

GENERAL NOTES OF HVAC WORKS



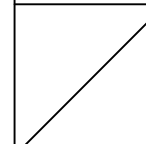
1. THESE GENERAL NOTES SHALL BE APPLICABLE TO ALL HVAC DRAWINGS THROUGHOUT THE PROJECT.
2. DO NOT SCALE FROM THESE DRAWINGS. DIMENSIONS SHALL BE TAKEN FROM ARCHITECTURAL DRAWINGS.
3. THESE DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED ONLY TO DEFINE THE BASIC FUNCTIONS REQUIRED. ACCESSORIES REQUIRED FOR PROPER OPERATION OF THE SYSTEMS, EVEN THOUGH NOT SPECIFICALLY INDICATED, SHALL BE INCLUDED AND INSTALLED. SUCH ACCESSORIES MAY INCLUDE, BUT ARE NOT LIMITED TO, MOTOR STARTERS, ETC.
4. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE CONTRACT TERMS & CONDITIONS, SPECIFICATIONS AND SCHEDULES OF ITEMS OF WORK.
5. ANY DISCREPANCY OR INADEQUACY WITHIN THE BID DOCUMENTS OR BETWEEN THE BID DOCUMENTS AND THE RELATED PLUMBING, FIRE PROTECTION, ELECTRICAL, STRUCTURAL, ARCHITECTURAL, INTERIOR DECOR AND SITE ENGINEERING DRAWINGS OR BETWEEN THE BID DOCUMENTS AND FIELD CONDITIONS MUST BE BROUGHT TO THE ATTENTION OF THE OWNER, CONSULTANT AND ENGINEER-IN-CHARGE PRIOR TO BID SUBMISSION.
6. THE SCOPE OF WORK CONSISTS OF FURNISHING LABOUR, MATERIALS AND EQUIPMENT FOR THE INSTALLATION. IT ALSO INCLUDES PLACING INTO OPERATION COMPLETE AND OPERABLE HEATING, VENTILATING AND AIR CONDITIONING SYSTEMS AS SPECIFIED AND SHOWN. THIS INCLUDES, BUT IS NOT LIMITED TO, HVAC UNITS, EXHAUST FANS, DUCTLESS SPLIT-SYSTEMS, DUCTWORK, AIR DISTRIBUTION, CONTROLS AND ACCESSORIES.
7. ALL REQUIRED OFFSETS, RISES AND DROPS DUE TO POSSIBLE OBSTRUCTIONS OF DUCT AND PIPE RUNS ARE NOT NECESSARILY SHOWN. THE BIDDER SHALL INCLUDE A CONTINGENCY IN HIS BID TO OFFSET ANY COST REQUIRED FOR ADDITIONAL FITTINGS AND LABOR THAT MAY BE REQUIRED, MINOR DEVIATIONS FROM THE DESIGN LAYOUT IN ROUTING OF DUCT AND/OR PIPING ARE ANTICIPATED AND SHALL BE CONSIDERED A PART OF THE WORK INCLUDED. THE BIDDER SHALL VERIFY THE ACTUAL DIMENSIONS OF THE EQUIPMENT PROPOSED TO ENSURE THAT THE EQUIPMENT WILL FIT IN THE AVAILABLE SPACE.
8. THE HVAC LAYOUT IS BASED ON ARCHITECTURAL DRAWINGS AVAILABLE AT THE TIME OF DESIGN. AS STRUCTURAL OR OTHER FIELD CHANGES MAY OCCUR, THE BIDDER SHALL TAKE RESPONSIBILITY FOR VERIFYING THE INTEGRITY OF THE CHANGES WITH THE HVAC CONSULTANT.
9. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF ALL APPLICABLE CODES AND REGULATIONS INCLUDING BUT NOT LIMITED TO NATIONAL, CITY, STATE AND LOCAL ORDINANCES WHICH MAY BE IN EFFECT. ALL HVAC MATERIALS, INSTALLATION PROCEDURES AND SYSTEM LAYOUTS SHALL BE APPROVED BY ALL APPLICABLE CODE ENFORCEMENT AUTHORITIES HAVING JURISDICTION. THE BIDDER SHALL PROVIDE ALL MATERIALS AND LABOUR NECESSARY TO COMPLY WITH THESE RULES, REGULATIONS AND ORDINANCES AT NO ADDITIONAL COST. THESE CODES REPRESENT THE MINIMUM ACCEPTABLE REQUIREMENTS, THEREFORE, WHERE DRAWINGS AND/OR SPECIFICATIONS INDICATE MATERIALS OR CONSTRUCTION IN EXCESS OF THESE CODE REQUIREMENTS, THE DRAWINGS AND/OR SPECIFICATIONS SHALL GOVERN.
10. IT IS THE RESPONSIBILITY OF THE BIDDER TO PAY FOR ALL NECESSARY PERMITS AND APPROVALS FOR THE INSTALLATION.
11. IT IS THE RESPONSIBILITY OF THE BIDDER TO REVIEW THESE DRAWINGS AND SPECIFICATIONS, AS WELL AS THE RELATED FIRE PROTECTION, ELECTRICAL, STRUCTURAL, ARCHITECTURAL, INTERIOR DECOR AND SITE ENGINEERING DRAWINGS TO BECOME FAMILIAR WITH THE FULL PROJECT SCOPE. IN ADDITION, THE BIDDER MUST COORDINATE WITH THE OWNER'S REPRESENTATIVE TO FULLY UNDERSTAND ALL REQUIREMENTS WHICH MAY NOT BE SPECIFIED HEREIN AND WHICH THE OWNER MAY CONSIDER PART OF THIS CONTRACT. DURING THE COURSE OF CONSTRUCTION COORDINATION AND ACTUAL CONSTRUCTION, IT IS A RESPONSIBILITY OF THE BIDDER TO WORK CLOSELY WITH ALL ACCOMPANYING CONTRACTORS AND TRADESMEN IN ORDER TO ENSURE A SMOOTH RUNNING AND CAREFULLY COORDINATED INSTALLATION.
12. THE BIDDER SHALL FURNISH AND INSTALL NEW PRODUCTS OF ESTABLISHED AND REPUTABLE MANUFACTURERS. NO EQUIPMENT SUBSTITUTIONS SHALL BE MADE THAT WOULD LEAVE INADEQUATE OPERATING OR SERVICE SPACE. EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES AND IN AN ARRANGEMENT THAT WILL GIVE THE GREATEST PRACTICAL EASE OF OPERATION AND SERVICE TO THE OWNER. MATERIALS AND EQUIPMENT SHALL BE INSTALLED SQUARELY WITH THE BUILDING LINES.
13. CONSTRUCT AND BRACE EQUIPMENT, PIPING, ETC., SO THAT THERE WILL BE NO VIBRATION AND/OR RATTLING WHEN THE SYSTEM IS IN OPERATION.
14. ANY SPECIFIC REFERENCE TO A MANUFACTURER'S PRODUCT IS ONLY TO ESTABLISH TYPE, QUALITY, AND PERFORMANCE REQUIRED. THESE QUALIFICATIONS ARE IN ADDITION TO THE REQUIREMENTS SHOWN ON THE PLANS.
15. FABRICATE, SUPPORT, TEST AND INSTALL ALL DUCTWORK IN STRICT ACCORDANCE WITH IS 655: 2006, THE LATEST EDITION OF THE SMACNA H.V.A.C. DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE- SECOND EDITION AND ALL APPLICABLE BUILDING CODES.
16. RETURN AIR DUCT TO HAVE AT LEAST ONE (1) 90° ELBOW BETWEEN THE PLENUM ON THE FAU TO THE PLENUM AT THE RETURN AIR GRILLE. PLENUM BOX AT RETURN AIR GRILLE TO BE A MINIMUM 6" DEEP. RETURN AIR GRILLES TO BE A MINIMUM OF 3' DISTANCE FROM SMOKE DETECTORS.
17. ALL OUTSIDE AIR INTAKES SHALL BE LOCATED A MINIMUM OF 10' FROM ANY PLUMBING VENT, EXHAUST, AND FLUE OUTLETS.
18. EXHAUST DUCTS SHALL TERMINATE THREE (3) FEET FROM ANY BUILDING OPENING AND BE EQUIPPED WITH A BACKDRAFT DAMPER. SCREENS SHALL NOT BE INSTALLED AT THE DUCT TERMINATION.
19. ALLOW 24" TO 36" OF STRAIGHT RUN FROM FAN OUTLET POINT BEFORE ADDING AN ELBOW OR BEND TO EXHAUST DUCTWORK.
20. FLASH AND COUNTER FLASH ALL ROOF PENETRATIONS. COORDINATE INSTALLATION OF ALL ROOF FLASHING AT ROOF PENETRATION.
21. SEAL ALL REFRIGERATION LINE PENETRATIONS AIR AND WATER TIGHT WITH SILICONE SEALANT.
22. THE BIDDER SHALL BE RESPONSIBLE FOR TESTING, ADJUSTING, AND BALANCING (T.A.B.). T.A.B. WORK SHALL INCLUDE THE ENTIRE AIR-SIDE SYSTEM AND BE PERFORMED IN ACCORDANCE WITH NEBB OR AABC REQUIREMENTS. TOLERANCES FOR AIR INLETS AND OUTLETS SHALL BE ±5% UNLESS NOTED OTHERWISE.
23. THE BIDDER SHALL INSPECT ANY EXISTING DUCTWORK FOR DEFECTS AND REPORT TO THE OWNER OR ENGINEER-IN-CHARGE ANY DEFICIENCY PRIOR TO PERFORMING ANY WORK. THE BIDDER SHALL CLEAN ALL EXISTING DUCTWORK, GRILLES, REGISTERS AND DIFFUSERS PRIOR TO INSTALLING THE NEW WORK.
24. THE BIDDER SHALL PAINT BLACK BEHIND ALL GRILLES AND REGISTERS AND INSIDE OF DUCT WHERE VISIBLE.
25. UNLESS NOTED OTHERWISE, DUCTWORK BEYOND SA & RA PLENUMS MAY BE CONSTRUCTED OF METAL, OR FACTORY-MANUFACTURED INSULATED DUCTWORK.
26. ALL BRANCH DUCTS TO HAVE VOLUME DAMPERS WHETHER SHOWN OR NOT.
27. SMOOTH TURN RADIUS DUCTWORK OR TURNING VANES SHALL BE USED THROUGHOUT WHERE FLOW EXCEEDS 150 CFM.
28. ALL DUCT JOINTS TO BE SEALED IN ACCORDANCE WITH "SMACNA" STANDARDS AND ACCEPTED GOOD PRACTICE.
29. HVAC FLEXIBLE DUCT CONNECTIONS SHALL BE MINIMUM OF 6" LONG AND HELD IN PLACE WITH HEAVY METAL BANDS, SECURELY ATTACHED TO PREVENT ANY LEAKAGE AT THE CONNECTION POINTS. FLEXIBLE CONNECTIONS SHALL BE FABRICATED FROM APPROVED FLAME-PROOF FABRIC CONFORMING TO NFPA 90A. ASBESTOS CLOTH IS NOT ACCEPTABLE.
30. THE BIDDER SHALL PROVIDE AND INSTALL REFRIGERANT PIPING IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND IN SUCH A WAY AS TO BE INCONSPICUOUS AND FREE FROM ANY POSSIBLE CONDENSATION. INSULATE REFRIGERANT LINES WITH APPROPRIATE INSULATION.
31. REFRIGERANT PIPING OTHER THAN PRE-CHARGED TUBING SETS FURNISHED BY AIR CONDITIONING MANUFACTURER SHALL BE TYPE "ACR" HARD DRAWN COPPER TUBING WITH WROUGHT COPPER FITTINGS. PIPING SHALL BE INSTALLED IN ACCORDANCE WITH ARI STANDARDS. USE EASY-FLO OR SAFETY SILVER BRAZING ALLOY TO MAKE JOINTS. RUN ALL HORIZONTAL LINES DEAD LEVEL TO ENSURE GAS RETURN TO COMPRESSOR.
32. ALL MATERIALS OF INSULATION SHALL BE OF THE TYPE AND QUALITY AS MANUFACTURED BY ARMAFLEX, ARMSTRONG, CERTAINEED, OWENS-CORNING OR MANVILLE. ALL MATERIAL AND EQUIPMENT SPECIFIED TO BE INSULATED SHALL BE THOROUGHLY TESTED AND APPROVED PRIOR TO APPLYING THE INSULATION. THE INSTALLATION OF ALL INSULATION SHALL BE PERFORMED BY AN EXPERIENCED CRAFTSMAN IN A NEAT WORKMANSHIP-LIKE MANNER AND SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN RECOMMENDATIONS FOR SERVICE INTENDED.
33. WRAPPED INSULATION ON DUCTWORK SHALL BE AS PER SPECIFIED THICKNESS (IN SMACNA) BLACK FLEXIBLE CLOSED-CELL ELASTOMERIC INSULATION WITH UL APPROVED FOIL. SECURE WITH ADHESIVE APPLIED DIRECTLY TO THE DUCT IN 4" WIDE STRIPS AROUND THE DUCT ON 12" CENTERS AND TAPE ALL JOINTS.
34. ACOUSTICAL DUCT LINING SHALL BE AS SPECIFIED THICKNESS OF OPEN CELL ELASTOMERIC FOAM, BASED ON SYNTHETIC RUBBER, COMPLYING WITH FIRE CLASSIFICATION REQUIREMENTS OF NFPA 90A AND 90B. ADHERE LINER TO DUCT WITH FIRE RESISTANT ADHESIVE AND WELDED PIN TYPE MECHANICAL FASTENERS AS INDICATED IN SMACNA STANDARDS.
35. DUCTWORK DIMENSIONS SHOWN ON DRAWINGS ARE CLEAR DIMENSIONS. DIMENSIONS SHALL BE INCREASED TO ACCOMMODATE LINING THICKNESS. ALL DUCT SHOWN ARE NET INSIDE VALUES. DIMENSIONS MAY BE CHANGED SO LONG AS THE NET FREE FACE AREA IS MAINTAINED.
36. THE BIDDER SHALL PROVIDE ALL AIR TEMPERATURE CONTROLS INCLUDING WIRING, TUBING AND THERMOSTATS (WITH LOCKING COVERS) AND ALL MISCELLANEOUS APPURTENANCES TO MEET THE INTENT OF THESE DOCUMENTS.
37. THE BIDDER SHALL FURNISH AND INSTALL UL LISTED DUCT SMOKE DETECTORS WITH AUXILIARY CONTACTS FOR CONNECTION TO THE FIRE ALARM SYSTEM. DETECTORS SHALL DE-ENERGIZE AIR HANDLING UNIT UPON ACTIVATION.
38. VIBRATION ISOLATORS FOR HAVING EQUIPMENT SHALL BE EQUAL TO MASON INDUSTRIAL MODEL 30N, COMBINATION SPRING AND DOUBLE DEFLECTION NEOPRENE HANGER, OR DEFLECTION AS RECOMMENDED BY MANUFACTURER.
39. VIBRATION ISOLATORS FOR BASE MOUNTED EQUIPMENT SHALL BE EQUAL TO MASON INDUSTRIES MODEL SLF, DEFLECTION AS RECOMMENDED BY MANUFACTURER.
40. THE BIDDER SHALL VISIT THE SITE AND VERIFY ALL DIMENSIONS IN THE FIELD, AND SHALL ADVISE TO THE OWNER OR ENGINEER-IN-CHARGE OF ANY DISCREPANCY BEFORE EXECUTION OF THE WORK.

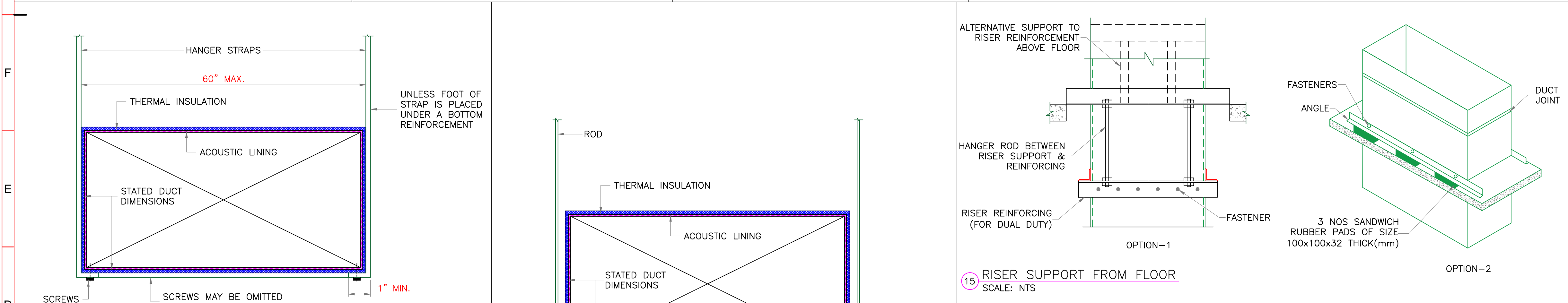
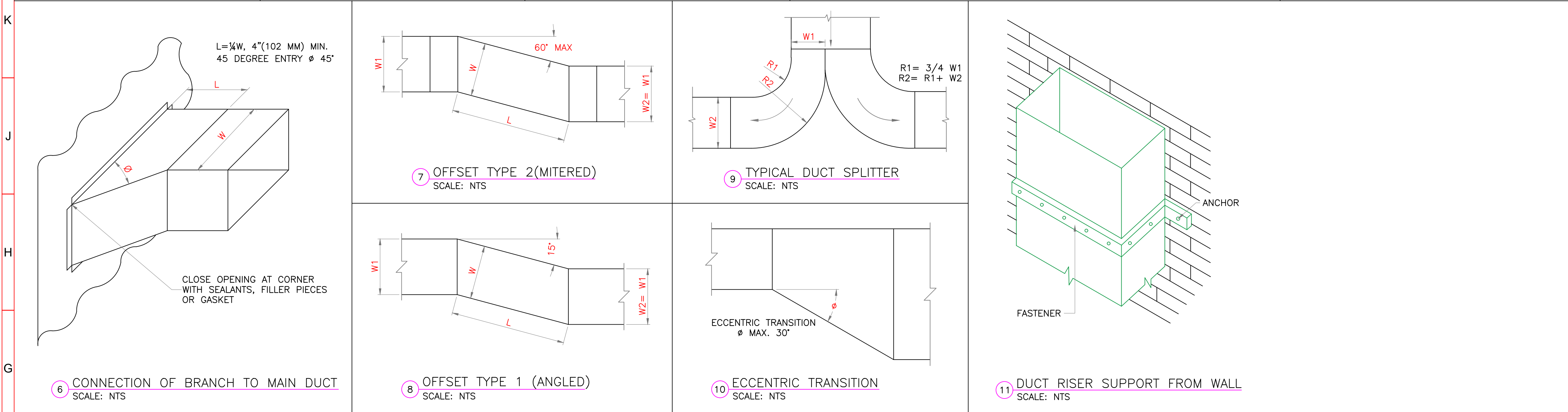
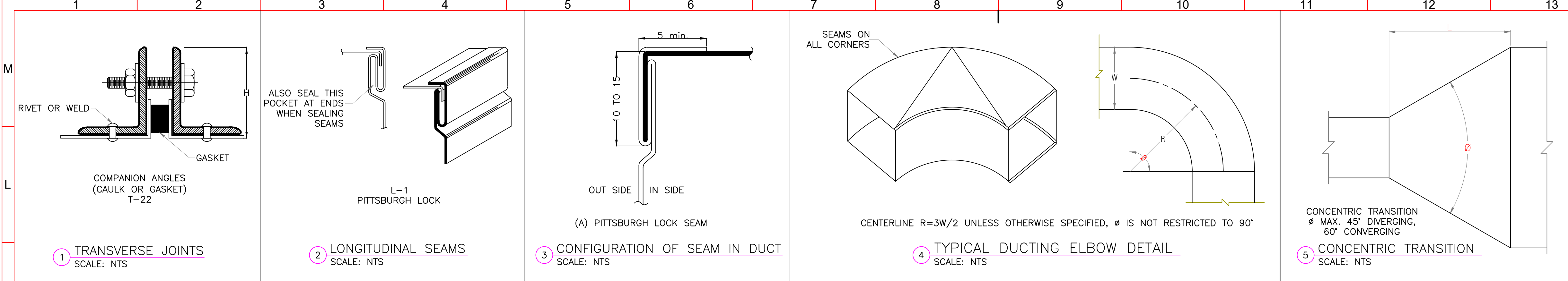
41. THE BIDDER SHALL SCHEDULE ALL SHUTDOWNS THAT AFFECT UTILITIES AND PORTIONS OF THE BUILDING THAT MUST REMAIN IN OPERATION WITH THE OWNER.
42. WHERE CONDUIT, CABLES, DUCTWORK OR PIPING PASSES THROUGH FIRE RATED FLOORS OR WALLS, THE SLEEVES SHALL BE COMPLETELY SEALED WITH A FIRE STOP MATERIAL THAT IS UL LISTED AND ACCEPTED BY THE BUILDING DEPARTMENT AND FIRE DEPARTMENT AS BEING SUITABLE FOR THIS SERVICE SUCH AS DOW CORNING CORP., SILICONE ELASTOMER, DOW CORNING 3-6548 SILICONE RTV FOAM, OR APPROVED EQUAL. THIS MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MANUFACTURER TO MAINTAIN THE FIRE RATING OF THE PENETRATED WALL OR FLOOR.
43. THE BIDDER SHALL PROVIDE AND INSTALL APPROVED FIRE DAMPERS AND ACCESS PANELS IN ANY AND ALL DUCTWORK WHICH PENETRATES A HORIZONTAL OR VERTICAL FIRE PARTITION, OR AS OTHERWISE SHOWN ON DRAWINGS.
44. THE BIDDER SHALL PROVIDE MAINTENANCE INSTRUCTIONS FOR THE EQUIPMENT AND SYSTEM THAT REQUIRE PREVENTIVE MAINTENANCE. INSTRUCTIONS SHALL BE CLEARLY STATED AND INCORPORATED ON A READILY ACCESSIBLE LABEL AND INCLUDE THE TITLE OR PUBLICATION NUMBER FOR THE OPERATION AND MAINTENANCE MANUAL FOR THAT PARTICULAR MODEL AND TYPE OF PRODUCT.

STANDARD ABBREVIATIONS

AIR	AIR CONDITIONING UNIT
ACH	AIR CHANGES PER HOUR
AD	ACCESS DOOR
ARV	AIR RELEASE VALVE
ADP	APPARATUS DEW POINT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AMB	AMBIENT
APD	AIR PRESSURE DROP
APPROX	APPROXIMATE
AVG	AVERAGE
BAS	BUILDING AUTOMATION SYSTEM
BDD	BACK DRAFT DAMPER
BHP	BRAKE HORSE POWER
BOD	BOTTOM OF DUCT
Btu/hr	BRITISH THERMAL UNIT/HOUR
CAP	CAPACITY
CAV	CONSTANT AIR VOLUME
CDD	COOLING DEGREE DAYS
CDW	CONDENSER WATER
CDWP	CONDENSER WATER PUMP
CFM	CUBIC FEET PER MINUTE
CH	CHILLER
CHW	CHILLED WATER
CHWP	CHILLED WATER PUMP
CHWR	CHILLED WATER RETURN
CHWRT	CHILLED WATER RETURN TEMP.
CHWS	CHILLED WATER SUPPLY
CHWST	CHILLED WATER SUPPLY TEMP.
CLF	COOLING LOAD FACTOR
CLTD	COOLING LOAD TEMPERATURE DIFF.
CN	CONDENSATE DRAIN
CT	COOLING TOWER
CUH	CABINET UNIT HEATER
DIA	DIAMETER
DB	DRY BULB
DEG	DEGREES
D.L.	DUCT LINER
DP	DEW POINT
EXIST	EXISTING
EXA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATU
EDB	ENTERING DRY BULB TEMPERATURE
EER	ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN
EFF.	EFFICIENCY
ELECT	ELECTRICAL
ELEV	ELEVATION
EMS	ENERGY MANAGEMENT SYSTEM
ESP	EXTERNAL STATIC PRESSURE
ET	EXPANSION TANK
EWB	ENTERING WET BULB TEMPERATURE
EW	ENTERING WATER TEMPERATURE
EXH	EXHAUST
FMS	FACILITY MANAGEMENT SYSTEM
FPM	FEET PER MINUTE
FT	FEET OR FOOT
FSD	FIRE / SMOKE DAMPER
GPM	US GALLONS PER MINUTE
HC	HEATING COIL
HDD	HEATING DEGREE DAYS
HP	HORSE POWER
HRTU	HEAT RECOVERY UNIT
HW	HOT WATER
HWP	HOT WATER PUMP
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
HX	HEAT EXCHANGER
IN	INCHES
INWG	INCHES IN WATER GAUGE
INWC	INCHES IN WATER COLUMN

LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
MA	MIXED AIR
MAT	MIXED AIR TEMPERATURE
MAU	MAKEUP AIR UNIT
MAX	MAXIMUM
MBH	BTU PER HOUR (THOUSAND)
MCC	MOTOR CONTROL CENTER
MD	MOTORIZED DAMPER
MFR	MANUFACTURER
MIN	MINIMUM
MVD	MANUAL VOLUME DAMPER
MWT	MAKEUP WATER TANK
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NC	NORMALLY CLOSED
NO	NORMALLY OPENED
NOM	NORMAL
NPSH	NET POSITIVE SUCTION HEAD
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OAP	OUTSIDE AIR PERCENTAGE
OAT	OUTSIDE AIR TEMPERATURE
OB	OPPRESSED BLADE DAMPER
PD	PRESSURE DROP
PRV	PRESSURE RELIEF VALVE
PSI	POUNDS PER SQUARE INCH
RA	RETURN AIR
RH	RELATIVE HUMIDITY
RTU	ROOFTOP UNIT
SA	SUPPLY AIR
SAT	SUPPLY AIR TEMPERATURE
SF	SUPPLY FAN
SP	STATIC PRESSURE
SPEC	SPECIFICATIONS
SL	SEA LEVEL
SQ	SQUARE
SS	STAINLESS STEEL
T.A.B	TEST AND BALANCE
TCP	TEMP. CONTROL PANEL
TSP	TOTAL STATIC PRESSURE
T-STAT	THERMOSTAT
TXV	THERMOSTATIC EXPANSION VALVE
TYP	TYPICAL
UH	UNIT HEATER
UV	UNIT VENTILATOR
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER
VCD	VOLUME CONTROL DAMPER
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
VSD	VARIABLE SPEED DRIVE
VSP	VARIABLE SPEED PUMP(ING)
W/	WITH
WB	WET BULB
WC	WATER COLUMN
WPD	WATER PRESSURE DROP
WMS	WIRE MESH SCREEN

R0	25-06-2024	ISSUED FOR TENDER	BHAVIK P.	
REV. NO.	DATE	DESCRIPTION	SIGNATURE	
REVISION				
PROJECT				
CONSTRUCTION OF ADMINISTRATIVE OFFICE BUILDING IN PLACE OF P& C BUILDING OUTSIDE CARGO JETTY AREA AT KANDLA, DEENDAYAL PORT AUTHORITY				
TITLE				
GENERAL NOTES OF HVAC WORKS				
		 GEO DESIGNS & RESEARCH (P) LTD.		
				REGD. OFFICE
APPROVED BY PARIN SHAH, P.Eng. (India)		B-10, Krishna Industrial Estate, Opp. BIDC Gorwa, Vadodara- 390016 (Guj.) India. Ph: +91 265 2290222. Email: mep@geogroup.in		
DEPARTMENT	MEP (DESIGN)	DOC. STATUS	FOR TENDER	
DGN.	KETUL S.	PROJECT NO.	GDBU23005	
DRN.	KARAN B.			
CHD.	BHAVIK P.	DRAWING NO.	SHEET NO.	REV.
SCALE	NTS	GDBU23005-MEP-02	01 OF 11	R0
ISSUE DATE	25-06-2024			
REF. DRG. NO.				SHT. NO.
	DEENDAYAL PORT AUTHORITY PROJECT DIVISION			
DATE				
JE (E)		AXEN (E)		XEN(EN)

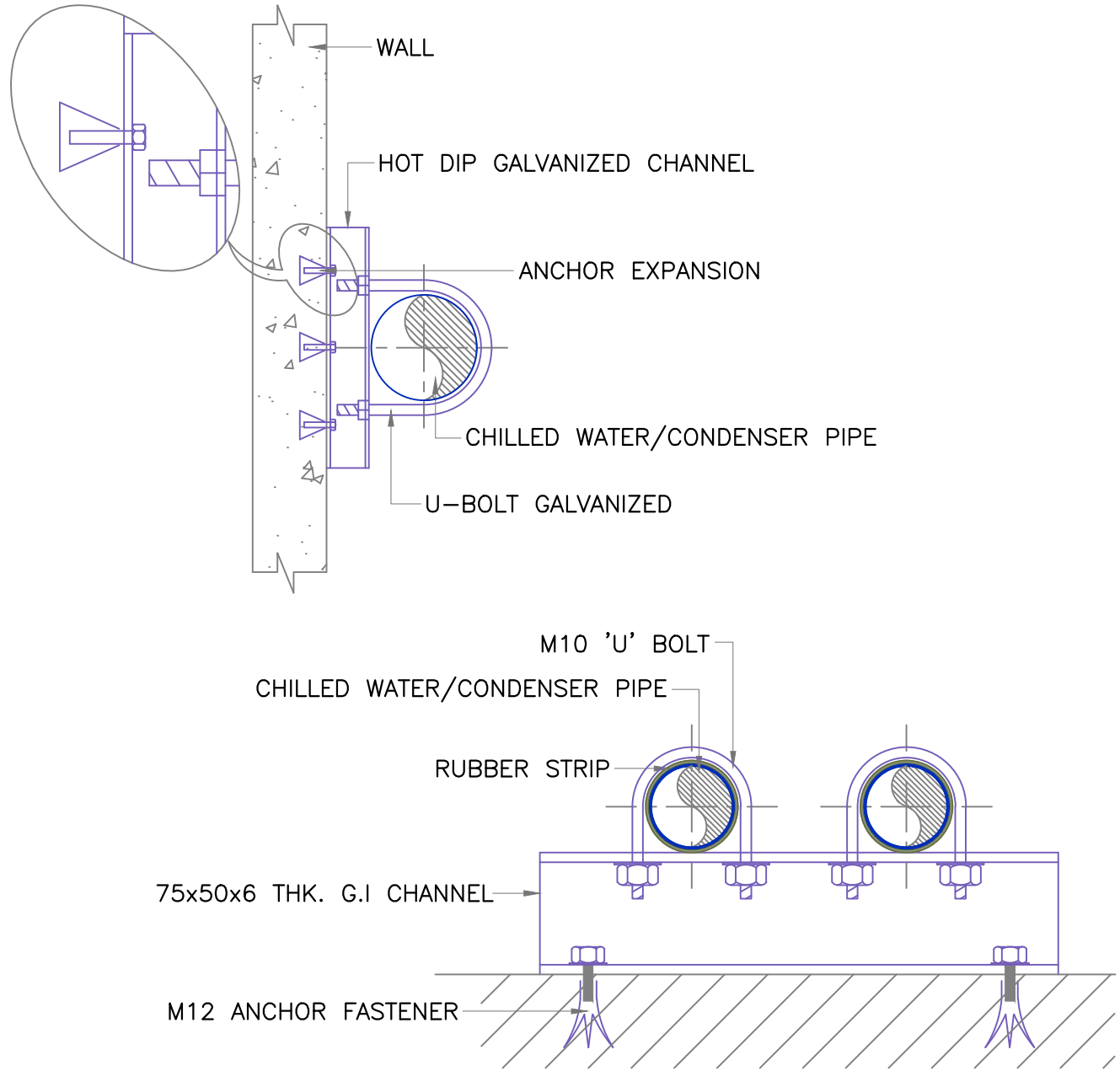


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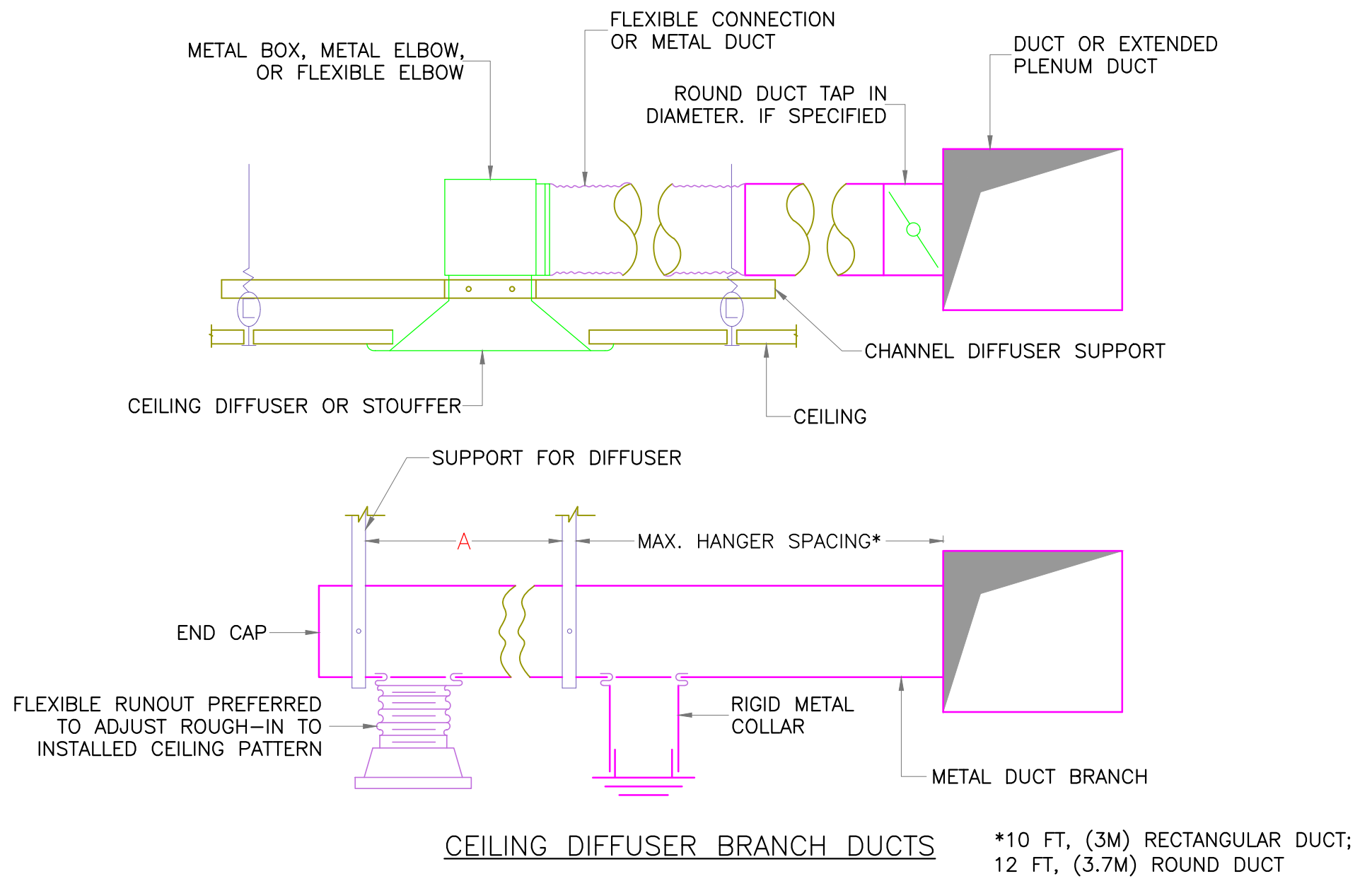
PROJECT
CONSTRUCTION OF ADMINISTRATIVE OFFICE BUILDING IN PLACE OF P& C BUILDING OUTSIDE CARGO JETTY AREA AT KANDLA, DEENDAYAL PORT AUTHORITY

TITLE
TYPICAL HVAC FIXING & SUPPORTING DETAILS

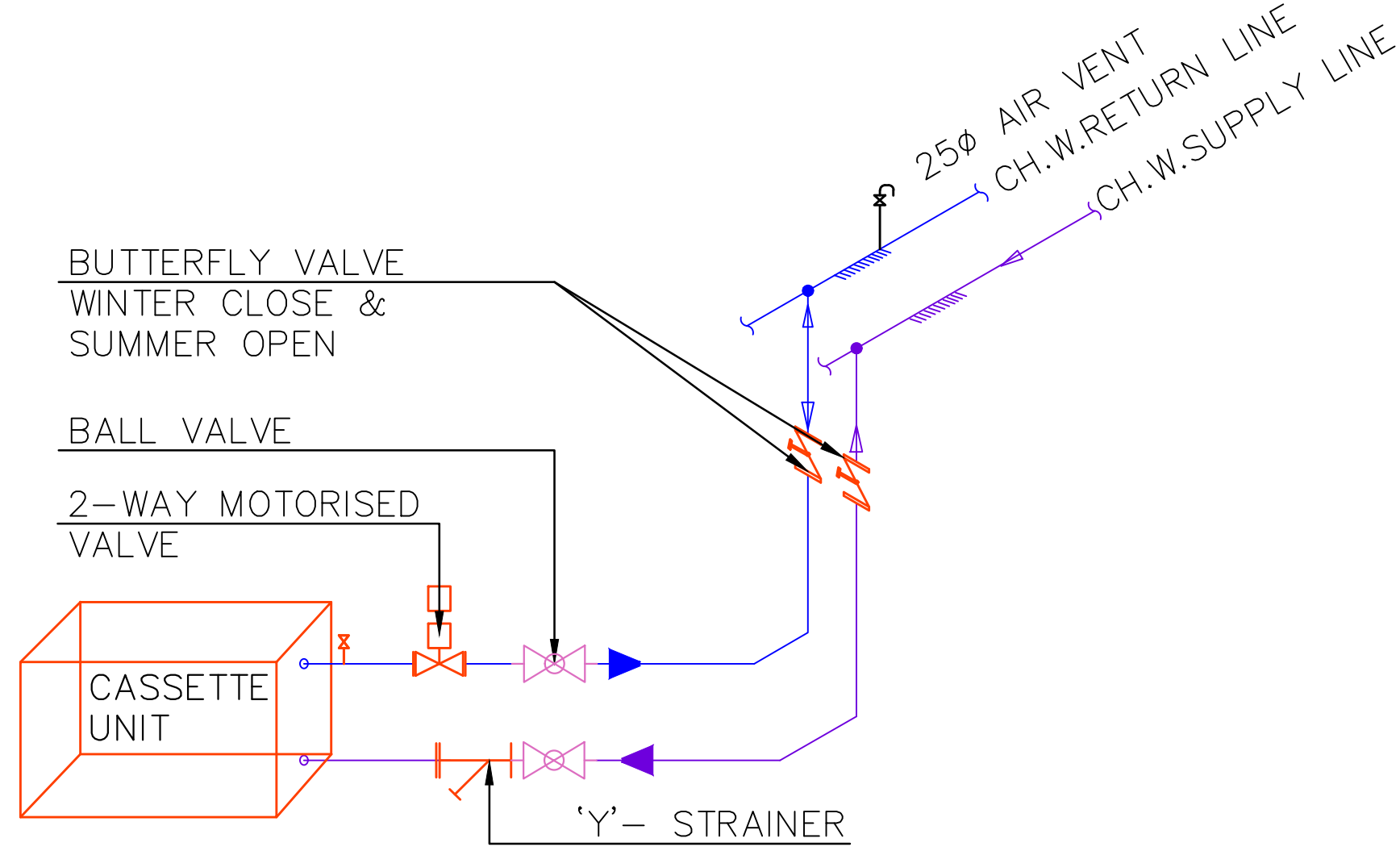
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DEPARTMENT MEP (DESIGN)	DOC. STATUS FOR TENDER		
DGN. KETUL S.	PROJECT NO. GDBU23005		
DRN. KARAN B.	DRAWING NO.	SHEET NO. 02 OF 11	REV. R0
CHD. BHAVIK P.	GDBU23005-MEP-02		
SCALE NTS	ISSUE DATE 25-06-2024		
REF. DRG. NO.			SHT. NO.
DEENDAYAL PORT AUTHORITY PROJECT DIVISION			
DATE			
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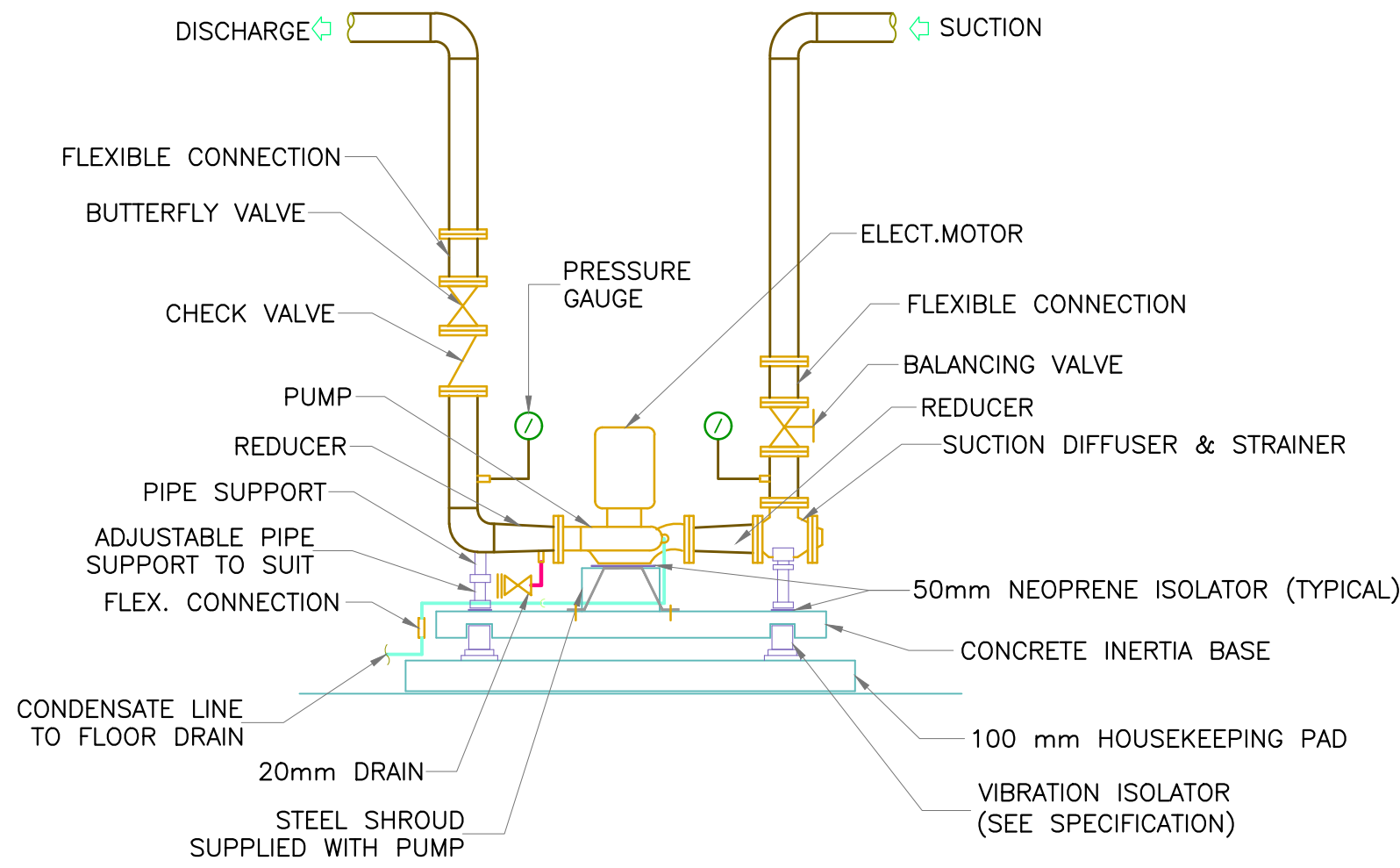
1 TYPICAL SUPPORT DETAILS FOR HVAC PIPES
SCALE: NTS



2 BRANCH DUCT CEILING DIFFUSERS TYPICAL DETAIL
SCALE: NTS



3 TYPICAL COIL CONNECTION DETAIL FOR CASSETTE UNITS
SCALE: NTS



4 TYPICAL PUMP INSTALLATION DETAILS
SCALE: NTS

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REVISION			
PROJECT			
CONSTRUCTION OF ADMINISTRATIVE OFFICE BUILDING IN PLACE OF P & C BUILDING OUTSIDE CARGO JETTY AREA AT KANDLA, DEENDAYAL PORT AUTHORITY			
TITLE			
TYPICAL HVAC FIXING & SUPPORTING DETAILS			
APPROVED BY PARIN SHAH, P.Eng. (India)		REGD. OFFICE B-10, Krishna Industrial Estate, Opp. BIDD Gorwa, Vadodara- 390016 (Guj.) India. Ph: +91 265 2290222. Email: mep@geogroup.in	
DEPARTMENT	MEP (DESIGN)	DOC. STATUS	FOR TENDER
DGN.	KETUL S.	PROJECT NO.	GDBU23005
DRN.	KARAN B.	DRAWING NO.	SHEET NO.
CHD.	BHAVIK P.	25-06-2024	03 OF 11
SCALE	NTS	GDBU23005-MEP-02	R0
ISSUE DATE	25-06-2024		
REF. DRG. NO.			SHT. NO.
DATE		DEENDAYAL PORT AUTHORITY PROJECT DIVISION	
JE (E)		AXEN (E)	XEN(EN)



NOTES:

1. THIS IS A TENDER DRAWING. THE CONTRACTOR SHALL PREPARE SHOP DRAWING, COORDINATED WITH ARCH., STR. AS WELL AS MEP DISCIPLINES, AND SUBMIT IT TO THE ENGINEER-IN-CHARGE FOR THE APPROVAL OF THE MEP CONSULTANT AND AFTER THAT THE A.O. / REPRESENTATIVE BEFORE COMMENCEMENT OF THE WORK.
2. THE HVAC LAYOUT IS BASED ON ARCHITECTURAL DRAWINGS AVAILABLE AT THE TIME OF DESIGN.
3. THESE DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED ONLY TO DEFINE THE BASIC FUNCTIONS REQUIRED. ACCESSORIES REQUIRED FOR PROPER OPERATION OF THE SYSTEMS, EVEN THOUGH NOT SPECIFICALLY INDICATED, SHALL BE INCLUDED AND INSTALLED.
4. LOCATION OF FCU SHALL BE FURNISHED UPON FINALIZATION OF THE RCP LAYOUT, COORDINATION OF ARCH., STR. AND MEP DISCIPLINES AND CLASH RESOLUTION.
5. ALL CHILLED WATER CASSETTE TYPE FCU SHALL BE PROVIDED WITH DRAIN PAN.
6. CHILLED WATER CASSETTE TYPE FCU'S DRAIN PIPING SHALL BE PROVIDED WITH ADEQUATE SLOPE. IF REQUIRED, IT SHALL BE CONNECTED WITH NEAREST DRAIN STACK.

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PROJECT
CONSTRUCTION OF ADMINISTRATIVE OFFICE
BUILDING IN PLACE OF P & C BUILDING OUTSIDE
CARGO JETTY AREA AT KANDLA, DEENDAYAL
PORT AUTHORITY

NAME OF WORK

ADMINISTRATIVE BUILDING

TITLE

HVAC LAYOUT- GROUND FLOOR PLAN



**GEO DESIGNS &
RESEARCH (P) LTD.**

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APPROVED BY
PARIN SHAH, P.Eng.

DEPARTMENT	MEP (DESIGN)
DGN	KETILL S

DGN.	RETUL S.
DRN.	KARAN B.

CHD.	BHAVIK P.
SCALE	AS SHOWN

ISSUE DATE
REF. DRG. NO.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	52
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DEENDAYAL PORT AUTHORITY
PROJECT DIVISION

SHT. NC

JE (E)

AXEN (E)

XEN(EN)



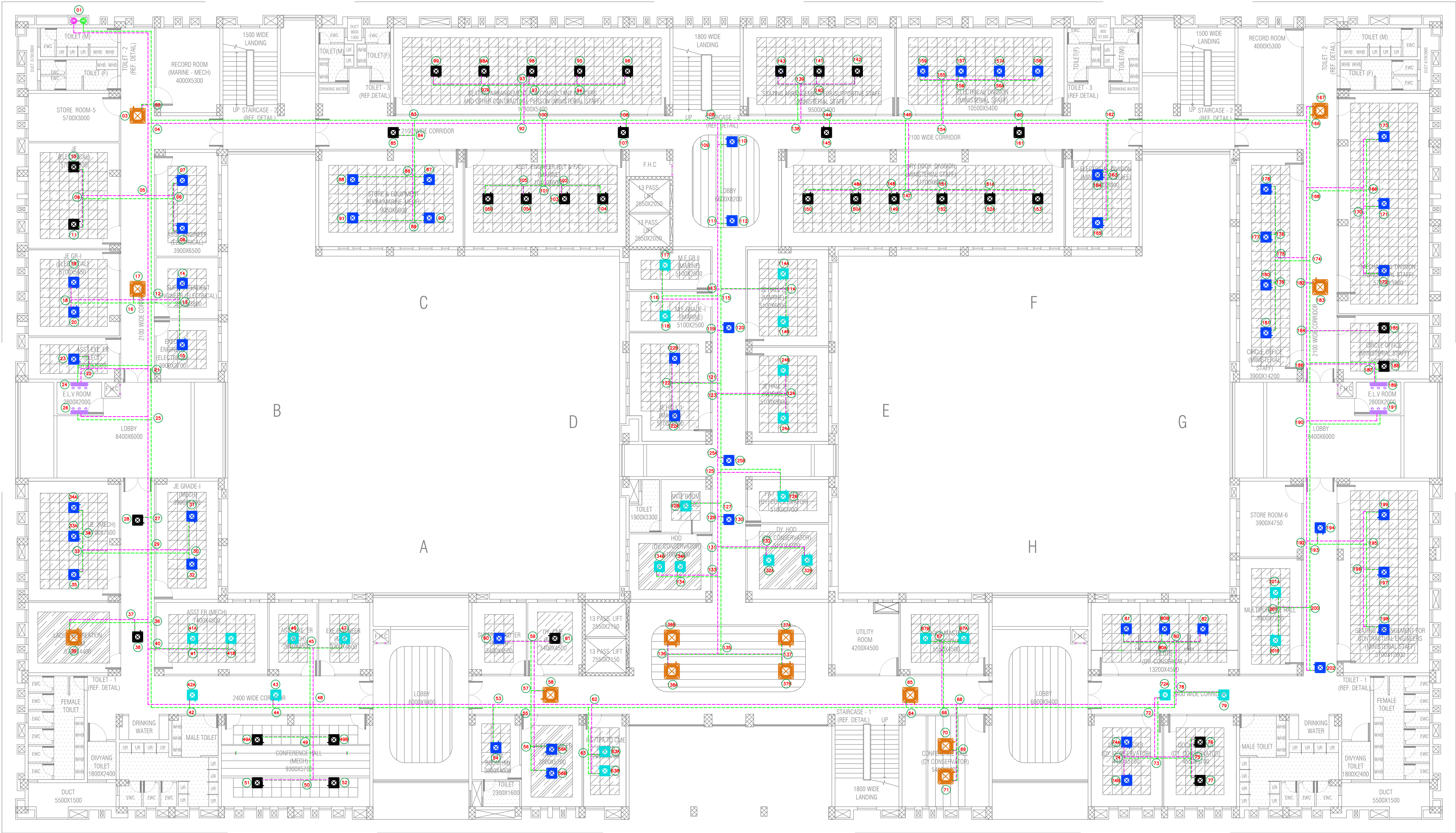
1 FIRST FLOOR PLAN
SCALE 1:150

LEGEND			
SL. NO.	DESCRIPTION	SYMBOL	QTY.
01	CHILLED WATER CASSETTE UNIT (0.9 TR, 330 CFM MIN.)		41
02	CHILLED WATER CASSETTE UNIT (1.1 TR, 422 CFM MIN.)		27
03	CHILLED WATER CASSETTE UNIT (1.2 TR, 462 CFM MIN.)		09
04	CHILLED WATER CASSETTE UNIT (1.6 TR, 667 CFM MIN.)		05
05	CHILLED WATER HI-WALL UNIT (0.8 TR, 300 CFM MIN.)		01
06	CHILLED WATER HI-WALL UNIT (1.4 TR, 600 CFM MIN.)		04
07	SUPPLY LINE		--
08	RETURN LINE		--

NOTES:

- THIS IS A TENDER DRAWING. THE CONTRACTOR SHALL PREPARE SHOP DRAWING, COORDINATED WITH ARCH., STR. AS WELL AS MEP DISCIPLINES, AND SUBMIT IT TO THE ENGINEER-IN-CHARGE FOR THE APPROVAL OF THE MEP CONSULTANT AND AFTER THAT THE A.O. / REPRESENTATIVE BEFORE COMMENCEMENT OF THE WORK.
- THE HVAC LAYOUT IS BASED ON ARCHITECTURAL DRAWINGS AVAILABLE AT THE TIME OF DESIGN.
- THESE DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED ONLY TO DEFINE THE BASIC FUNCTIONS REQUIRED. ACCESSORIES REQUIRED FOR PROPER OPERATION OF THE SYSTEMS, EVEN THOUGH NOT SPECIFICALLY INDICATED, SHALL BE INCLUDED AND INSTALLED.
- LOCATION OF FCU SHALL BE FURNISHED UPON FINALIZATION OF THE RCP LAYOUT, COORDINATION OF ARCH., STR. AND MEP DISCIPLINES AND CLASH RESOLUTION.
- ALL CHILLED WATER CASSETTE TYPE FCU SHALL BE PROVIDED WITH DRAIN PAN.
- CHILLED WATER CASSETTE TYPE FCU'S DRAIN PIPING SHALL BE PROVIDED WITH ADEQUATE SLOPE. IF REQUIRED, IT SHALL BE CONNECTED WITH NEAREST DRAIN STACK.

R0	25-06-2024	ISSUED FOR TENDER	BHAVIK P.
REV. NO.	DATE	DESCRIPTION	SIGNATURE
REVISION			
PROJECT			
CONSTRUCTION OF ADMINISTRATIVE OFFICE BUILDING IN PLACE OF P& C BUILDING OUTSIDE CARGO JETTY AREA AT KANDLA, DEENDAYAL PORT AUTHORITY			
NAME OF WORK			
ADMINISTRATIVE BUILDING			
TITLE			
HVAC LAYOUT- FIRST FLOOR PLAN			
APPROVED BY PARIN SHAH, P.Eng. (India)		REGD. OFFICE B-10, Krishna Industrial Estate, Opp. BIDD Gorwa, Vadodara- 390016 (Guj.) India. Ph: +91 265 2290222. Email: mep@geogroup.in	
DEPARTMENT	MEP (DESIGN)	DOC. STATUS	FOR TENDER
DGN.	KETUL S.	PROJECT NO.	GDBU23005
DRN.	KARAN B.	DRAWING NO.	SHEET NO.
CHD.	BHAVIK P.	GDBU23005-MEP-02	05 OF 11
SCALE	AS SHOWN		R0
ISSUE DATE	25-06-2024		
REF. DRG. NO.			SHT. NO.
DEENDAYAL PORT AUTHORITY PROJECT DIVISION			
DATE			
JE (E)		AXEN (E)	XEN(EN)



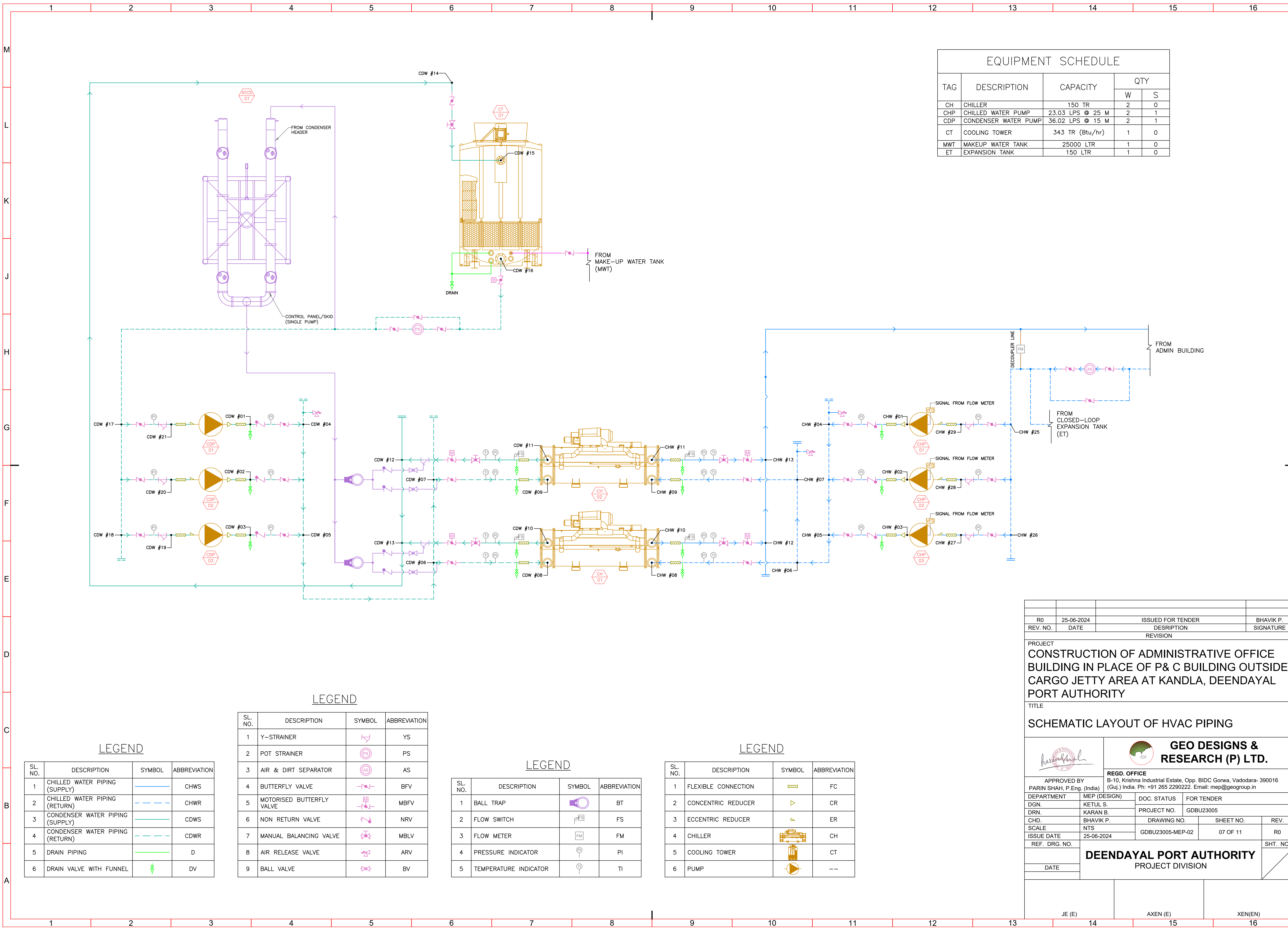
1 SECOND FLOOR PLAN
SCALE 1:150

LEGEND			
SL. NO.	DESCRIPTION	SYMBOL	QTY.
01	CHILLED WATER CASSETTE UNIT (0.9 TR, 330 CFM MIN.)		26
02	CHILLED WATER CASSETTE UNIT (1.1 TR, 422 CFM MIN.)		51
03	CHILLED WATER CASSETTE UNIT (1.2 TR, 462 CFM MIN.)		35
04	CHILLED WATER CASSETTE UNIT (1.6 TR, 667 CFM MIN.)		13
05	CHILLED WATER HI-WALL UNIT (1.4 TR, 600 CFM MIN.)		04
06	SUPPLY LINE		--
07	RETURN LINE		--

NOTES:

- THIS IS A TENDER DRAWING. THE CONTRACTOR SHALL PREPARE SHOP DRAWING, COORDINATED WITH ARCH., STR. AS WELL AS MEP DISCIPLINES, AND SUBMIT IT TO THE ENGINEER-IN-CHARGE FOR THE APPROVAL OF THE MEP CONSULTANT AND AFTER THAT THE A.O. / REPRESENTATIVE BEFORE COMMENCEMENT OF THE WORK.
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- CHILLED WATER CASSETTE TYPE FCU'S DRAIN PIPING SHALL BE PROVIDED WITH ADEQUATE SLOPE. IF REQUIRED, IT SHALL BE CONNECTED WITH NEAREST DRAIN STACK.

R0	25-06-2024	ISSUED FOR TENDER	BHAVIK P.
REV. NO.	DATE	DESCRIPTION	SIGNATURE
REVISION			
PROJECT			
CONSTRUCTION OF ADMINISTRATIVE OFFICE BUILDING IN PLACE OF P& C BUILDING OUTSIDE CARGO JETTY AREA AT KANDLA, DEENDAYAL PORT AUTHORITY			
NAME OF WORK			
ADMINISTRATIVE BUILDING			
TITLE			
HVAC LAYOUT- SECOND FLOOR PLAN			
APPROVED BY PARIN SHAH, P.Eng. (India)		REGD. OFFICE B-10, Krishna Industrial Estate, Opp. BIDD Gorwa, Vadodara- 390016 (Guj.) India. Ph: +91 265 2290222. Email: mep@geogroup.in	
DEPARTMENT	MEP (DESIGN)	DOC. STATUS	FOR TENDER
DGN.	KETUL S.	PROJECT NO.	GDBU23005
DRN.	KARAN B.	DRAWING NO.	SHEET NO.
CHD.	BHAVIK P.	GDBU23005-MEP-02	06 OF 11
SCALE	AS SHOWN		R0
ISSUE DATE	25-06-2024		
REF. DRG. NO.			SHT. NO.
DATE		DEENDAYAL PORT AUTHORITY PROJECT DIVISION	



EQUIPMENT SCHEDULE				
TAG	DESCRIPTION	CAPACITY	QTY	
			W	S
CH	CHILLER	150 TR	2	0
CHP	CHILLED WATER PUMP	23.03 LPS @ 25 M	2	1
CDP	CONDENSER WATER PUMP	36.02 LPS @ 15 M	2	1
CT	COOLING TOWER	343 TR (Btu/hr)	1	0
MWT	MAKEUP WATER TANK	25000 LTR	1	0
ET	EXPANSION TANK	150 LTR	1	0

LEGEND

SL. NO.	DESCRIPTION	SYMBOL	ABBREVIATION
1	Y-STRAINER		YS
2	POT STRAINER		PS
3	AIR & DIRT SEPARATOR		AS
4	BUTTERFLY VALVE		BFV
5	MOTORISED BUTTERFLY VALVE		MBFV
6	NON RETURN VALVE		NRV
7	MANUAL BALANCING VALVE		MBLV
8	AIR RELEASE VALVE		ARV
9	BALL VALVE		BV

LEGEND



SL. NO.	DESCRIPTION	SYMBOL	ABBREVIATION
1	CHILLED WATER PIPING (SUPPLY)		CHWS
2	CHILLED WATER PIPING (RETURN)		CHWR
3	CONDENSER WATER PIPING (SUPPLY)		CDWS
4	CONDENSER WATER PIPING (RETURN)		CDWR
5	DRAIN PIPING		D
6	DRAIN VALVE WITH FUNNEL		DV

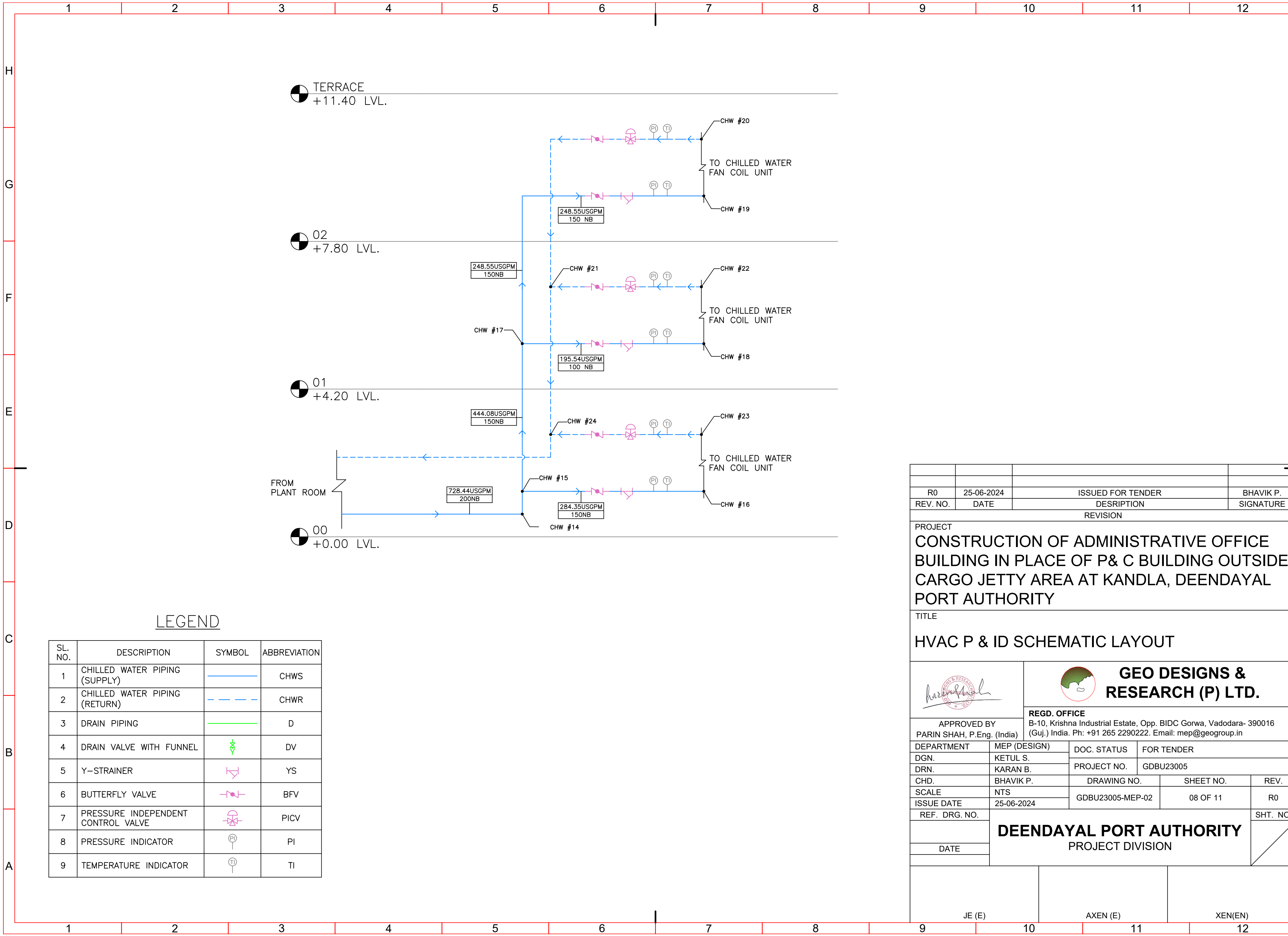
LEGEND



SL. NO.	DESCRIPTION	SYMBOL	ABBREVIATION
1	BALL TRAP		BT
2	FLOW SWITCH		FS
3	FLOW METER		FM
4	PRESSURE INDICATOR		PI
5	TEMPERATURE INDICATOR		TI

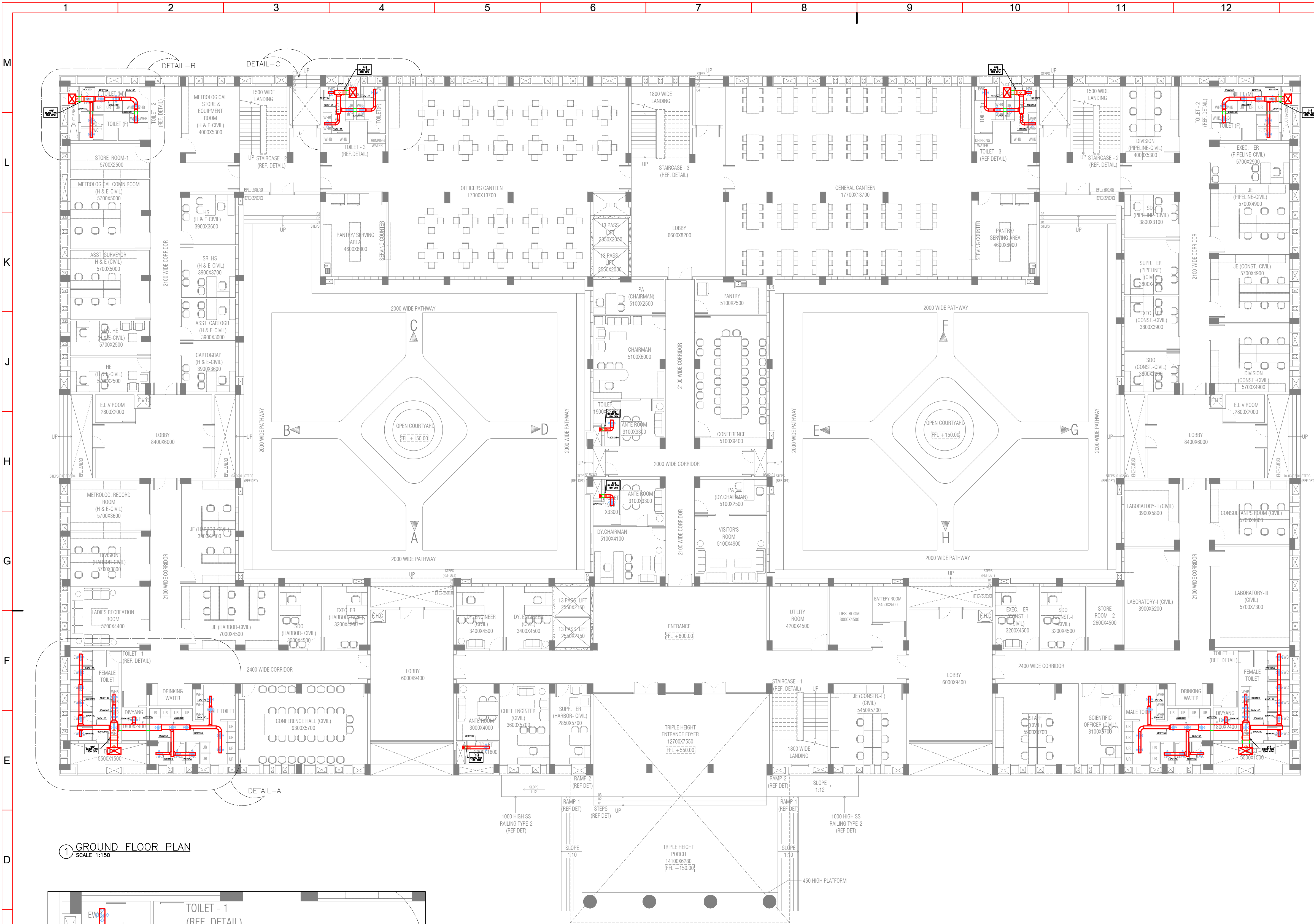
LEGEND

SL. NO.	DESCRIPTION	SYMBOL	ABBREVIATION
1	FLEXIBLE CONNECTION		FC
2	CONCENTRIC REDUCER		CR
3	ECCENTRIC REDUCER		ER
4	CHILLER		CH
5	COOLING TOWER		CT
6	PUMP		--

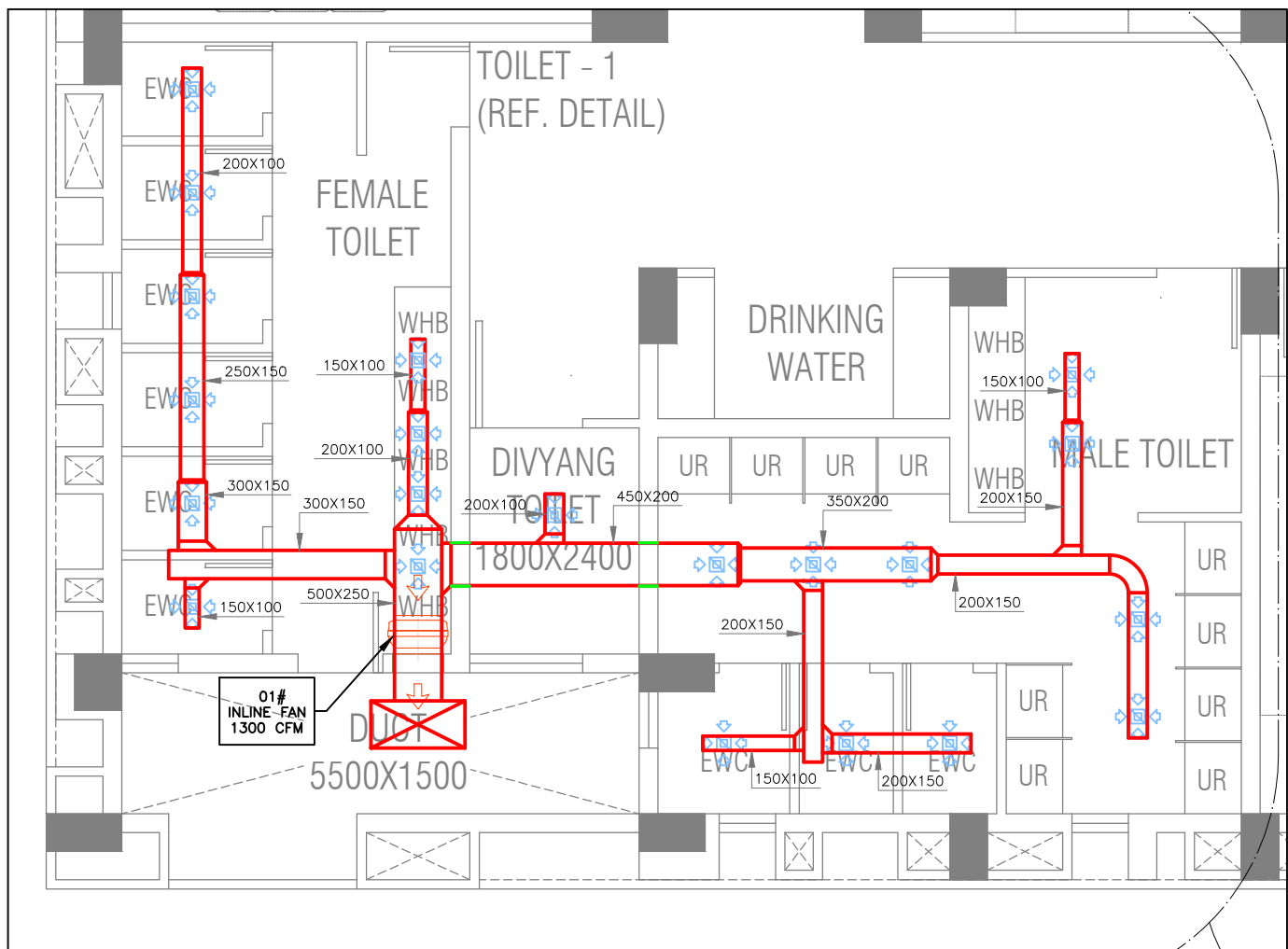
R0		25-06-2024		ISSUED FOR TENDER		BHAVIK P.	
REV. NO.		DATE		DESCRIPTION		SIGNATURE	
REVISION							
PROJECT							
CONSTRUCTION OF ADMINISTRATIVE OFFICE BUILDING IN PLACE OF P& C BUILDING OUTSIDE CARGO JETTY AREA AT KANDLA, DEENDAYAL PORT AUTHORITY							
TITLE							
SCHEMATIC LAYOUT OF HVAC PIPING							
		 <div>GEO DESIGNS & RESEARCH (P) LTD.</div>					
APPROVED BY PARIN SHAH, P.Eng. (India)		REGD. OFFICE B-10, Krishna Industrial Estate, Opp. BIDD Gorwa, Vadodara- 390016 (Guj.) India. Ph: +91 265 2290222. Email: mep@geogroup.in					
DEPARTMENT		MEP (DESIGN)		DOC. STATUS		FOR TENDER	
DGN.		KETUL S.		PROJECT NO.		GDBU23005	
DRN.		KARAN B.		DRAWING NO.		SHEET NO.	
CHD.		BHAVIK P.				REV.	
SCALE		NTS		GDBU23005-MEP-02		07 OF 11	
ISSUE DATE		25-06-2024				R0	
REF. DRG. NO.						SHT. NO.	
DATE		<div>DEENDAYAL PORT AUTHORITY</div> <div>PROJECT DIVISION</div>					
JE (E)		AXEN (E)		XEN(EN)			



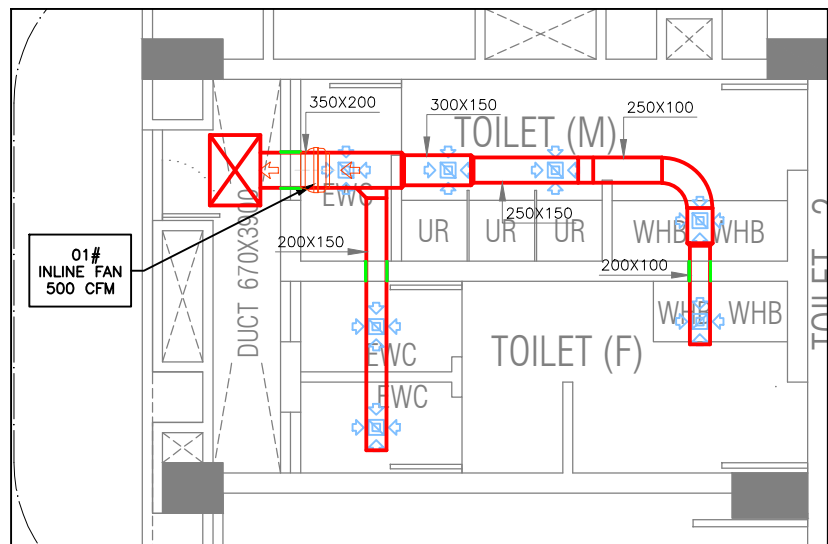
R0	25-06-2024	ISSUED FOR TENDER	BHAVIK P.	
REV. NO.	DATE	DESCRIPTION	SIGNATURE	
REVISION				
PROJECT				
CONSTRUCTION OF ADMINISTRATIVE OFFICE BUILDING IN PLACE OF P& C BUILDING OUTSIDE CARGO JETTY AREA AT KANDLA, DEENDAYAL PORT AUTHORITY				
TITLE				
HVAC P & ID SCHEMATIC LAYOUT				
		 <div>GEO DESIGNS & RESEARCH (P) LTD.</div>		
APPROVED BY PARIN SHAH, P.Eng. (India)		REGD. OFFICE B-10, Krishna Industrial Estate, Opp. BIDC Gorwa, Vadodara- 390016 (Guj.) India. Ph: +91 265 2290222. Email: mep@geogroup.in		
DEPARTMENT	MEP (DESIGN)	DOC. STATUS	FOR TENDER	
DGN.	KETUL S.	PROJECT NO.	GDBU23005	
DRN.	KARAN B.			
CHD.	BHAVIK P.	DRAWING NO.	SHEET NO.	REV.
SCALE	NTS	GDBU23005-MEP-02	08 OF 11	R0
ISSUE DATE	25-06-2024			
REF. DRG. NO.	DEENDAYAL PORT AUTHORITY PROJECT DIVISION			SHT. NO.
DATE				
JE (E)		AXEN (E)		XEN(EN)
9	10	11	12	



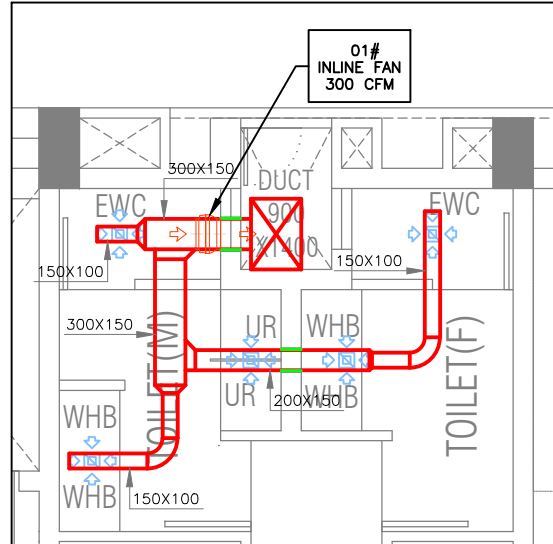
1 GROUND FLOOR PLAN
SCALE 1:150



1 DETAIL-A
SCALE 1:75



1 DETAIL-B
SCALE 1:75



1 DETAIL-C
SCALE 1:75

LEGEND

SL. NO.	DESCRIPTION	SYMBOL	QTY.
1	EXHAUST AIR DUCT		-
2	INLINE EXHAUST AIR FAN		06
3	EXHAUST AIR DIFFUSER (NECK SIZE 150MM X 150MM)		66

NOTES:

- THIS IS A TENDER DRAWING. THE CONTRACTOR SHALL PREPARE SHOP DRAWING, COORDINATED WITH ARCH., STR. AS WELL AS MEP DISCIPLINES, AND SUBMIT IT TO THE ENGINEER-IN-CHARGE FOR THE APPROVAL OF THE MEP CONSULTANT AND AFTER THAT THE A.O. / REPRESENTATIVE BEFORE COMMENCEMENT OF THE WORK.
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- LOCATION OF EXHAUST AIR DIFFUSER SHALL BE FURNISHED UPON FINALIZATION OF THE RCP LAYOUT, COORDINATION OF ARCH., STR. AND MEP DISCIPLINES AND CLASH RESOLUTION.
- ALL INLINE EXHAUST AIR DIFFUSER SHALL BE PROVIDED WITH DUCTING FOR TOILET VENTILATION.

R0	25-06-2024	ISSUED FOR TENDER	BHAVIK P.
REV. NO.	DATE	DESCRIPTION	SIGNATURE
		REVISION	

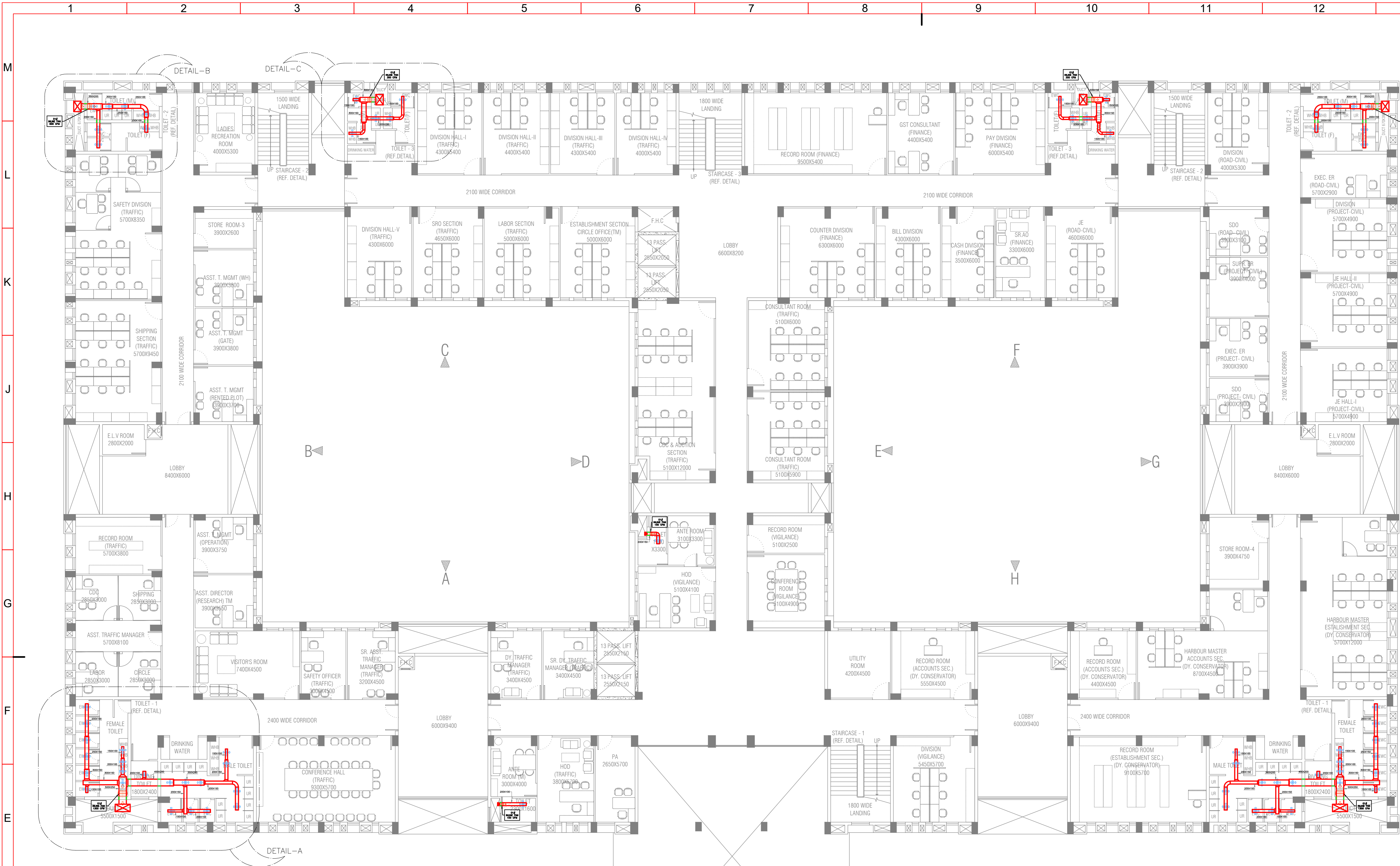
PROJECT
CONSTRUCTION OF ADMINISTRATIVE OFFICE BUILDING IN PLACE OF P & C BUILDING OUTSIDE CARGO JETTY AREA AT KANDLA, DEENDAYAL PORT AUTHORITY

NAME OF WORK

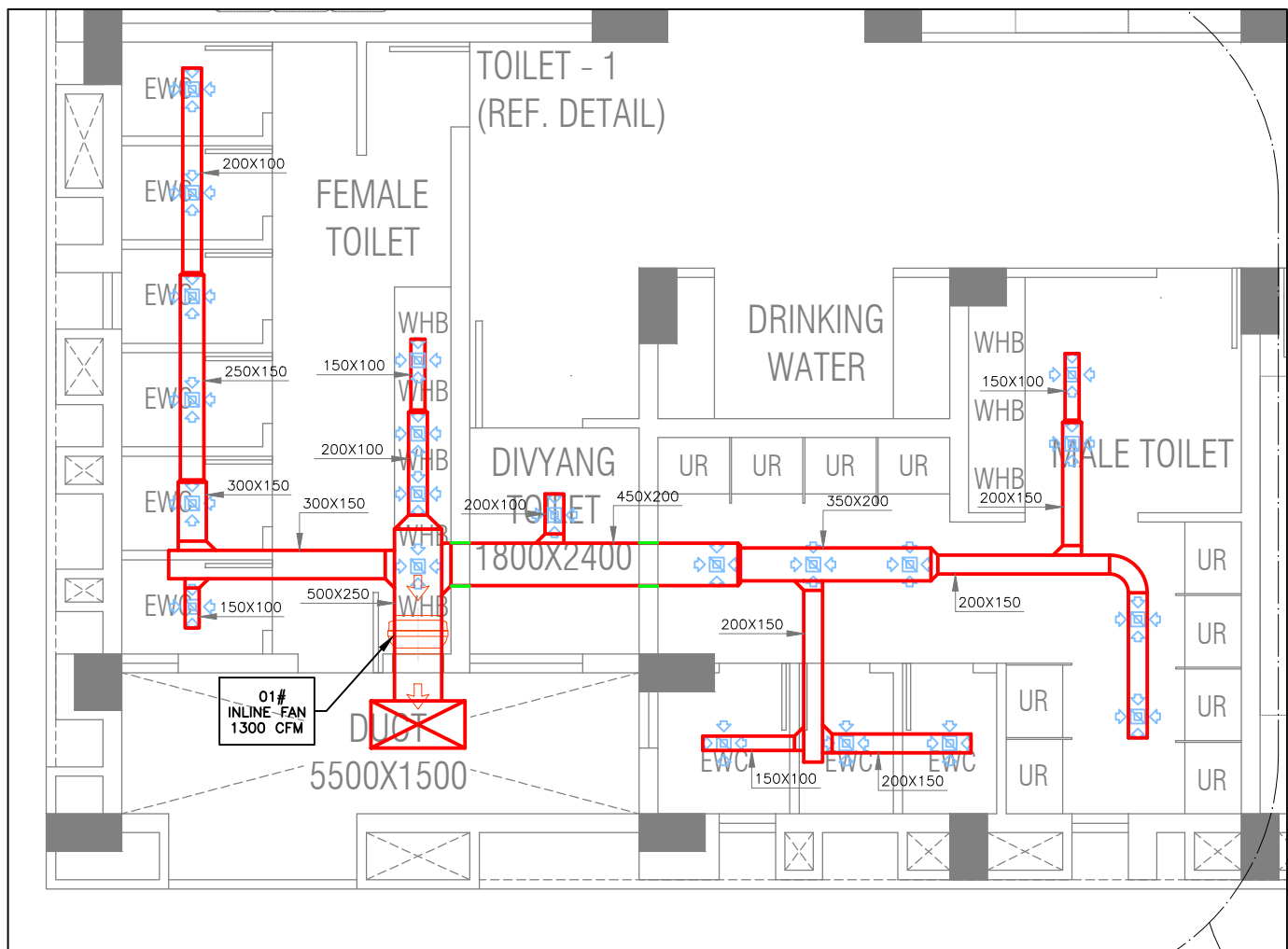
ADMINISTRATIVE BUILDING

TITLE
HVAC VENTILATION LAYOUT- GROUND FLOOR PLAN

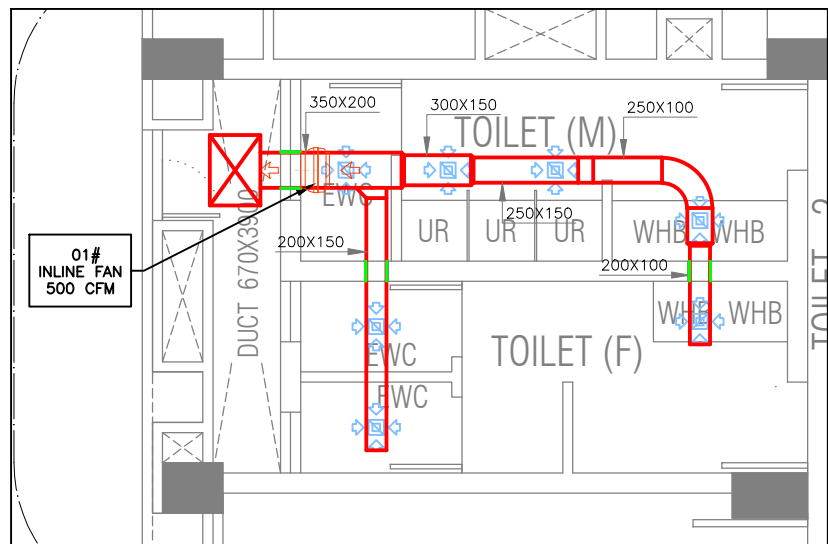
		GEO DESIGNS & RESEARCH (P) LTD.	
APPROVED BY PARIN SHAH, P.Eng. (India)		REGD. OFFICE B-10, Krishna Industrial Estate, Opp. BIDD Gorwa, Vadodara- 390016 (Guj.) India. Ph: +91 265 2290222. Email: mep@geogroup.in	
DEPARTMENT DGN. DRN. CHD. SCALE ISSUE DATE REF. DRG. NO.	MEP (DESIGN) KETUL S. KARAN B. BHAVIK P. AS SHOWN 25-06-2024	DOC. STATUS FOR TENDER PROJECT NO. DRAWING NO. GDBU23005	SHEET NO. REV. 09 OF 11 R0
DATE		DEENDAYAL PORT AUTHORITY PROJECT DIVISION	
JE (E)		AXEN (E)	
		XEN (EN)	



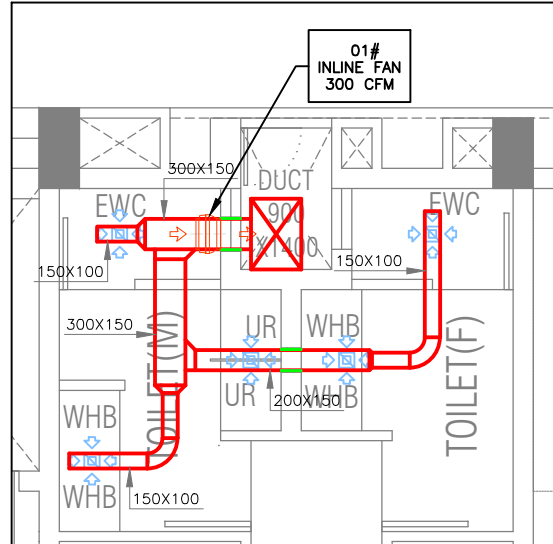
1 FIRST FLOOR PLAN
SCALE 1:150



1 DETAIL-A
SCALE 1:75



1 DETAIL-B
SCALE 1:75



1 DETAIL-C
SCALE 1:75

LEGEND

SL. NO.	DESCRIPTION	SYMBOL	QTY.
1	EXHUST AIR DUCT		-
2	INLINE EXHAUST AIR FAN		06
3	EXHAUST AIR DIFFUSER (NECK SIZE 150MM X 150MM)		66

NOTES:

- THIS IS A TENDER DRAWING. THE CONTRACTOR SHALL PREPARE SHOP DRAWING, COORDINATED WITH ARCH., STR. AS WELL AS MEP DISCIPLINES, AND SUBMIT IT TO THE ENGINEER-IN-CHARGE FOR THE APPROVAL OF THE MEP CONSULTANT AND AFTER THAT THE A.O. / REPRESENTATIVE BEFORE COMMENCEMENT OF THE WORK.
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- ALL INLINE EXHAUST AIR DIFFUSER SHALL BE PROVIDED WITH DUCTING FOR TOILET VENTILATION.

R0	25-06-2024	ISSUED FOR TENDER	BHAVIK P.
REV. NO.	DATE	DESCRIPTION	SIGNATURE
		REVISION	

PROJECT
CONSTRUCTION OF ADMINISTRATIVE OFFICE
BUILDING IN PLACE OF P & C BUILDING OUTSIDE
CARGO JETTY AREA AT KANDLA, DEENDAYAL
PORT AUTHORITY

NAME OF WORK

ADMINISTRATIVE BUILDING

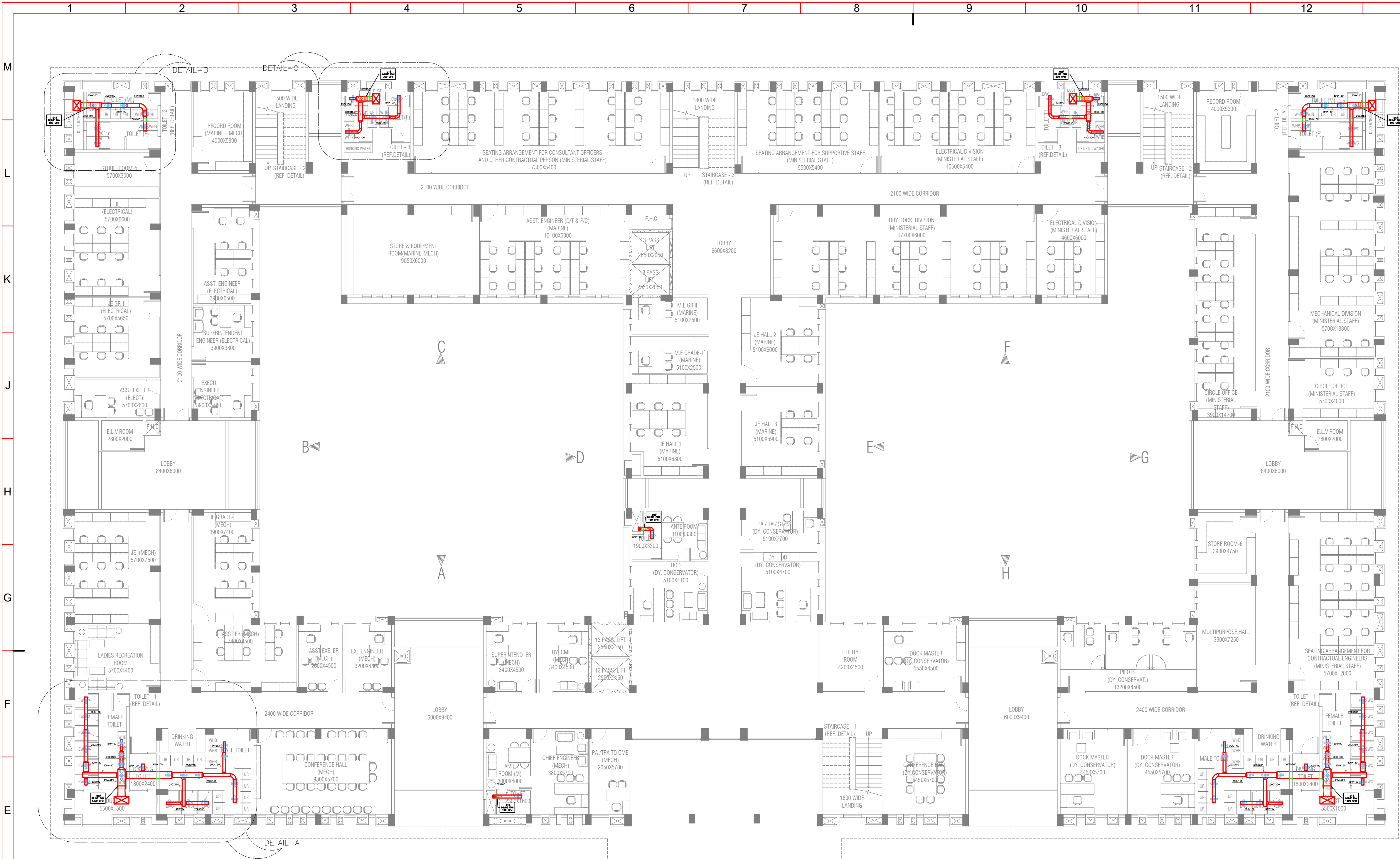
TITLE
HVAC VENTILATION LAYOUT- FIRST FLOOR
PLAN

APPROVED BY PARIN SHAH, P.Eng. (India)		REGD. OFFICE B-10, Krishna Industrial Estate, Opp. BIDC Gorwa, Vadodara- 390016 (Guj.) India. Ph: +91 265 2290222. Email: mep@geogroup.in	
DEPARTMENT	MEP (DESIGN)	DOC. STATUS	FOR TENDER
DGN.	KETUL S.	PROJECT NO.	GDBU23005
DRN.	KARAN B.	DRAWING NO.	SHEET NO.
CHD.	BHAVIK P.	GDBU23005-MEP-02	10 OF 11
SCALE	AS SHOWN		REV.
ISSUE DATE	25-06-2024		R0
REF. DRG. NO.			SHT. NO.
DATE		DEENDAYAL PORT AUTHORITY PROJECT DIVISION	

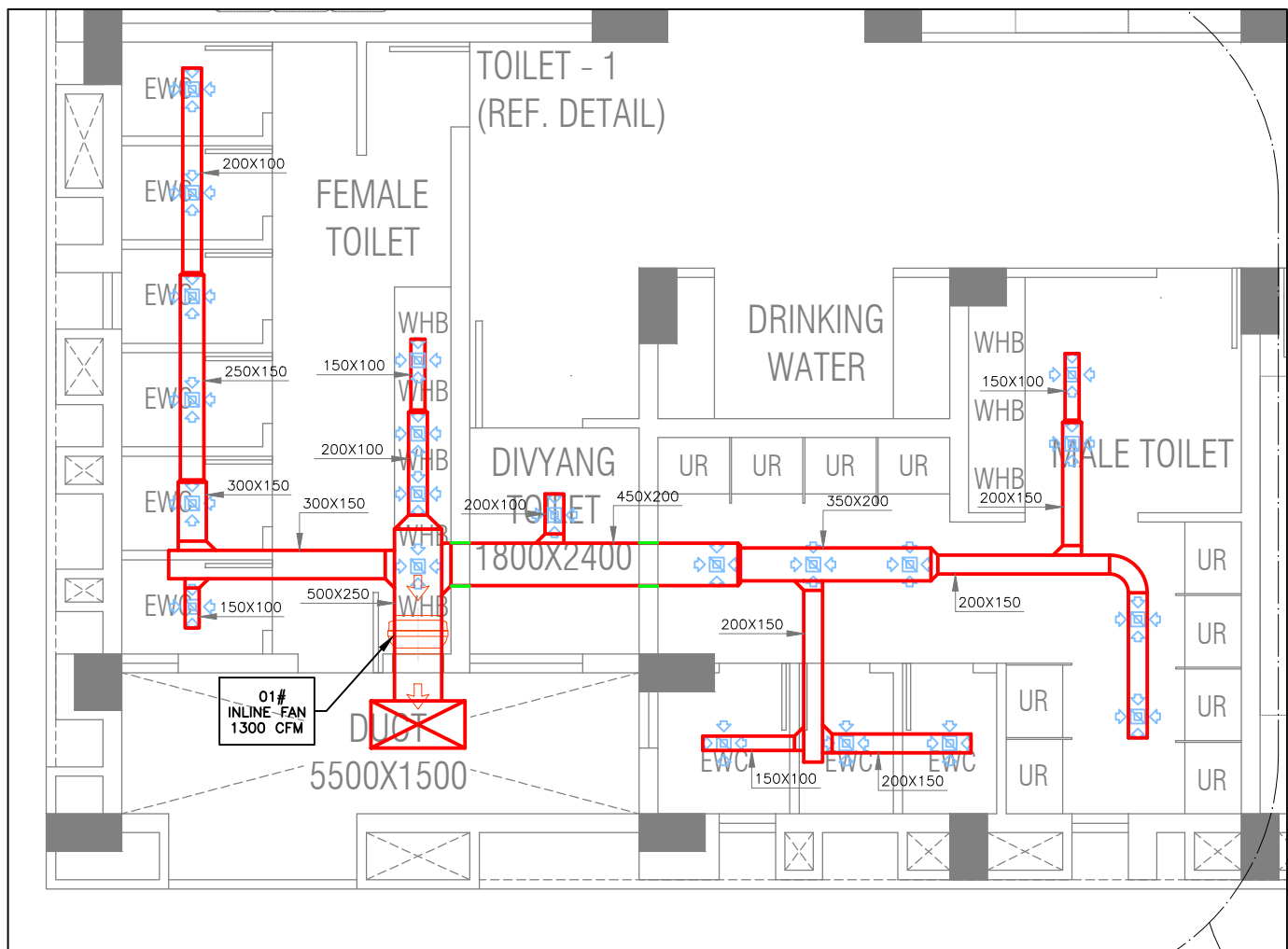
JE (E)

AXEN (E)

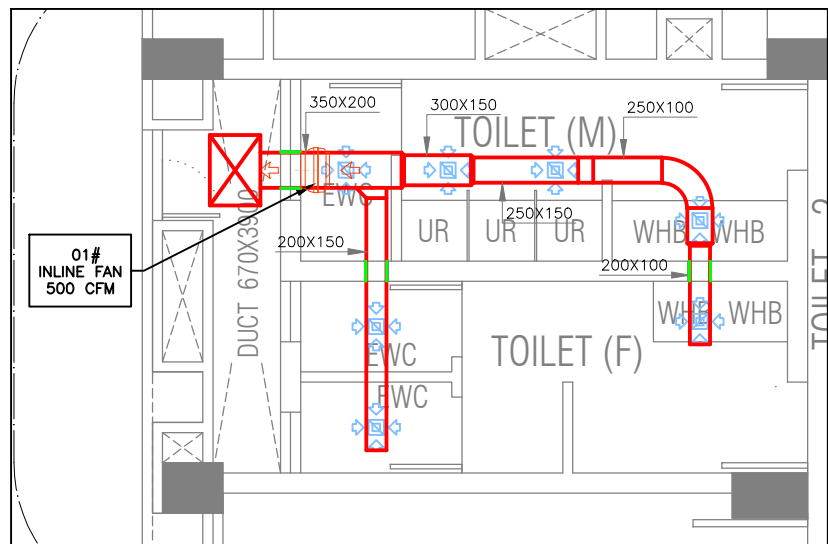
XEN(EN)



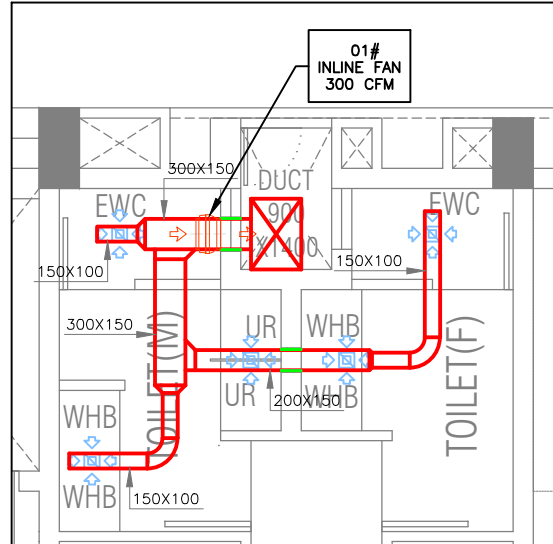
1 SECOND FLOOR PLAN
SCALE 1:150



1 DETAIL-A
SCALE 1:75



1 DETAIL-B
SCALE 1:75



1 DETAIL-C
SCALE 1:75

LEGEND

SL. NO.	DESCRIPTION	SYMBOL	QTY.
1	EXHAUST AIR DUCT		-
2	INLINE EXHAUST AIR FAN		06
3	EXHAUST AIR DIFFUSER (NECK SIZE 150MM X 150MM)		66

NOTES:

- THIS IS A TENDER DRAWING. THE CONTRACTOR SHALL PREPARE SHOP DRAWING, COORDINATED WITH ARCH., STR. AS WELL AS MEP DISCIPLINES, AND SUBMIT IT TO THE ENGINEER-IN-CHARGE FOR THE APPROVAL OF THE MEP CONSULTANT AND AFTER THAT THE A.O. / REPRESENTATIVE BEFORE COMMENCEMENT OF THE WORK.
- THE HVAC LAYOUT IS BASED ON ARCHITECTURAL DRAWINGS AVAILABLE AT THE TIME OF DESIGN.
- THESE DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED ONLY TO DEFINE THE BASIC FUNCTIONS REQUIRED. ACCESSORIES REQUIRED FOR PROPER OPERATION OF THE SYSTEMS, EVEN THOUGH NOT SPECIFICALLY INDICATED, SHALL BE INCLUDED AND INSTALLED.
- LOCATION OF EXHAUST AIR DIFFUSER SHALL BE FURNISHED UPON FINALIZATION OF THE RCP LAYOUT, COORDINATION OF ARCH., STR. AND MEP DISCIPLINES AND CLASH RESOLUTION.
- ALL INLINE EXHAUST AIR DIFFUSER SHALL BE PROVIDED WITH DUCTING FOR TOILET VENTILATION.

R0	25-06-2024	ISSUED FOR TENDER	BHAVIK P.
REV. NO.	DATE	DESCRIPTION	SIGNATURE
REVISION			

PROJECT
CONSTRUCTION OF ADMINISTRATIVE OFFICE
BUILDING IN PLACE OF P & C BUILDING OUTSIDE
CARGO JETTY AREA AT KANDLA, DEENDAYAL
PORT AUTHORITY

NAME OF WORK

ADMINISTRATIVE BUILDING

TITLE
HVAC VENTILATION LAYOUT- SECOND FLOOR
PLAN

APPROVED BY PARIN SHAH, P.Eng. (India)		REGD. OFFICE B-10, Krishna Industrial Estate, Opp. BIDC Gorwa, Vadodara- 390016 (Guj.) India. Ph: +91 265 2290222. Email: mep@geogroup.in	
DEPARTMENT	MEP (DESIGN)	DOC. STATUS	FOR TENDER
DGN.	KETUL S.	PROJECT NO.	GDBU23005
DRN.	KARAN B.	DRAWING NO.	SHEET NO.
CHD.	BHAVIK P.	GDBU23005-MEP-02	11 OF 11
SCALE	AS SHOWN		REV. R0
ISSUE DATE	25-06-2024		
REF. DRG. NO.			SHT. NO.
DEENDAYAL PORT AUTHORITY PROJECT DIVISION			
DATE			