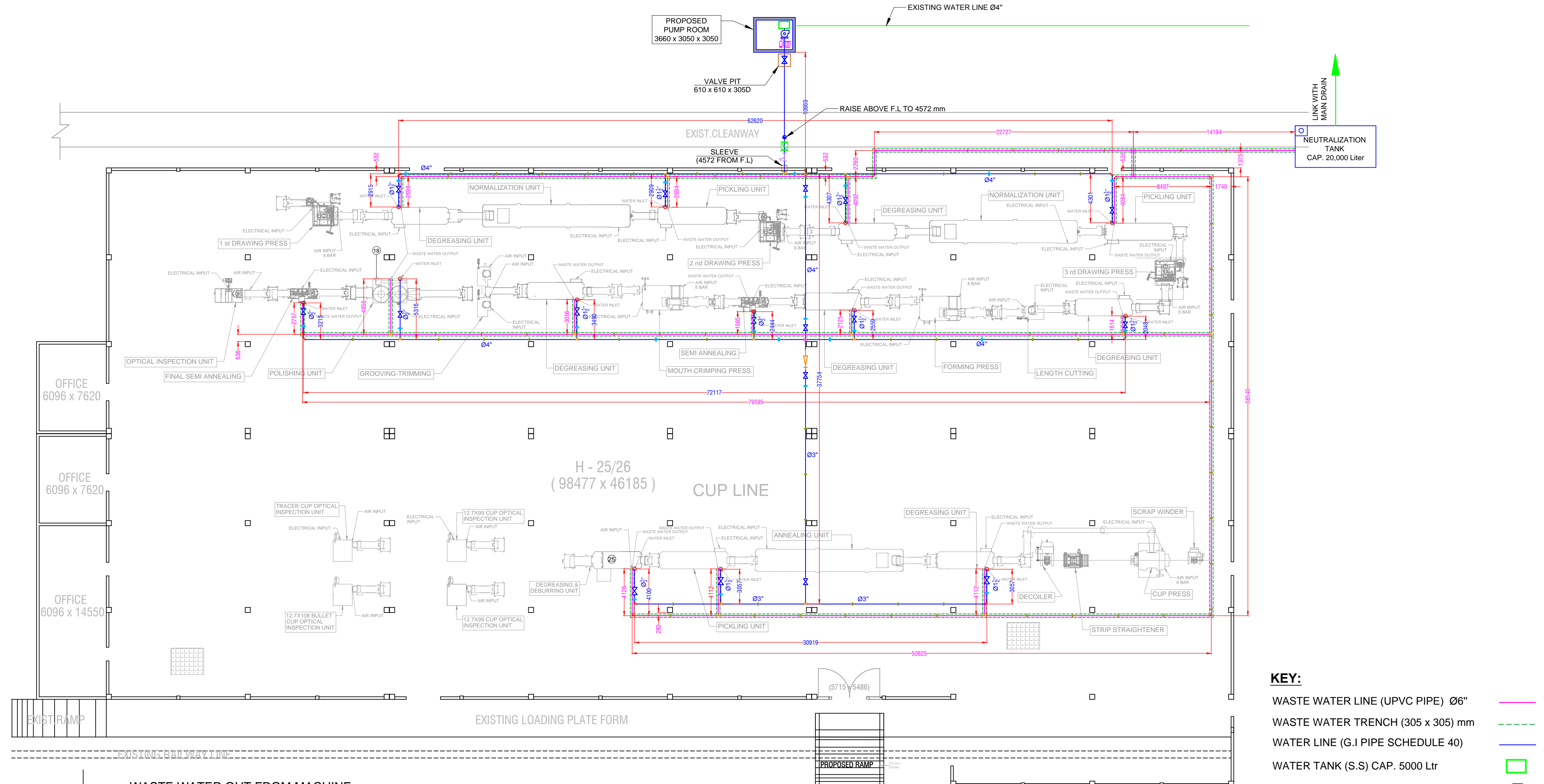


**NOTE:**  
 1. STRAINER TO BE INSTALLED ONLY FOR STRAINER AT THE OPENING FOR WASTE WATER  
 2. MAIN HOLE / P-TRAPS ARE REQUIRED AT SUITABLE PLACES ON WASTE WATER LINE

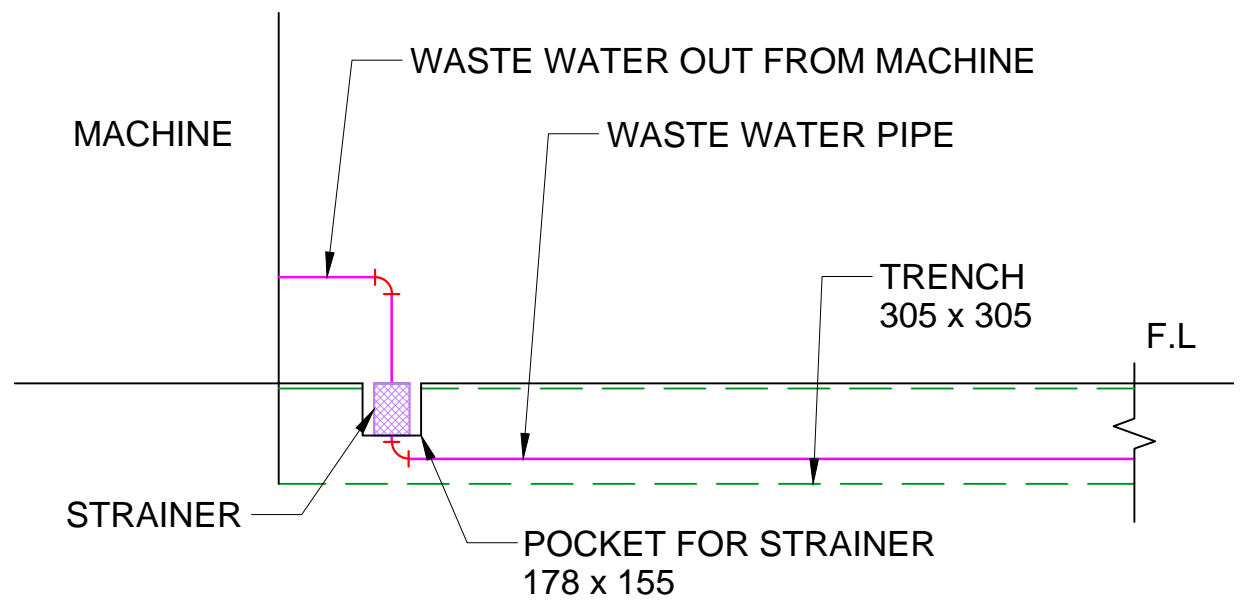
**DETAIL FOR WASTE WATER STRAINER**

- KEY:**
- COLD WATER SUPPLY (G.I PIPE SCHEDULE 40) —
  - RAW WATER RETURN (G.I PIPE SCHEDULE 40) —
  - HOT WATER SUPPLY (G.I PIPE SCHEDULE 40) —
  - HOT WATER RETURN (G.I PIPE SCHEDULE 40) —
  - WASTE WATER LINE (UPVC PIPE Ø6") —
  - WASTE WATER TRENCH (305 x 305)mm - - -
  - GM GATE VALVE
  - CENTRIFUGAL PUMP 110 GPM
  - STRAINER
  - SOCKET
  - UNION
  - ELBOW
  - ELBOW UP
  - ELBOW DOWN
  - SUBMERSIBLE PUMP 200-250 GPM

# WATER & TRENCH LAYOUT FOR H-25/26 SHOP-12.7MM PLANT POF SANJWAL



- KEY:**
- WASTE WATER LINE (UPVC PIPE) Ø6" —
  - WASTE WATER TRENCH (305 x 305) mm - - -
  - WATER LINE (G.I PIPE SCHEDULE 40) —
  - WATER TANK (S.S) CAP. 5000 Ltr □
  - CENTRIFUGAL PUMP (02 x 300 GPM) ⊙
  - SOFTENING UNIT (200 ltr/min) ⊙
  - ELBOW UP ⌒
  - ELBOW DOWN ⌓
  - GATE VALVE ⊗
  - WATER FLOW METER ⊙
  - STRAINER ⊙
  - UNION ⊕
  - SOCKET ⊖
  - REDUCER 4" x 3" ⌒
  - SUBMERSIBLE PUMP 200-250 GPM ⊙
  - ELBOW ⌒
  - TEE ⊕
  - CROSS TEE ⊕



**NOTE:**

1. STRAINER TO BE INSTALLED ONLY AT THE OPENING FOR WASTE WATER
2. MAIN HOLE / P-TRAPS ARE REQUIRED AT SUITABLE PLACES ON WASTE WATER LINE

**DETAIL FOR WASTE WATER STRAINER**