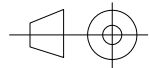





400/230 KV NORTHERN SITE INTERFACE S/S

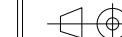



Earthing System Plan drawings

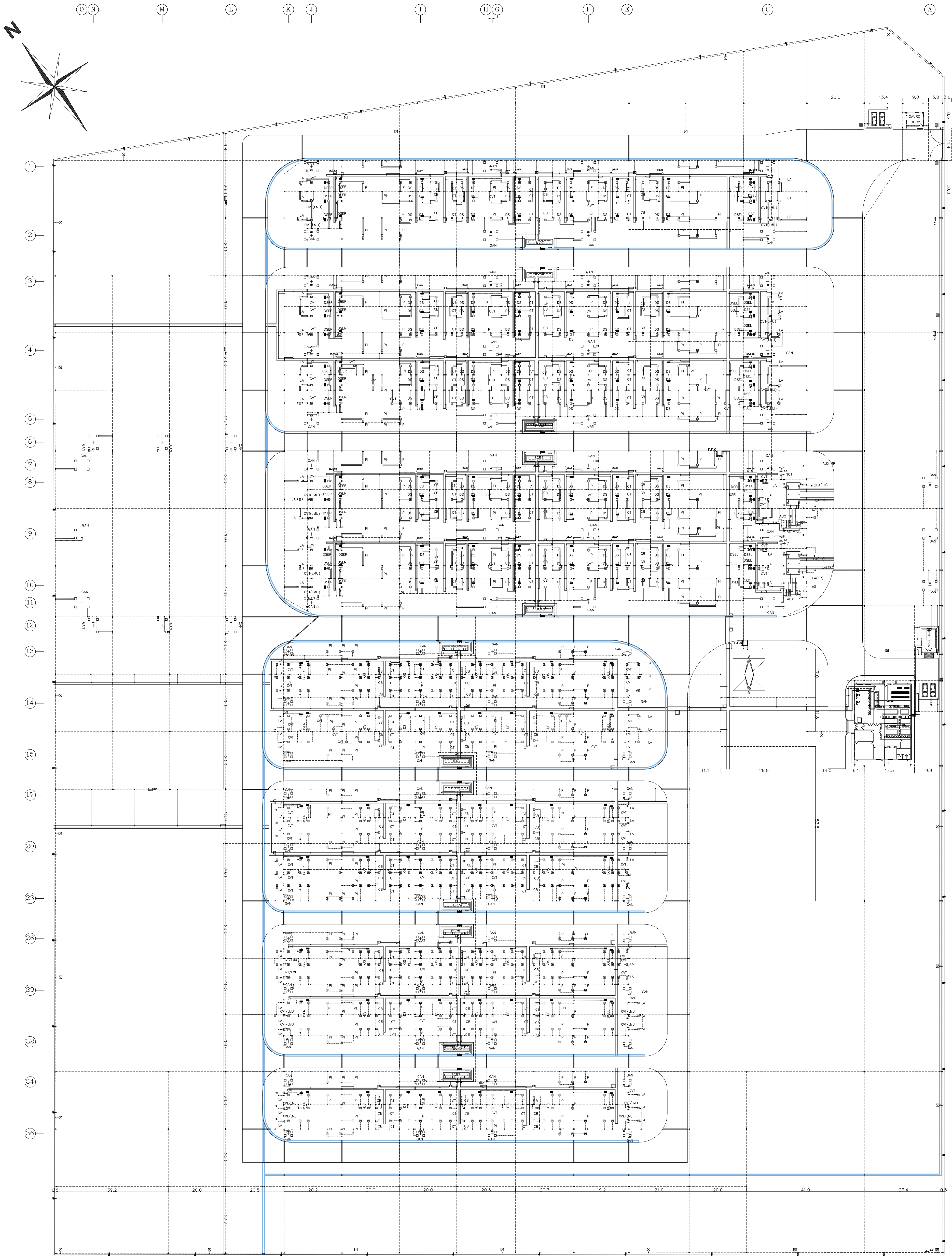
B		E.B	1405/02	ISSUE FOR APPROVE	
A		M.N	1403/10	ISSUE FOR APPROVE	
Z		M.N	1403/08	ORIGINAL ISSUE	
REV.	VERIFIED	DRAWN	DATE	DESCRIPTION	
		DATE:	NAME:	SCALE: –	STANDARD:
DRAWN		1405/02	E.BARZEGAR	SUBJECT: 400/230 KV NORTHERN SITE INTERFACE S/S Earthing System Plan drawings	
DESIGNED		1405/02	E.BARZEGAR		
CHECKED		1405/02	E.BARZEGAR		
APPROVED		1405/02	M.DANESHPOU		
CONTRACT NO:				DRAWING NO: 784301-TV-4-AS-2-KKK-3-EHV-018-1	
CONSULTANT:				CONTRACTOR:	
GHODS NIROO ENGINEERING COMPANY (G.N.E.C)		MOHAM SHARGH CO.			
CLIENT:					
P.G.M.I.S.E.Z					
CONSU. REF:		CONT. REF:		CLIEN REF:	





1	2	3	4	5	6	7	8																							
<div>NOTES :</div> <div>1 : ALL THE UNDER GROUND CONNECTIONS ARE CADWELD.</div> <div>2 : ALL THE ABOVE GROUND CONNECTIONS TO STRUCTURES ARE BOLTED.</div> <div>3 : MESH CONDUCTOR SIZE : 185mm2</div> <div>4 : RISER CONDUCTOR SIZE(400kv) : 2*150mm2</div> <div>RISER CONDUCTOR SIZE(230kv) : 240mm2</div> <div>RISER CONDUCTOR SIZE(LIGHTING POLE) : 35mm2</div> <div>RISER CONDUCTOR SIZE(BUILDING STRUCTURE(CONTROL ROOM,BCR ROOM, GUARD HOUSE) : 150mm2</div> <div>RISER CONDUCTOR SIZE(LV PANEL) : 2*35mm2</div> <div>RISER CONDUCTOR SIZE(AC/DC PANEL) : 150mm2</div> <div>RISER CONDUCTOR SIZE(WALL MOUNTED PANELS) : 35mm2</div> <div>RISER CONDUCTOR SIZE(JUNCTION BOX) : 35mm2</div> <div>5 : BURIAL DEPTH OF MESH CONDUCTORS IS −0.7m FROM SURFACE OF SOIL.</div> <div>6 : SURFACE LAYER THICKNESS (GRAVEL HEIGHT) IS 0.15m.</div> <div>7 : EARTH MAT MUST BE INSTALLED FOR DISCONNECTOR AND EARTHING SWITCH.</div> <div>8 : CABLE TRAYS MUST BE EARTHED AT INTERVALS MAXIMUM 15m.</div> <div>9 : GALVANIZED PIPE (ø 50mm) MUST BE CONSIDERED AT CROSSING OF EARTHING WIRE WITH TRENCH AND ROAD.</div> <div>10 : THE EQUIPMENTS MUST BE EARTHED BY RISERS FROM NEAREST PATH TO GROUND GRID (MAXIMUM RISER LENGTH: 6m)</div> <div>11 : CONECTIONS OF EARTH RISERS TO EQUIPMENTS ARE DIFINED AT EARTHING DETAIL DOCUMENT.</div> <div>12 : THE MAXIMUM LENGTH OF THE RISER BETWEEN THE EQUIPMENT IS 6 METERS.</div> <div>13 : THE DISTANCE BETWEEN THE RISERS OF THE FENCE IS 30 METERS FROM EACH OTHER.</div> <div>14 : ALL THE CONNECTION OF THE RISERS TO THE EQUIPMENT ARE DONE BY MEANS OF CABLE LUG(IN PRESSES).</div> <div>15 : IN EQUIPMENT AND LOCATION WHERE THE ROD IS USED:</div> <div>LIGHTNING ARRESTER , CAPACITIVE VOLTAGE TRANSFORMER(LMU) , DISCONNECTOR EARTHING SWITCH , P.TR</div> <div>AUX.E TR , NCT(EARTH PIT) , DOOR , BUILDING STRUCTURE , DIESEL GENERATOR , BUILDING AIR ROD</div>								<div>CONNECTION LEGENDS</div> <table><tr><th>SYMBOL</th><th>DESCRIPTION</th></tr><tr><td></td><td>CADWELD CONNECTION MESH TO MESH 185mm2 TO 185mm2 CONDUCTOR</td></tr><tr><td></td><td>TEE CADWELD CONNECTION RISER TO MESH 240 TO 185mm2 CONDUCTOR</td></tr><tr><td></td><td>TEE CADWELD CONNECTION RISER TO MESH 2*150mm2 TO 185mm2 CONDUCTOR</td></tr><tr><td></td><td>TEE CADWELD CONNECTION RISER TO MESH 185 TO 35mm2 CONDUCTOR</td></tr><tr><td></td><td>TEE CADWELD CONNECTION RISER OR MESH CONDUCTOR TO EARTHING ROD (ROD: LENGTH 3m,DIAMETER 20mm)</td></tr><tr><td></td><td>CADWELD CONNECTION MESH TO FENCE 150mm2 TO 185mm2 CONDUCTOR</td></tr><tr><td></td><td>TEE CADWELD CONNECTION MESH TO EARTH PIT 185 TO 185mm2 CONDUCTOR</td></tr><tr><td></td><td>TEE CADWELD CONNECTION MESH TO LIGHTING POLE 150 TO 35mm2 CONDUCTOR</td></tr><tr><td></td><td>TEE CADWELD CONNECTION MESH TO EARTH MAT(DS) 185 TO 35mm2 CONDUCTOR</td></tr><tr><td></td><td>TEE CADWELD CONNECTION MESH TO MECHANISM(CB) 185 TO 35mm2 CONDUCTOR</td></tr></table>	SYMBOL	DESCRIPTION		CADWELD CONNECTION MESH TO MESH 185mm2 TO 185mm2 CONDUCTOR		TEE CADWELD CONNECTION RISER TO MESH 240 TO 185mm2 CONDUCTOR		TEE CADWELD CONNECTION RISER TO MESH 2*150mm2 TO 185mm2 CONDUCTOR		TEE CADWELD CONNECTION RISER TO MESH 185 TO 35mm2 CONDUCTOR		TEE CADWELD CONNECTION RISER OR MESH CONDUCTOR TO EARTHING ROD (ROD: LENGTH 3m,DIAMETER 20mm)		CADWELD CONNECTION MESH TO FENCE 150mm2 TO 185mm2 CONDUCTOR		TEE CADWELD CONNECTION MESH TO EARTH PIT 185 TO 185mm2 CONDUCTOR		TEE CADWELD CONNECTION MESH TO LIGHTING POLE 150 TO 35mm2 CONDUCTOR		TEE CADWELD CONNECTION MESH TO EARTH MAT(DS) 185 TO 35mm2 CONDUCTOR		TEE CADWELD CONNECTION MESH TO MECHANISM(CB) 185 TO 35mm2 CONDUCTOR
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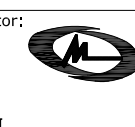
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SYMBOLS	
	GALVANIZED PIPE (ø50)
	EARTH MAT (1000mm*500mm)
	M.B: MARSHALING or AC OUTDOOR PANEL
	EARTHING POINT OF FENCE(PER 30m)
	J.B: JUNCTION BOX
	E.P: EARTH PIT
	DS CENTRAL BOX

C			<div>Consultant: </div>	<div>Employer: </div>	<div>Contractor: </div>		Name	Date	Title:
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-  : FOUNDATION
-  : LIGHTING POLE FOUNDATION
-  : CABLE CHANNEL
-  : DRAINAGE

C		Consultant:	Employer:		Contractor:		Name		Date	Title:	Project:		Scale:
B	ISSUE FOR APPROVE	1405/02	GHDS NIKRO ENGINEERING COMPANY (C.N.E.C)	P.G.M.I.S.E.Z	MOHAM SHARAH CO.		DRAWN	E.BARZEGAR	1405/02	PLAN	400/230 kV NORTHERN SITE INTERFACE S/S		Size: A1
A	ISSUE FOR APPROVE	1403/10					DESIGNED	E.BARZEGAR	1405/02		Project No:		Sheet: 02
Z	ORIGINAL ISSUE	1403/08					CHECKED	E.BARZEGAR	1405/02		Contract No:		Next: 03
REV	Description	DATE					APPROVED	M.DANESHPOU	1405/02		DWG NO: 784351-TV-4-AS-2-KKK-3-EHV-018-1		

