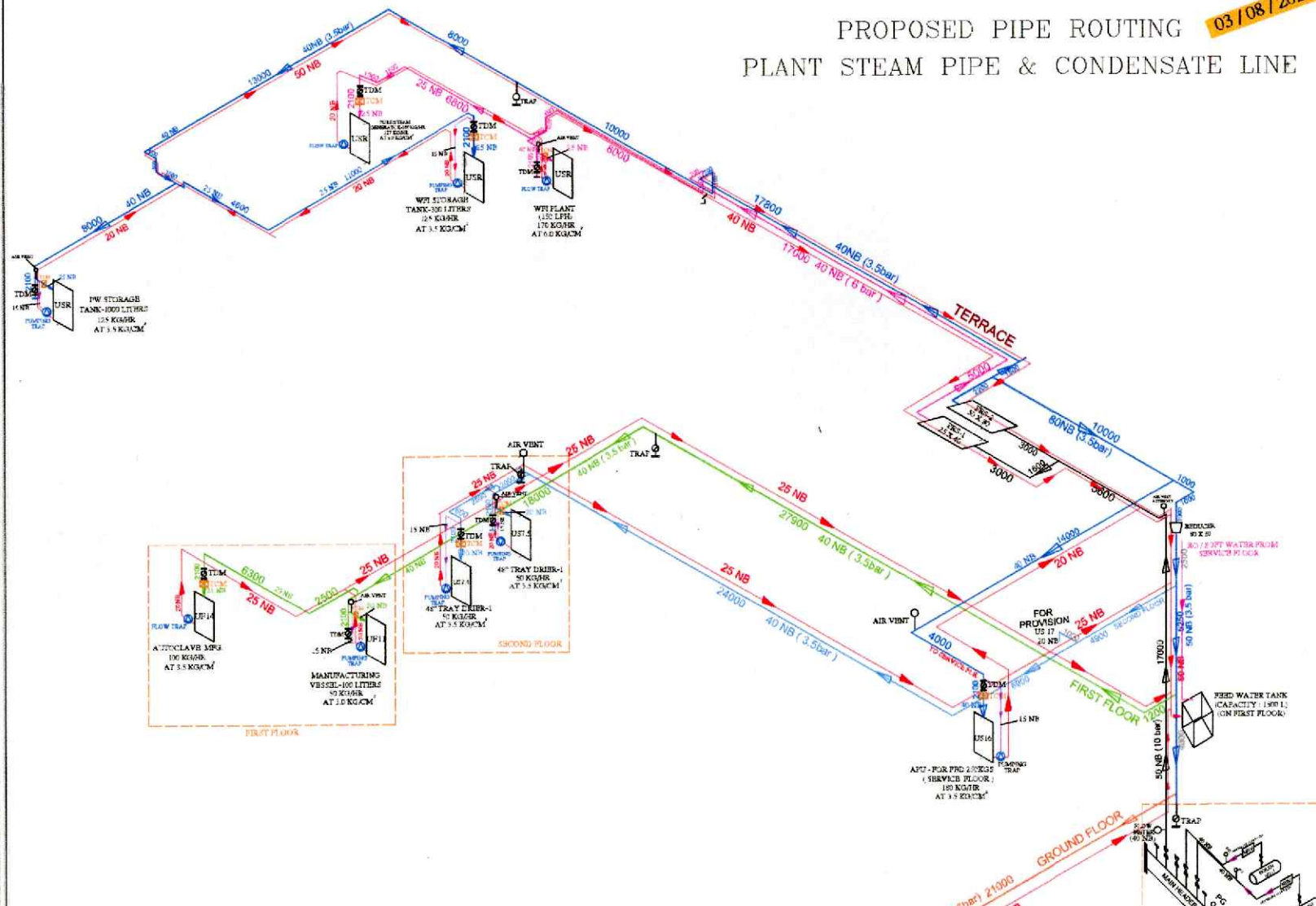


# PROPOSED PIPE ROUTING PLANT STEAM PIPE & CONDENSATE LINE

03/08/2023



**LEGENDS :**

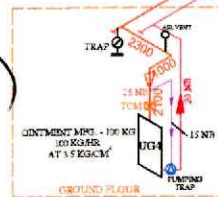
**PROPOSED PIPE ROUTE :**

	ON TERRACE
	ON SERVICE FLOOR
	ON SECOND FLOOR
	ON FIRST FLOOR
	ON GROUND FLOOR
	CONDENSATE LINE

TCM - TEMPERATURE CONTROL MODULE  
TDM - THERMODYNAMIC TRAP MODULE



**NOTE :- PIPE LENGTH MENTIONED IN THIS DRAWING ARE INDICATIVE , IT MAY VARY AS PER SITE CONDITIONS.**



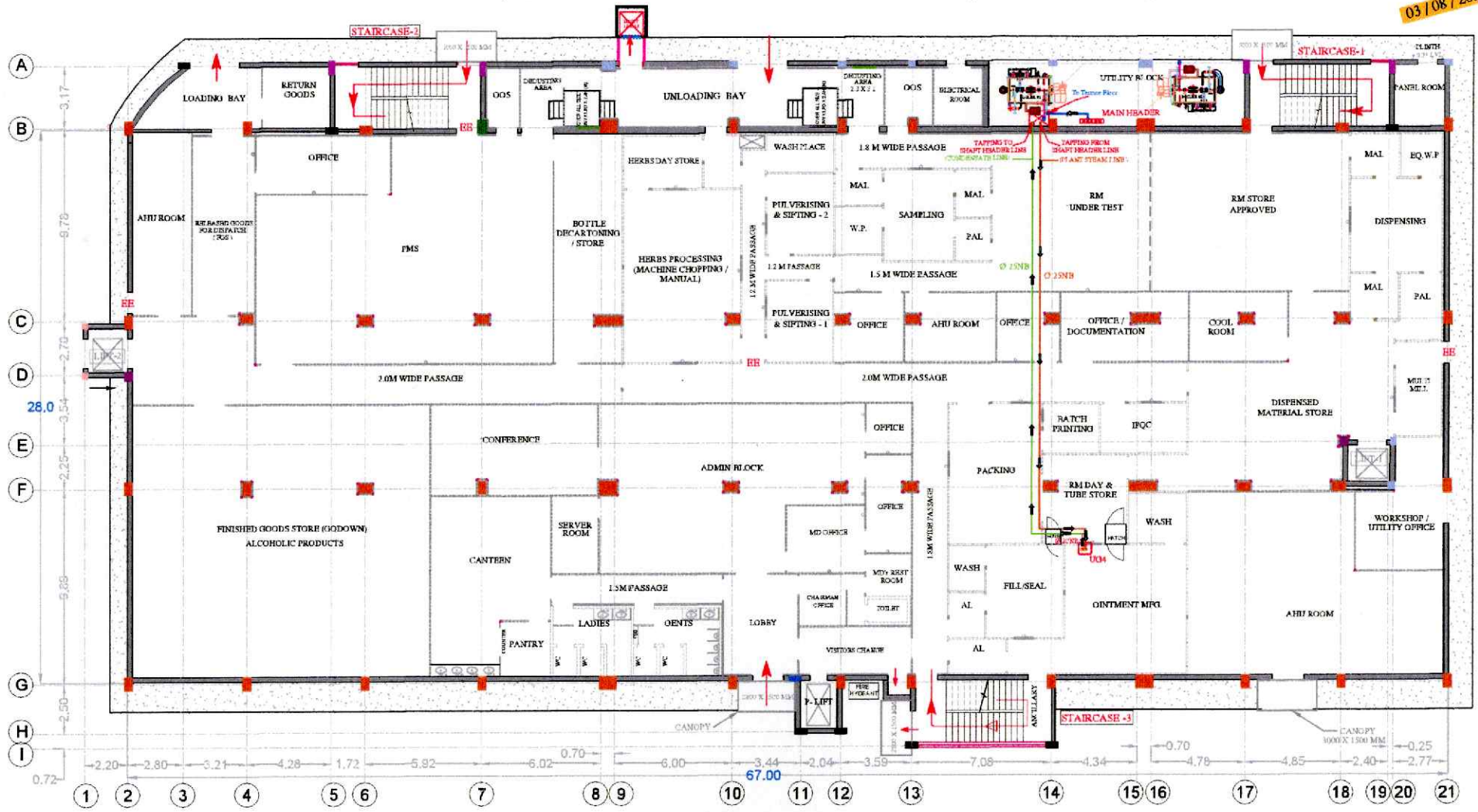
**HOMCO.**  
**CONSULTANT: KNACK TECHNOCRATS**

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ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED				
DRAWN BY	CHECKED BY	DATE	SCALE	DWG NO.
ABID H	ANSHU	03-08-2023	N.T.S	16/00000/00000
TITLE: PROPOSED PIPE ROUTING - PLANT STEAM PIPE & CONDENSATE LINE				
FILE: 2_Mumbai_03082023_KnackTechnocrats_Proposed Pipe Routing - Plant Steam and Condensate Line				

# PLANT STEAM WITH CONDENSATE PIPE ROUTING - ( GROUND FLOOR )

03 / 08 / 2023



**LEGENDS :**

CODE	LOCATION	DESCRIPTION
UG - 4	POINTMENT MANUFACTURING PLANT - 100 KG (CREAM MANUFACTURING VESSEL)	<ul style="list-style-type: none"> <li>PROPOSED STEAM PIPE ROUTE @ 3.5 bar</li> <li>PROPOSED CONDENSATE PIPE ROUTE</li> </ul>
		<p>NOTE :- PIPE SIZE IS MENTION IN THE DRAWING</p> <p>MOC :- CS PIPE , ASTM A 106 GRADE-B , SCHEDULE B 40</p> <p>NO. OF USER POINTS :- 1 NO.</p> <p>BOP (BOTTOM OF PIPE) :- 3.35 M FROM PFL</p> <p>IN ROOM 1200 MM FROM FINISHED FLOOR LEVEL</p> <p>TAPPING HEIGHT :- OR AS PER EQUIPMENT CONNECTION REQUIREMENT</p>

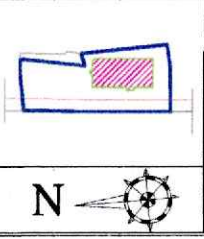
**ABBREVIATION :-**

- ST - STEAM

**HEIGHT DETAILS :-**

- BOTTOM OF SLAB :- 4.0 M
- BOTTOM OF BEAM :- 3.450 M

FALSE CEILING HEIGHT : PLEASE REFER FALSE CEILING LAYOUT



**HOMCO.**

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ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.

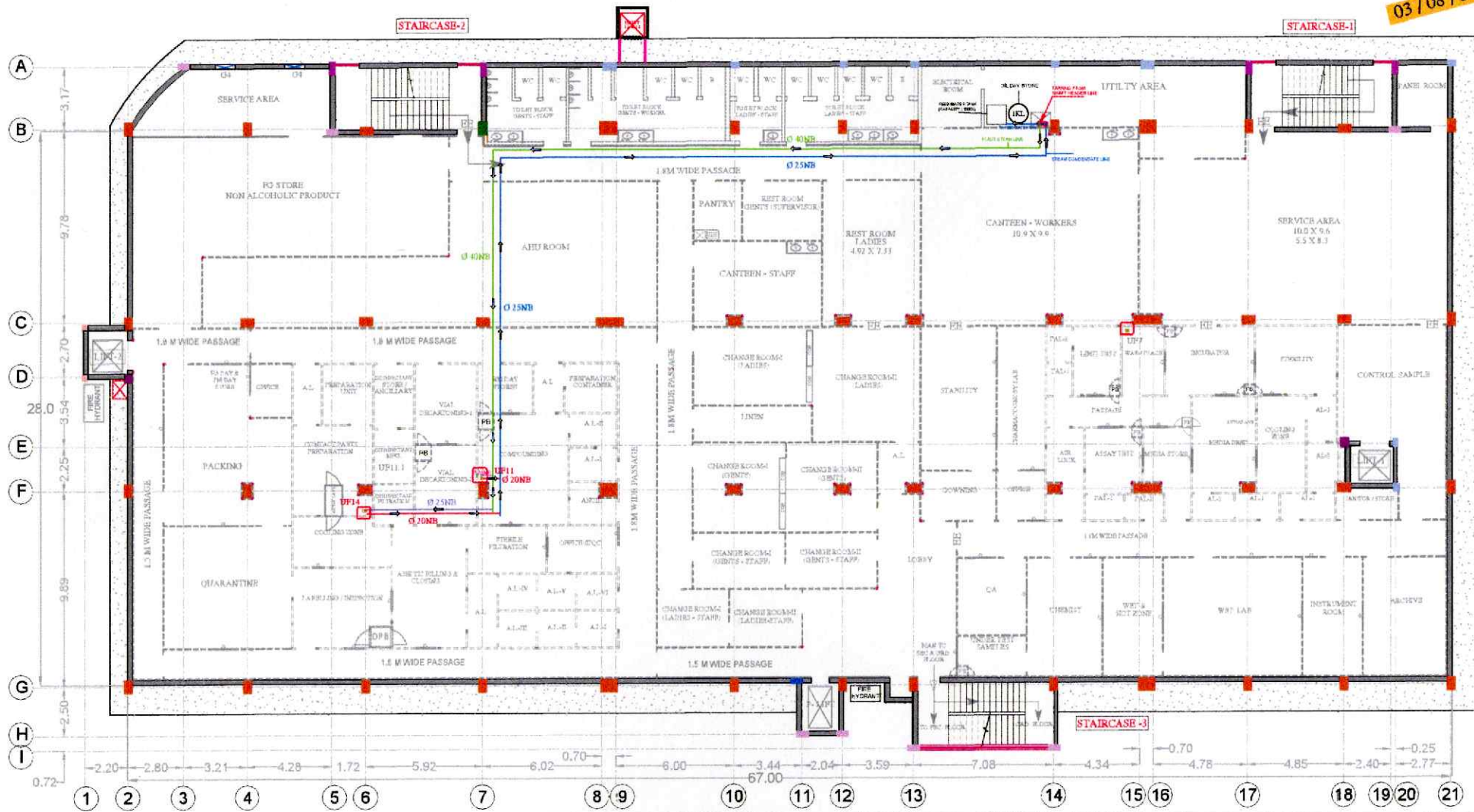
DRAWN BY	CHECKED BY	DATE	SCALE	DWG NO.	REVISION
ABD H.	I ANSARI	03-08-2023	N/T'S	KV/MS/P/08/ST-40/A/2	-

TITLE: PLANT STEAM WITH CONDENSATE PIPE ROUTING - ( GROUND FLOOR )

FILE: Z:\Mumbai\0222\Book\Sample\0222 Pipe routing - steam with condensate pipe\MOC CS Pipe\Plant steam condensate pipe routing

# PLANT STEAM WITH CONDENSATE PIPE ROUTING - ( FIRST FLOOR )

03 / 08 / 2023



**LEGENDS :**

CODE	LOCATION	PROPOSED PIPE ROUTE @ 3.5 bar
UP-11	OPTIMAL MFG MANUFACTURING VESSEL - 100 LITRES	PROPOSED STEAM CONDENSATE ROUTE
UP-14	EQUIPMENT AUTOCLAVE - HORIZONTAL	

NOTE - PIPE SIZE IS MENTION IN THE DRAWING.  
 MOC : CS PIPE, ASTM A 106 GRADE -B, SCHEDULE 40  
 NO. OF USER POINTS :- 02 NOS.  
 BOP (BOTTOM OF PIPE) - 3.61 M FROM FFL  
 IN ROOM 1200 MM FROM FINISHED FLOOR LEVEL.  
 TAPPING HEIGHT : OR AS PER EQUIPMENT CONNECTION REQUIREMENT.

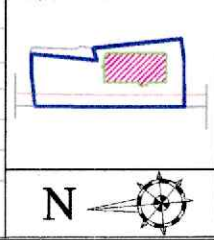
NOTE - ALL HEADER PIPE LINE ARE RUNNING OVR FALSE CEILING.  
 PIPE ROUTES ARE INDICATIVE, MAY VARY AS PER SITE FEASIBILITY.

**ABBREVIATION :-**

- PS - PLANT STEAM

**HEIGHT DETAILS FROM FFL :-**

- BOTTOM OF SLAB :- 4.64 M
- BOTTOM OF BEAM :- 4.0 M
- FALSE CEILING HEIGHT :- (PLEASE REFER FALSE CEILING LAYOUT)



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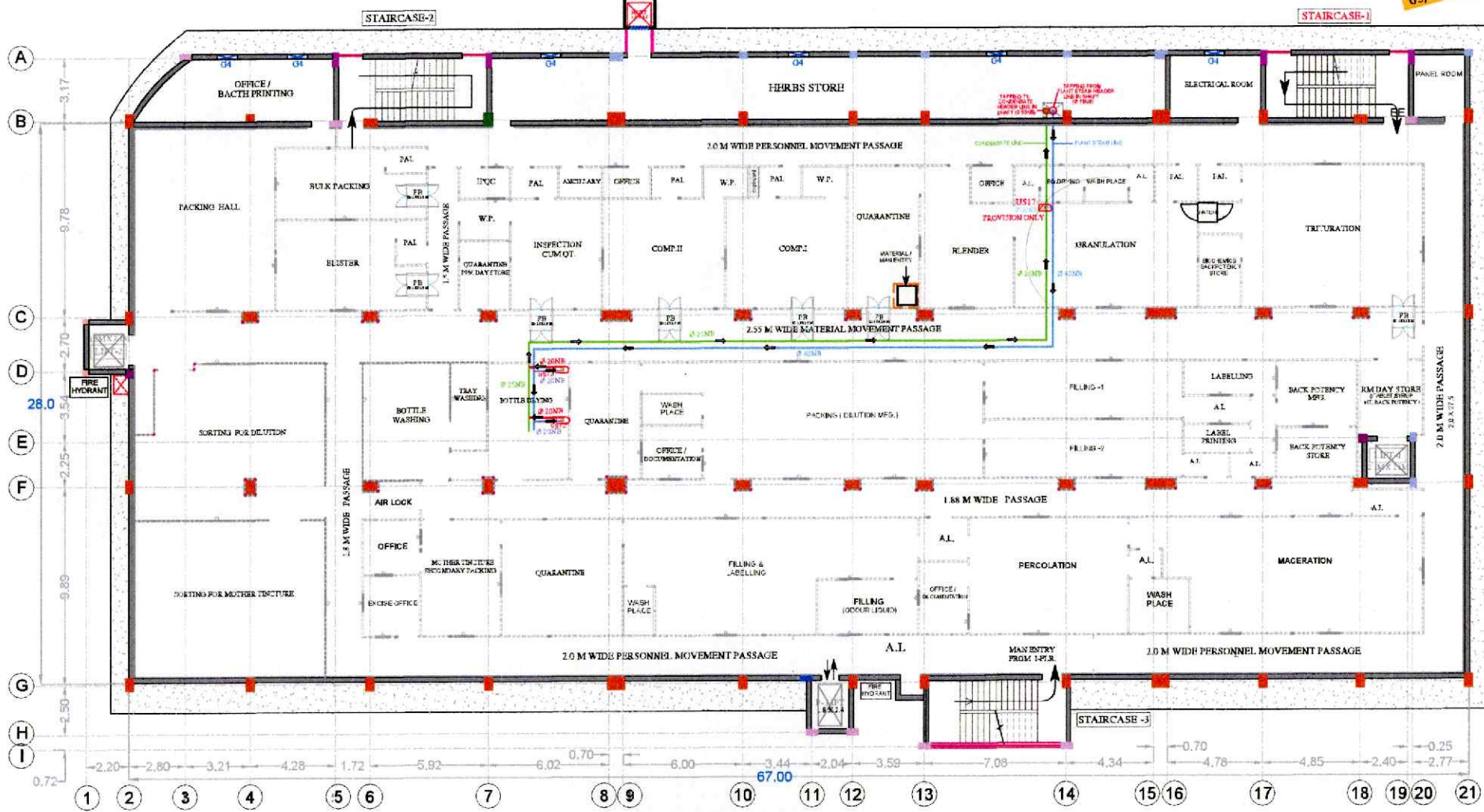
ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.

DRAWN BY	CHECKED BY	DATE	SCALE	DWG NO.	REVISION
ABD H	I ANSARI	03-08-2023	N.T.S	KN/HC/P/19/06-04/13	-

TITLE: PLANT STEAM WITH CONDENSATE PIPE ROUTING - ( FIRST FLOOR )  
 FILE: Z:\HOMCO\23\39\Andheri\03-08-2023\23-08-03-01\Plant steam with condensate pipe MOC CS PIPE\Plant steam

# PLANT STEAM WITH CONDENSATE PIPE ROUTING - ( SECOND FLOOR )

03/08/2023



LEGENDS:			
CODE	LOCATION		
US-17	PATE PREPARATION VESSEL (50 LITERS - (PROVISION ONLY))		PROPOSED PLANT STEAM PIPR ROUTE @ 1.5 bar
US-74	TRAY DRIER -1 (48 NOS)		PROPOSED STEAM CONDENSATE ROUTE
US-75	TRAY DRIER -2 (48 NOS)		

HEIGHT DETAILS FROM PFL >	
BOTTOM OF SLAB	- 5.08 M
BOTTOM OF BEAM	- 4.52 M
FALSE CEILING (ROOF - PHASE REPER)	
FALSE CEILING LAYOUT	

NO. OF USER POINTS >	03 NOS.
ROP ( BOTTOM OF PIPE )	- 4.4M FROM PFL
IN ROOM	1200 MM FROM FINISHED FLOOR LEVEL
TAPPING HEIGHT :	OR AS PER EQUIPMENT CONNECTION EQUIPMENT

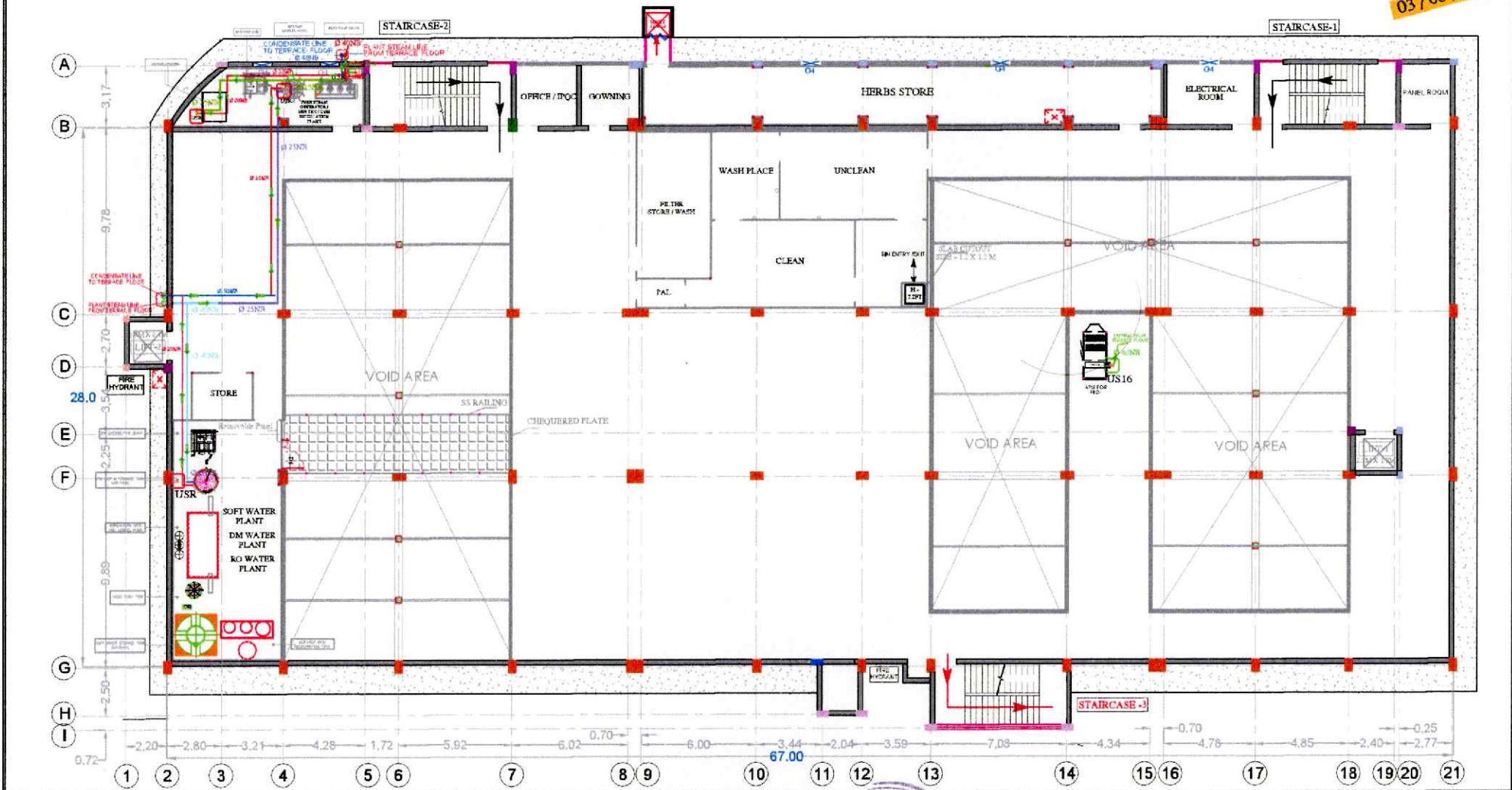
  

HOMCO.			
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ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.			
DRAWN BY	CHECKED BY	DATE	SCALE
ABID H	I ANSARI	03-08-2023	1:1
TITLE			REVISION
PLANT STEAM WITH CONDENSATE PIPE ROUTING - ( SECOND FLOOR )			

NOTE - ALL BRACKET PIPE LINE ARE ROUNDED OVER FALSE CEILING. PIPE ROUTES ARE INDICATIVE, MAY VARY AS PER SITE VISIBILITY.

# PLANT STEAM WITH CONDENSATE PIPE ROUTING - ( SERVICE FLOOR )

03 / 08 / 2023



**LEGENDS :**

CODE	LOCATION
US16	ATU - 4000 CPM (AIR PRESSURE UNIT) (FOR FBD - 250KG)
USR	WFI (WATER FOR INJECTION) PLANT - CAPACITY - 150LPH
USR	PURE STEAM GENERATION - 100 KHS
USR	PURIFIED WATER STORAGE TANK CAPACITY - 1000L
USR	WFI (WATER FOR INJECTION) STORAGE TANK CAPACITY - 300L

	PROPOSED PLANT STEAM PIPE ROUTE @ 6.0 bar
	PROPOSED PLANT STEAM EPB ROUTE @ 3.5 bar
	PROPOSED CONDENSATE PIPE ROUTE
NOTE :- PIPE SIZE IS MENTION IN THE DRAWING.	
MOC : CS PIPE - ASTM A 106 GRADE - B, SCHEDULE 40	
NO. OF USR POINTS :- 5 NOS.	
BOP (BOTTOM OF PIPE) - 2.0M FROM PFL	
IN ROOM 1200 MM FROM FINISHED FLOOR LEVEL	
TAPPING HEIGHT : OR AS PER EQUIPMENT CONNECTION REQUIREMENT	

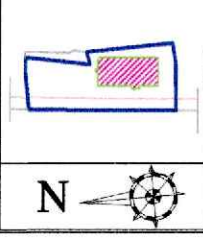
**ABBREVIATION :-**

- PS - PLANT STEAM

**HEIGHT DETAILS FROM PFL:**

- BOTTOM OF SLAB : 2.7 M
- BOTTOM OF BEAM : 3.2 M

**FALSE CEILING PLEASE REFER FALSE CEILING LAYOUT**



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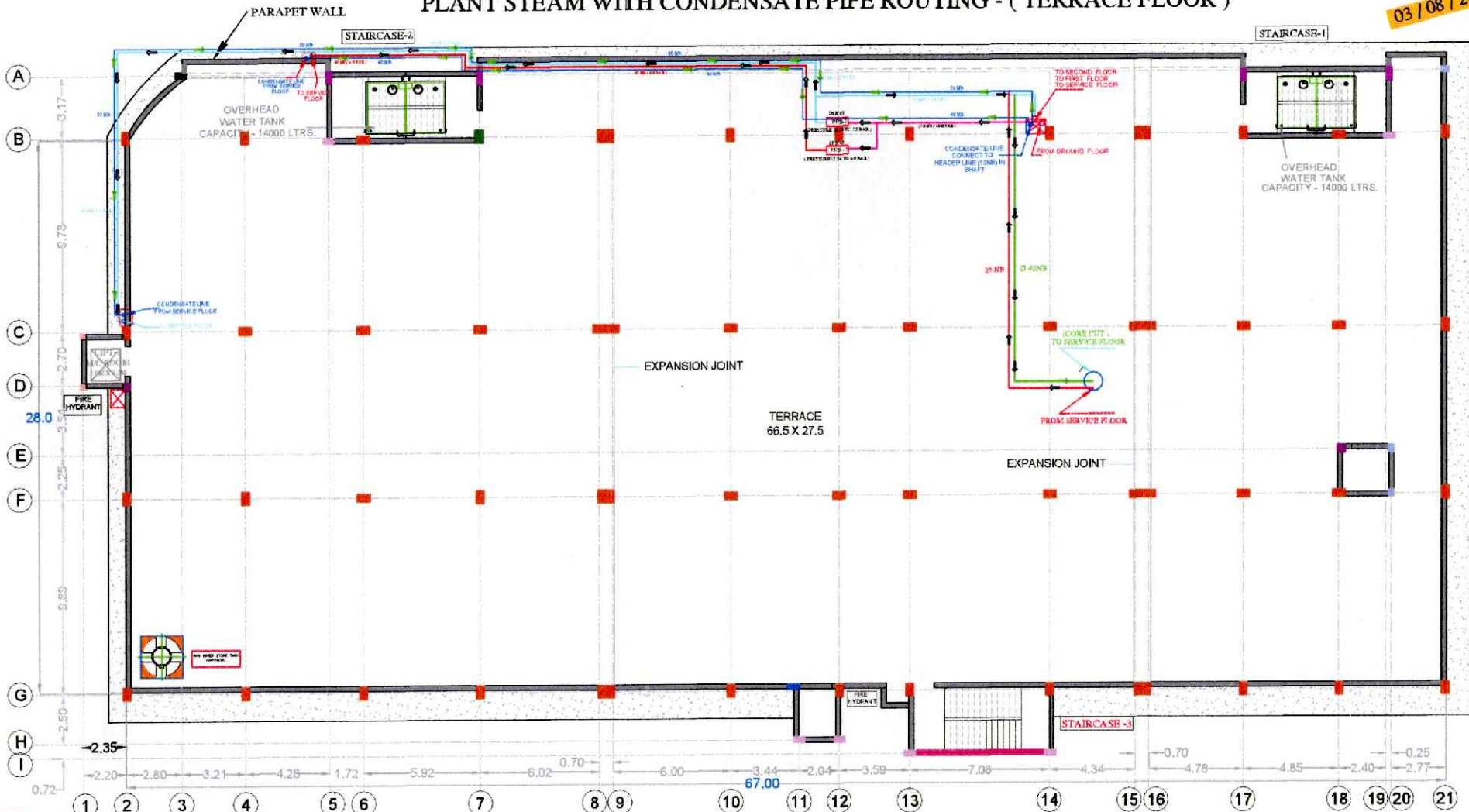
DRAWN BY	CHECKED BY	DATE	SCALE	DWG NO.	REVISION
ABD H	I ANSARI	03-08-2023	N.T.S	KT/HQ/P/2023/2	-

TITLE: PLANT STEAM WITH CONDENSATE PIPE ROUTING - ( SERVICE FLOOR )

FILE: Z:\Homco\2023\Bolt\September\03 Pipe routing - steam with condensate pipe\MOC CS PIPE\Plant steam with condensate pipe.rvt

# PLANT STEAM WITH CONDENSATE PIPE ROUTING - ( TERRACE FLOOR )

03/08/2023



**LEGENDS :**

- PROPOSED PLANT STEAM PIPE ROUTE @ 10.0 bar
- PROPOSED PLANT STEAM PIPE ROUTE @ 6.0 bar
- PROPOSED PLANT STEAM PIPE ROUTE @ 3.5 bar
- PROPOSED CONDENSATE PIPE ROUTE

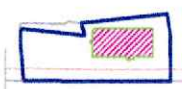
ABBREVIATION :  
PRS - PRESSURE REDUCING STATION

NOTE :- PIPE SIZE IS MENTION IN THE DRAWING.

BOP (BOTTOM OF PIPE) - 1.0M FROM FFL

MOC : CS PIPE , ASTM A 106 GRADE -B , SCHEDULE 40

NOTE :- PIPE ROUTES ARE INDICATIVE , MAY VARY AS PER SITE FEASIBILITY.



**HOMCO.**

**CONSULTANT: KNACK TECHNOCRATS**

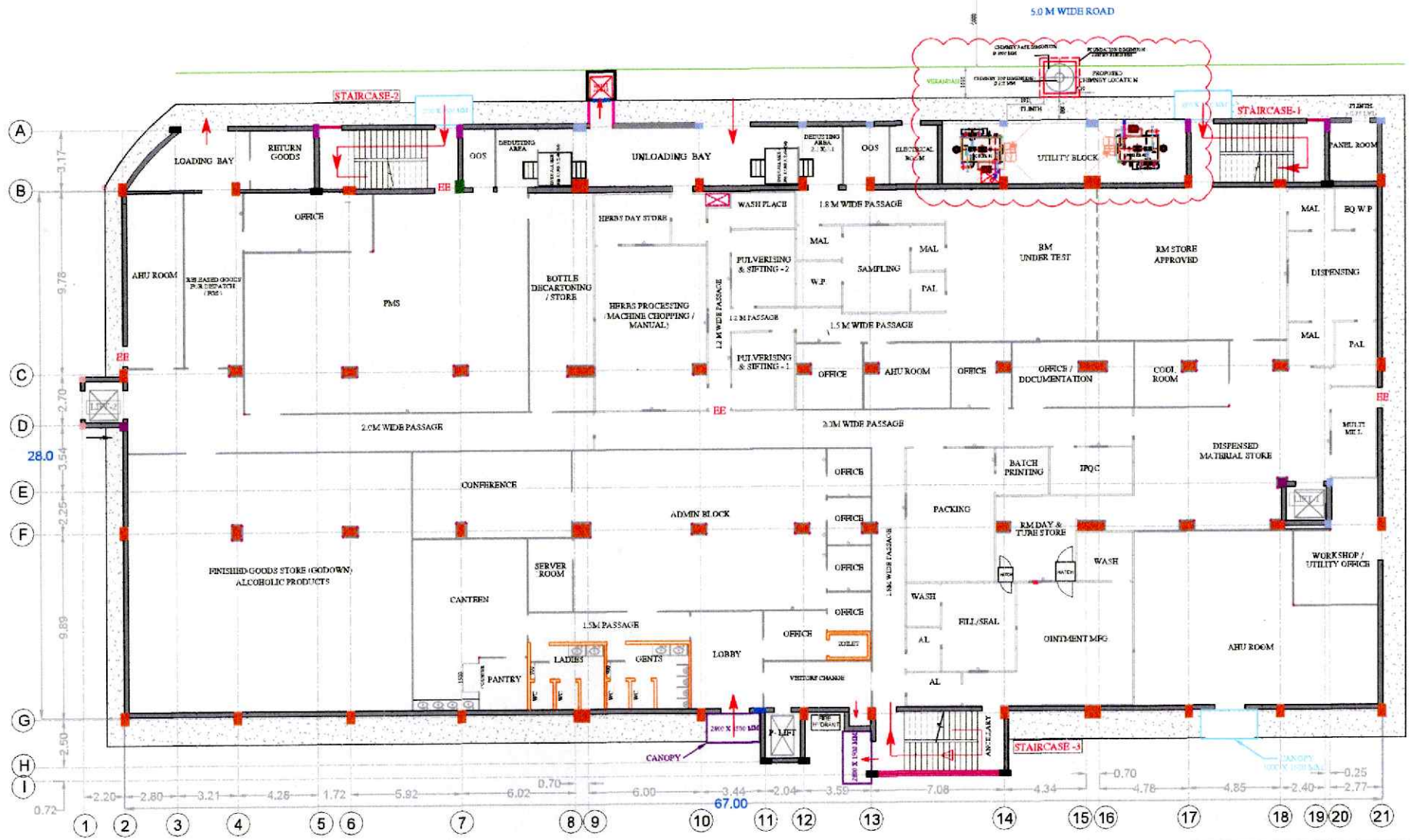
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EMAIL: info@knacktechnocrats.com

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.			
DRAWN BY	CHECKED BY	DATE	SCALE
ABD H	J ANSARI	03-08-2023	N.T.S.
TITLE		DWG NO.	REVISION
PLANT STEAM WITH CONDENSATE PIPE ROUTING - TERRACE FLOOR		KT/MS/PS/04	-

FILE: Z:\HOMCO\0228\04\1\September\2 Pipe routing - steam with condensate 26x100 CS PIPE.PLT ANT STEAM PIPE ROUTING

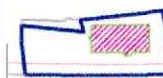
PROPOSED BOILER & CHIMNEY LOCATION - ( GROUND FLOOR )

03/08/2023



LEGENDS:

BOILER DETAILS :-	CHIMNEY DETAILS :-
BOILER CAPACITY :- 750 KG/HR	BASE DIAMETER :- 1000 MM
QUANTITY :- 2 NOS.	TOP DIAMETER :- 290 MM
	TYPE :- SELF SUPPORTING
	HEIGHT :- 25 M APPROX.
	QUANTITY :- 1 No.



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CONSULTANT: KNACK TECHNOCRATS

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DRAWN BY	CHECKED BY	DATE	SCALE	DWG. NO.	REVISION
ABD H.	ANSAR	03-08-2023	1:1	KNACK/2023/03/01	
TITLE: PROPOSED BOILER & CHIMNEY LOCATION - ( GROUND FLOOR )					

TENTATIVE PLANT STEAM CONSUMPTION ( IBR & NON IBR POINTS )								Date :- 03-08-2023
SR NO.	CODE	ROOM NAME	PLANT STEAM		STEAM TEMPERATURE	PROCESS TEMPERATURE	CONTROLLER	REMARK
			REQUIRED PRESSURE	Kgs/hr	° C	° C		
<b>A PRESSURE FOR IBR PIPE LINE</b>								
<b>SERVICE FLOOR</b>								
1	USR	Pure Steam Generator - 100kg /hr	5.0 to 6.0 KG/CM <sup>2</sup>	127	110-120	110-120	PID	
2	USR	WFI (water for injection ) Plant - 150 LPH	6.0 KG/CM <sup>2</sup>	170	110-120	110-120	PID	
<b>B PRESSURE FOR NON IBR PIPE LINE</b>								
<b>GROUND FLOOR</b>								
3	UG4	Ointment Manufacturing Plant - 100kg (Cream Manufacturing Vessel )	3.5 KG/CM <sup>2</sup>	100	80 - 100	60 - 80	PID	
<b>FIRST FLOOR</b>								
4	UF14	Equipment Autoclave - Horizontal	1.5 KG/CM <sup>2</sup>	100	121	121	PID	
5	UF11	Ophthalmic solution Manufacturing vessel - 100 liters	3.0 to 3.5 KG/CM <sup>2</sup>	50	80 - 100	60 - 80	PID	
<b>SECOND FLOOR</b>								
6	US17	Paste preparation Vessel - 150 liters (Electrical)	3.0 to 3.5 KG/CM <sup>2</sup>	70	60 - 70	50 - 60	PID	Provision Only
7	US7-4	Tray Drier - 1 ( 48 Nos. )	3.5 KG/CM <sup>2</sup>	50	60 -70	50 - 60	PID	
8	US7-5	Tray Drier - 2 ( 48 Nos. )	3.5 KG/CM <sup>2</sup>	50	60 - 70	50 - 60	PID	
<b>SERVICE FLOOR</b>								
9	US16	APU - 4000 CFM (Air pressur Unit)- For FBD 250 kgs	3.5 KG/CM <sup>2</sup>	180	80 - 100	60 - 80	PID	
10	USR	WFI (water for injection ) Storage tank - 300 liters	3.5 KG/CM <sup>2</sup>	125	80 - 90	60 - 70	PID	
11	USR	Purified water Storage tank - 1000 liters	3.5 KG/CM <sup>2</sup>	125	80 - 90	60 - 70	PID	
<b>Total Consumptions - Kgs/hr</b>				<b>1147</b>				
<b>Total no. of user points</b>				<b>11 Nos.</b>				
Peak Consumption - Kgs / hr				180				
Boiler Capacity				750 Kg/hr ( 2 Nos.)				
Boiler Location				On Ground Floor				
<b>NOTE :- CONSUMPTIONS &amp; PRESSURES ARE APPROXIMATE , MAY VARY AS PER THE PROCESS REQUIREMENT / VENDORS EQUIPMENTS.</b>								

