

AUTOMATIC ELECTRICAL WATER HEATER (NISOC RESIDENTIAL CAMP)

EQUIPMENT NO.	QTY	INSTALLATION AREA	TYPE	NOMINAL STORAGE TANK CAPACITY (Liter)	STORAGE TANK MATERIAL CONSTRUCTION	ELECTRIC POWER SUPPLY V/PH/Hz	HEATING ELEMENT POWER (KW)	INCLUDING
EWH-N02-01	2	TOILET/BATH	STAND	200	GALVANIZED STEEL	230/1/50	3	STANDARD THERMOSTAT (A SAFETY CUT-OUT) PREVENTING THE ELECTRICALLY-LIVE PARTS TO BE IN CONTACT WITH WATER. AND EQUIPPED WITH DRAIN VALVE, TEMPERATURE GAGE AND ALL STANDARD ACCESSORIES

SPACE TAG NUMBER

- 100 SINGLE BED REST ROOM
- 101 DOUBLE BED REST ROOM
- 102 MASTER REST ROOM
- 103 SPORT ROOM
- 104 TV ROOM
- 105 J.C
- 106 TOILET
- 107 BATH
- 108 PATIO
- 109 CANTEEN
- 110 KITCHEN
- 111 CORRIDOR
- 112 AIRLOCK

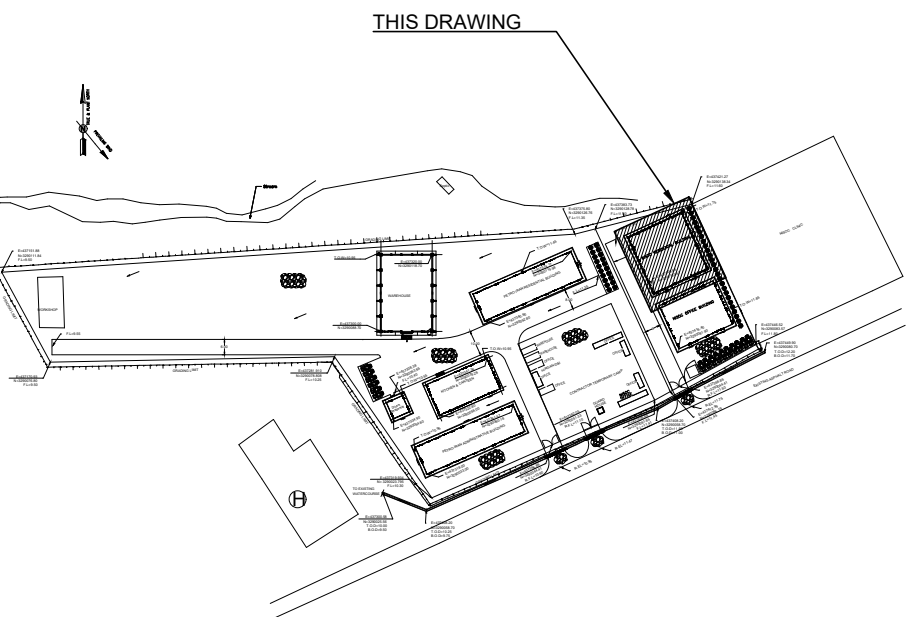
NOTES

- GENERAL NOTES:**
- 1-ALL DIMENSIONS AND COORDINATES ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
 - 2-ALL ELEVATIONS ARE IN METER FROM F.F.L. OF EACH ROOM.
 - 3-THIS DWG. SHOULD BE WORKED TOGETHER WITH THE OTHER MECHANICAL, ARCHITECTURAL ELECTRICAL DWGS. & ANY CONFLICT SHOULD CLARIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 - 4-ALL HORIZONTAL DOMESTIC WATER PIPES IN THE BUILDING SHALL RUN ABOVE THE FALSE CEILING.
 - 5-MATERIAL OF DOMESTIC COLD AND HOT WATER PIPES OUTSIDE BUILDING ARE GALVANIZED STEEL IN ACCORDANCE WITH ASTM A53 AND FITTINGS ARE IN ACCORDANCE WITH ASME B16.12.
 - 6-DOMESTIC HOT WATER PIPING INSIDE THE BUILDING WILL BE COVERED WITH THERMAL INSULATION (WATER PIPE INSULATION) ACCORDING TO NIBR TOPIC 16.
 - 7-DOMESTIC COLD WATER PIPING OUTSIDE THE BUILDING SHALL BE COVERED WITH ELASTOMERIC INSULATION (MIN 25MM)
 - 8-TOP OF THE SUPPORT STEEL STRUCTURE SHALL BE CONSIDERED AS B.O.P.
 - 9-MATERIAL OF SANITARY SEWER, VENT PIPES AND FITTINGS SHALL BE PVC-U (BD-TYPE) IN ACCORDANCE WITH EN 1451.
 - 10-SLOPE OF SEWAGE PIPES ARE 1.5% ~ 2% TO DRAIN.
 - 11-MATERIAL OF DOMESTIC COLD AND HOT WATER PIPES INSIDE BUILDING SHALL BE FIVE LAYERED POLYETHYLENE PEX -AL- PEX ACCORDING TO ASTM F1281/1282 AND FITTINGS SHALL BE ACCORDING TO ASTM F1281/1282.
 - 12-MATERIAL OF HOT DIPPED GALVANIZED STEEL PIPE SHALL BE ACCORDING TO ASTM A53 GR B AND FITTINGS SHALL BE ACCORDING TO ASTM A234 GR WPB.
 - 13-ALL VALVES ABOVE THE FALSE CEILING SHALL HAVE ACCESS DOOR.
 - 14-THE WASTE FROM BUILDING TO WASTE WATER TREATMENT PLANT SHALL DISCHARGE BY GRAVITY FLOW.
 - 15- FINAL ROUTE FOR PLUMBING SHALL NOT BE OVER AND NEAR THE ELECTRICAL & CONTROL PANEL.

LEGEND

REFERENCE DRAWING	DRG. No.
SANITARY SYSTEM & POTABLE WATER LAYOUT FOR CAMP AREA	BK-GNRL-PEDCO-220-CV-PY-0002
HVAC SYSTEM LAYOUT	BK-GNRL-PEDCO-220-HV-PY-0002

KEY PLAN



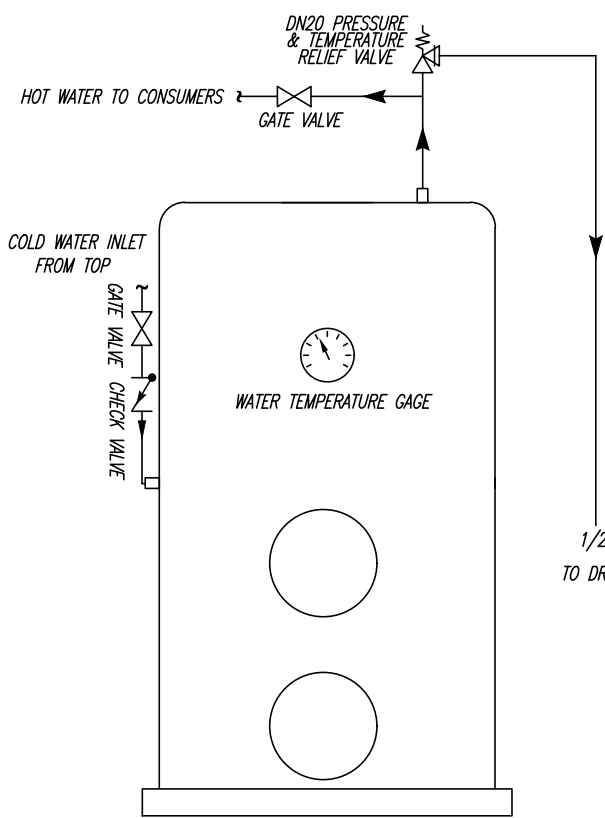
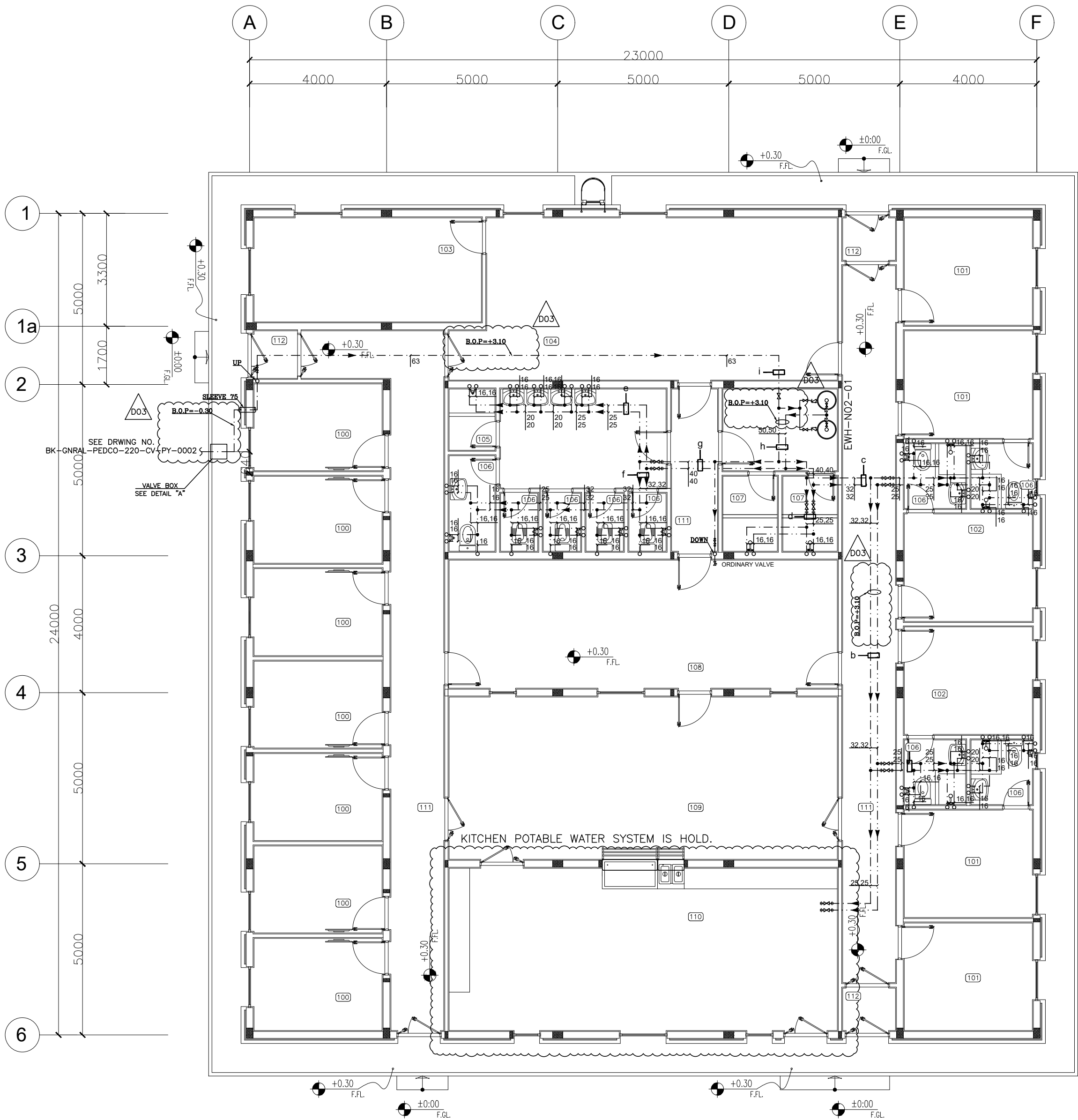
POTABLE WATER SIZING CALCULATION

SECTION	F.U.	QUANTITY	GPM	VELOCITY(M/S)	SIZE
a	8	7	1.5-2	25	
b	16	12	1.5-2	32	
c	24	17	1.5-2	32	
d	8	7	1.5-2	25	
e	15	11	1.5-2	25	
f	25	17.5	1.5-2	32	
g	40	24.5	1.5-2	40	
h	72	36.5	1.5-2	50	
i	144	53.5	1.5-2	63	

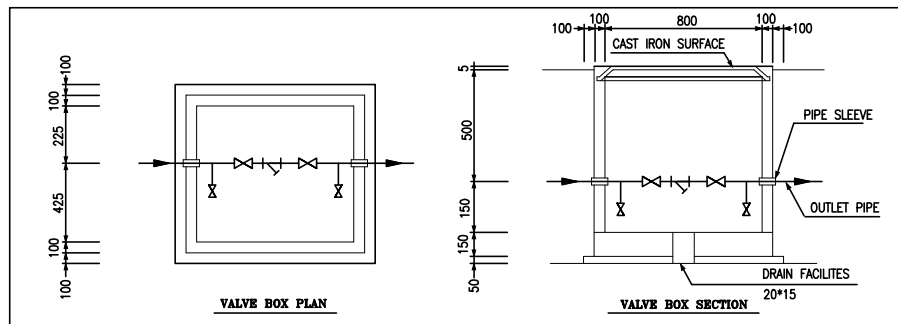
PLUMBING FIXTURE SCHEDULE

SYMBOL	FIXTURE NAME	QUANTITY	F.U.
SA1	WASH BASIN	9	3
SA2	PRIVATE EASTERN/WESTERN TYPE WATER CLOSET	2	3
SA2	GENERAL EASTERN/WESTERN TYPE WATER CLOSET	5	5
SA3	SHOWER	6	4
SA4	SINK + COUNTER TOP	0	4
SA5	ORDINARY VALVE	1	2
FD	FLOOR DRAIN	12	1

SC.1:100 1 GROUND FLOOR POTABLE WATER PIPING LAYOUT



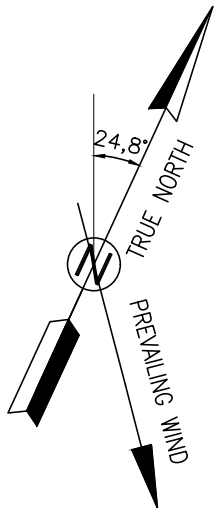
DETAIL B : ELECTRICAL WATER HEATER



ALL DIMENSIONS OF VALVE BOX ARE IN MILLIMETER

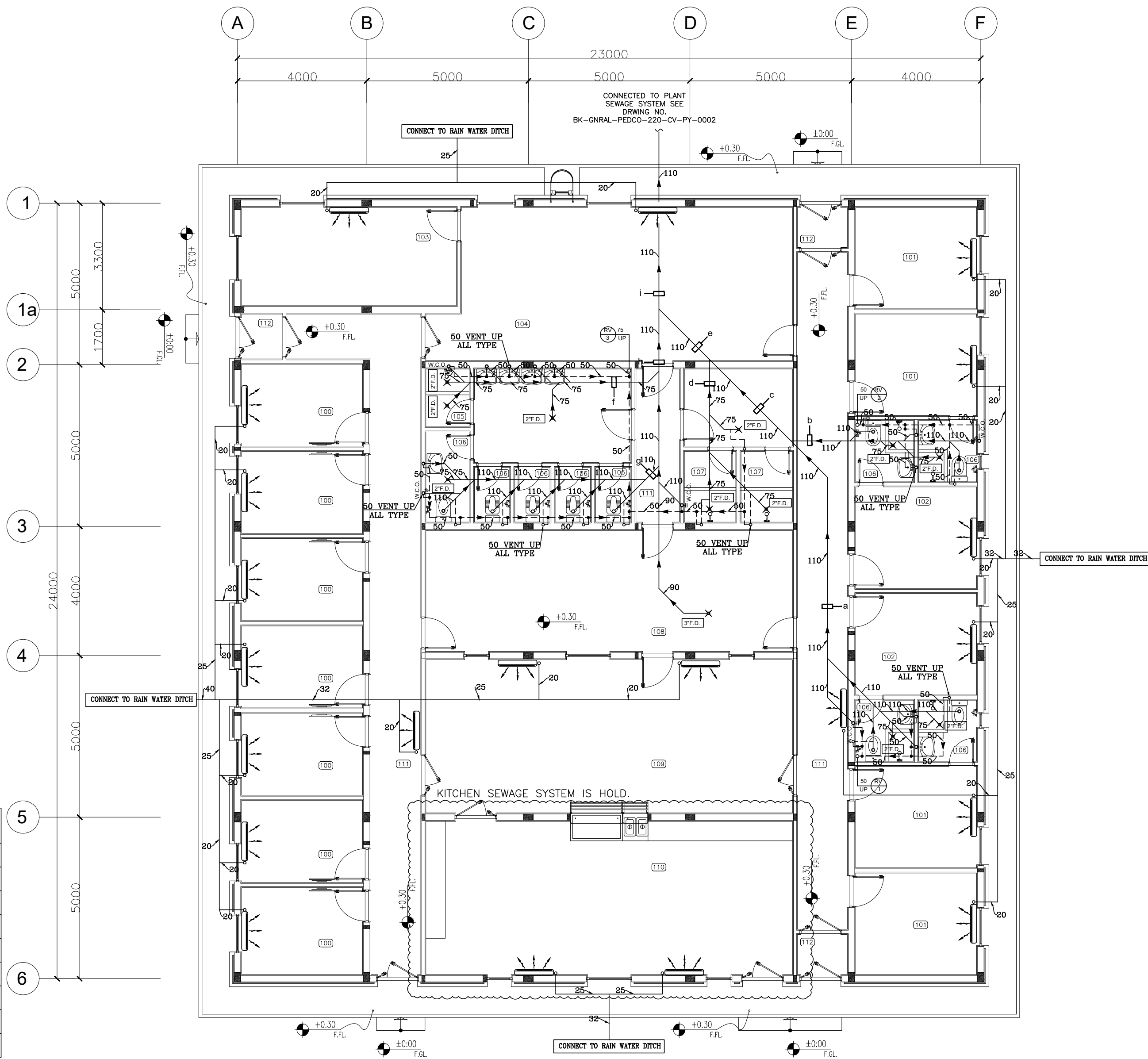
DETAIL A : VALVE BOX PLAN AND SECTION

D03	OCT.2023	IFA	K.AHMADI	M.PAKHARIAN	S.FARAMARPOUR	***							
D02	JUL.2023	IFA	K.AHMADI	M.PAKHARIAN	A.M.MOHSSENI	***	***	*****	***	***.***	***	***.***	
D01	SEP.2022	IFA	H.ADINEH	M.PAKHARIAN	M.MEHRSHAD	***	REV.	DESCRIPTION	BY	DATE	BY	DATE	
D00	MAY.2022	IFC	H.ADINEH	M.PAKHARIAN	M.MEHRSHAD	***			CHECKED		REV. APPR.		
REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.			اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.				
PROJECT NAME:			BINAK OILFIELD DEVELOPMENT GENERAL			THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS							
PROJECT NO.:			971020										
EPC CONTRACTOR:			EPD/EPC CONTRACTOR (GC):			BINAK OILFIELD DEVELOPMENT GENERAL							
 HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES			 PETROIRAN DEVELOPMENT COMPANY										
						DATE SCALE DRAWING BY CHECKED BY PROJECT ENG							
DRAWING TITLE:			PLUMBING & SEWAGE PIPING LAYOUT (CAMP – NISOC RESIDENTIAL BUILDING)			NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED							
						APPROVED FOR CONSTRUCTION				BY:		DATE:	
SCALE	SIZE		DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION	
1:100	A1		BK–GNRL–PEDCO–220–HV–PY–0001	01 OF 02	D03	053–073–9184	F	A1	1	707095	01 OF 02	D03	



SPACE TAG NUMBER

- (100) SINGLE BED REST ROOM
- (101) DOUBLE BED REST ROOM
- (102) MASTER REST ROOM
- (103) SPORT ROOM
- (104) TV ROOM
- (105) J.C
- (106) TOILET
- (107) BATH
- (108) PATIO
- (109) CANTEN
- (110) KITCHEN
- (111) CORRIDOR
- (112) AIRLOCK



SEWAGE SIZING CALCULATION

SECTION	F.U. QUANTITY	SLOPE(%)	SIZE
a	14	1.5	110
b	14	1.5	110
c	28	1.5	110
d	3	1.5	75
e	31	1.5	110
f	15	1.5	75
g	29	1.5	110
h	45	1.5	110
i	76	1.5	110

PLUMBING FIXTURE SCHEDULE

SYMBOL	FIXTURE NAME	QUANTITY	F.U.
SA1	WASH BASIN	9	3
SA2	PRIVATE EASTERN/WESTERN TYPE WATER CLOSET	2	3
SA2	GENERAL EASTERN/WESTERN TYPE WATER CLOSET	5	5
SA3	SHOWER	6	4
SA4	SINK + COUNTER TOP	0	4
SA5	ORDINARY VALVE	1	2
FD	FLOOR DRAIN	12	1

SC.1:100 2 GROUND FLOOR SEWAGE PIPING LAYOUT

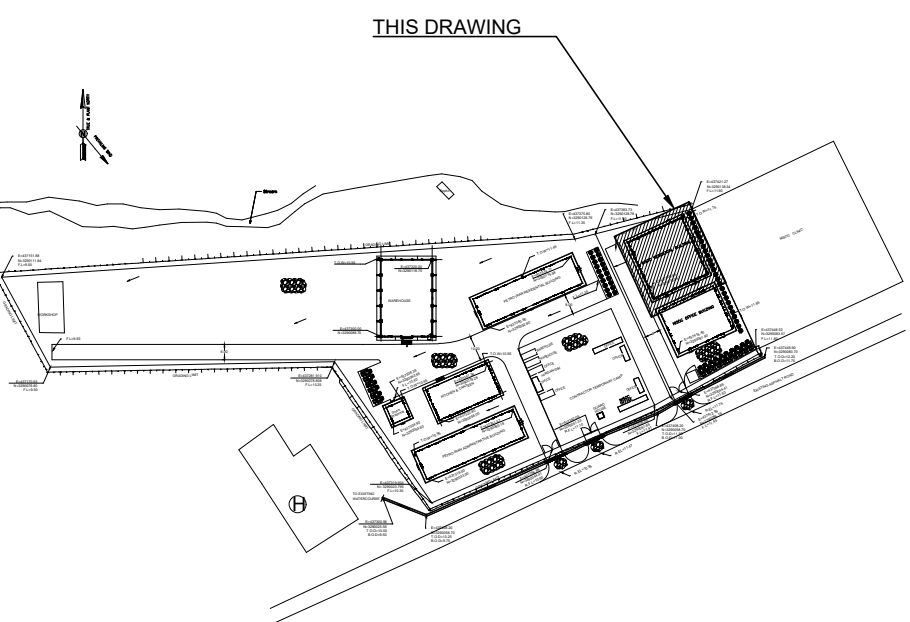
NOTES

- GENERAL NOTES:
- 1-ALL DIMENSIONS AND COORDINATES ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
 - 2-ALL ELEVATIONS ARE IN METER FROM F.F.L. OF EACH ROOM.
 - 3-THIS DWG. SHOULD BE WORKED TOGETHER WITH THE OTHER MECHANICAL, ARCHITECTURAL ELECTRICAL DWGS. & ANY CONFLICT SHOULD CLARIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 - 4-ALL HORIZONTAL DOMESTIC WATER PIPES IN THE BUILDING SHALL RUN ABOVE THE FALSE CEILING.
 - 5-MATERIAL OF DOMESTIC COLD AND HOT WATER PIPES OUTSIDE BUILDING ARE GALVANIZED STEEL IN ACCORDANCE WITH ASTM A53 AND FITTINGS ARE IN ACCORDANCE WITH ASME B16.12.
 - 6-DOMESTIC HOT WATER PIPING INSIDE THE BUILDING WILL BE COVERED WITH THERMAL INSULATION (WATER PIPE INSULATION) ACCORDING TO NIBR TOPIC 16.
 - 7-DOMESTIC COLD WATER PIPING OUTSIDE THE BUILDING SHALL BE COVERED WITH ELASTOMERIC INSULATION (MIN 25MM)
 - 8-TOP OF THE SUPPORT STEEL STRUCTURE SHALL BE CONSIDERED AS B.O.P.
 - 9-MATERIAL OF SANITARY SEWER, VENT PIPES AND FITTINGS SHALL BE PVC-U (BD-TYPE) IN ACCORDANCE WITH EN 1451.
 - 10-SLOPE OF SEWAGE PIPES ARE 1.5% ~ 2% TO DRAIN.
 - 11-MATERIAL OF DOMESTIC COLD AND HOT WATER PIPES INSIDE BUILDING SHALL BE FIVE LAYERED POLYETHYLENE PEX -AL- PEX ACCORDING TO ASTM F1281/1282 AND FITTINGS SHALL BE ACCORDING TO ASTM F1281/1282.
 - 12-MATERIAL OF HOT DIPPED GALVANIZED STEEL PIPE SHALL BE ACCORDING TO ASTM A53 GR B AND FITTINGS SHALL BE ACCORDING TO ASTM A234 GR WPB.
 - 13-ALL VALVES ABOVE THE FALSE CEILING SHALL HAVE ACCESS DOOR.
 - 14-THE WASTE FROM BUILDING TO WASTE WATER TREATMENT PLANT SHALL DISCHARGE BY GRAVITY FLOW.
 - 15- FINAL ROUTE FOR PLUMBING SHALL NOT BE OVER AND NEAR THE ELECTRICAL & CONTROL PANEL.

LEGEND

REFERENCE DRAWING	DRG. No.
SANITARY SYSTEM & POTABLE WATER LAYOUT FOR CAMP AREA	BK-GNRL-PEDCO-220-CY-PY-0002
HVAC SYSTEM LAYOUT	BK-GNRL-PEDCO-220-HV-PY-0002

KEY PLAN



D03	OCT.2023	IFA	K.AHMADI	M.PAKHARIAN	S.FARAMARPOUR	***															
D02	JUL.2023	IFA	K.AHMADI	M.PAKHARIAN	A.M.MOHSSENI	***	***	*****	***	***.***	***	***.***	***.***								
D01	SEP.2022	IFA	H.ADINEH	M.PAKHARIAN	M.MEHRSHAD	***	REV.	DESCRIPTION	BY	DATE	BY	DATE									
D00	MAY.2022	IFC	H.ADINEH	M.PAKHARIAN	M.MEHRSHAD	***			CHECKED		REV. APPR.										
REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.			اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.												
PROJECT NAME:									BINAK OILFIELD DEVELOPMENT GENERAL												
PROJECT NO.:							971020														
EPC CONTRACTOR:							EPD/EPC CONTRACTOR (GC):														
 HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES							 PETROIRAN DEVELOPMENT COMPANY														
							BINAK OILFIELD DEVELOPMENT GENERAL														
							DATE							SCALE		DRAWING BY		CHECKED BY		PROJECT ENG	
DRAWING TITLE:							NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED														
							APPROVED FOR CONSTRUCTION							BY:		DATE:					
SCALE	SIZE	DRAWING NO.			SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION								
1:100	A1	BK-GNRL-PEDCO-220-HV-PY-0001			02 OF 02	D03	053-073-9184	F	A1	1	707095	02 OF 02	D03								