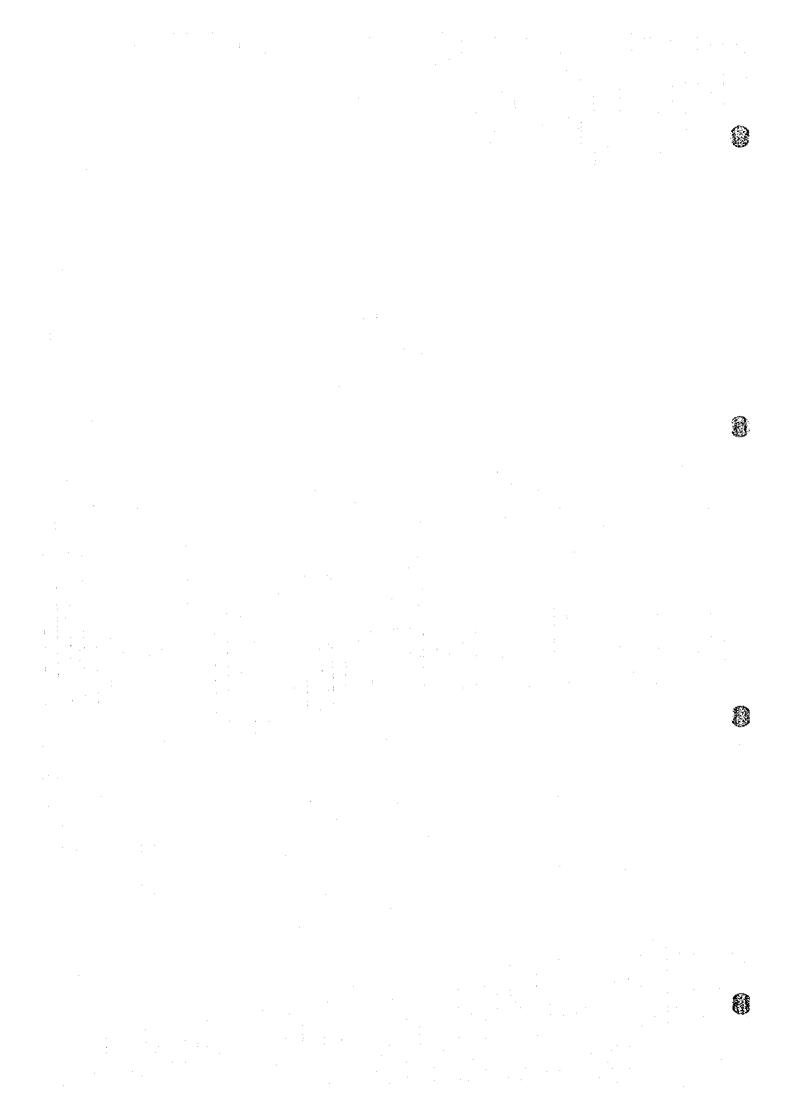
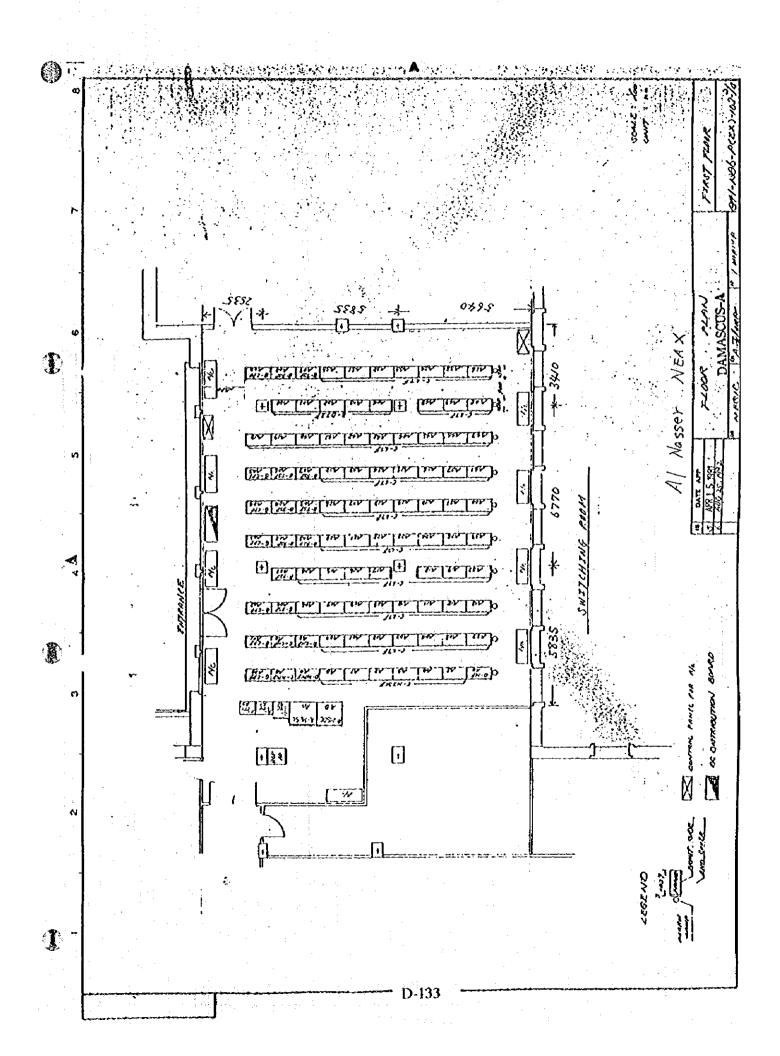
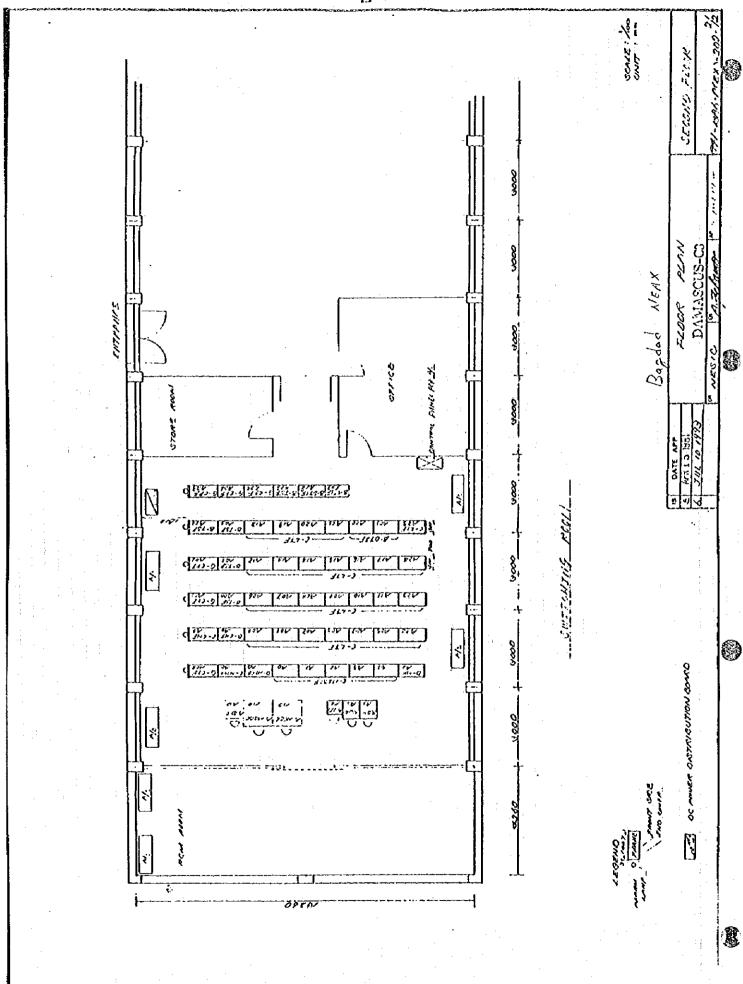
Floor Plan (Switching)



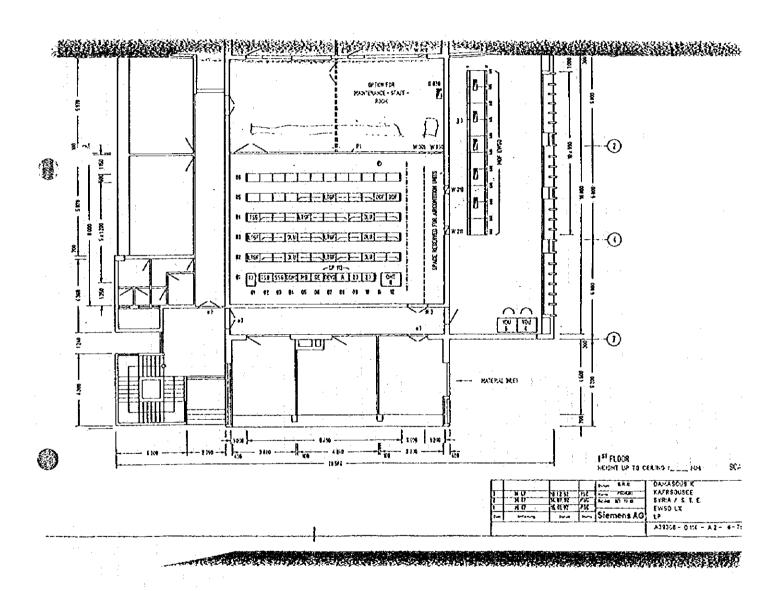




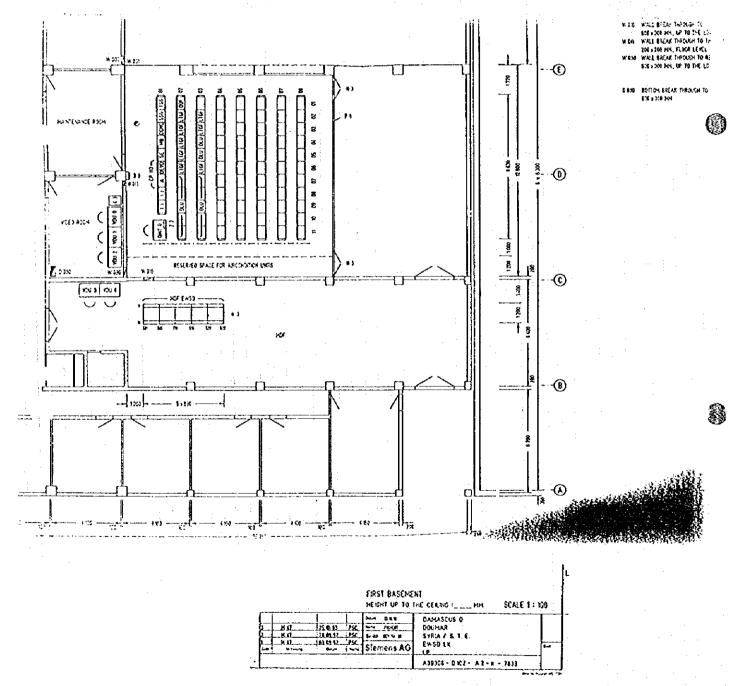
Ď-134



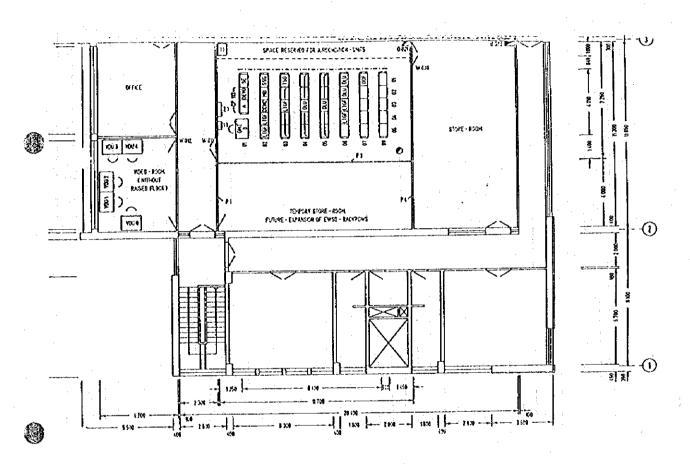




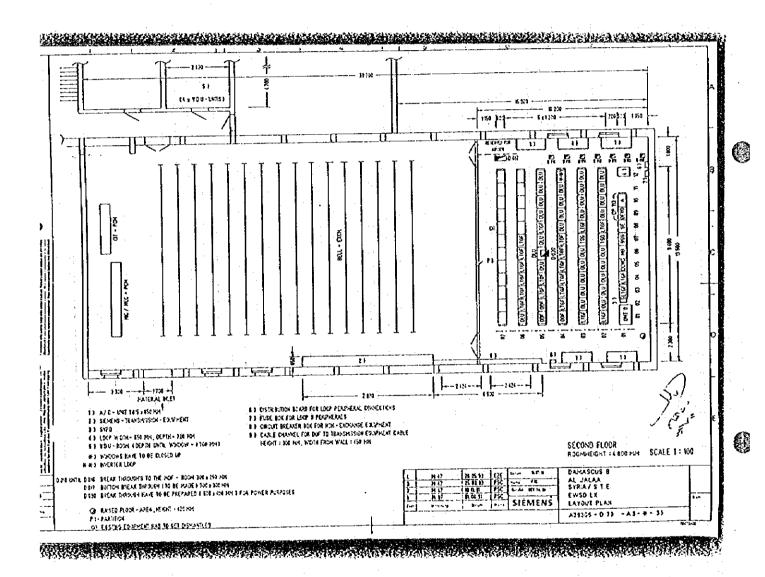


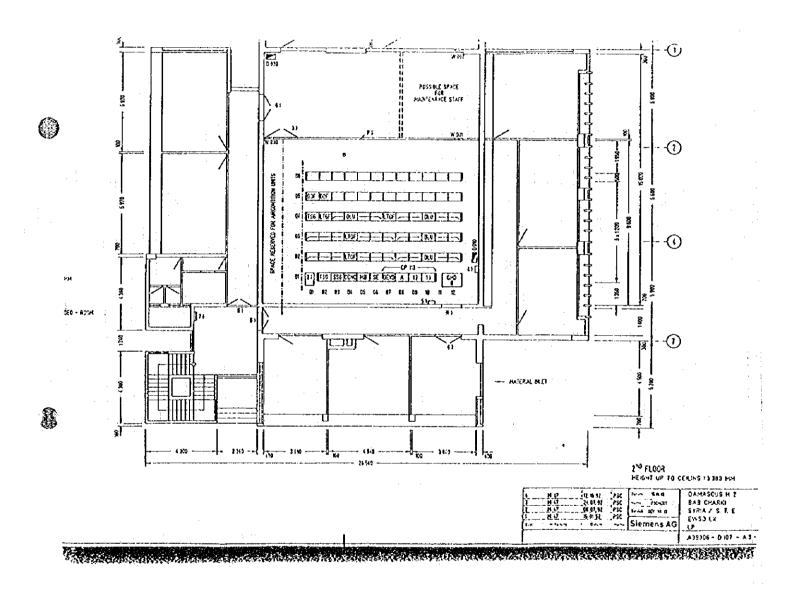


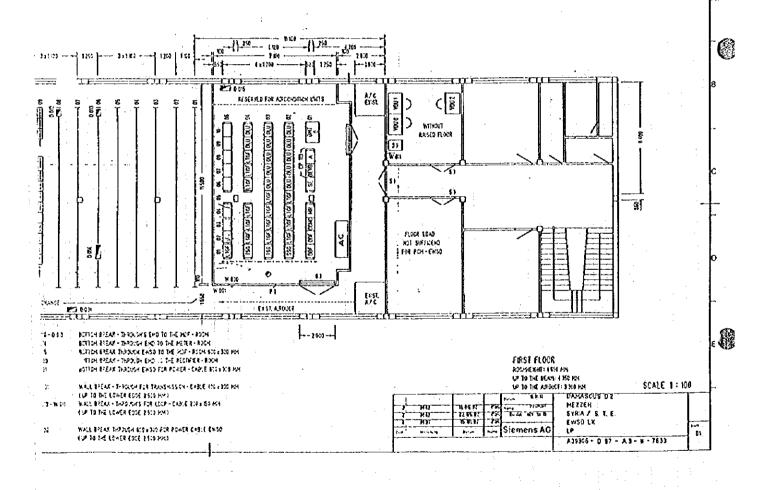


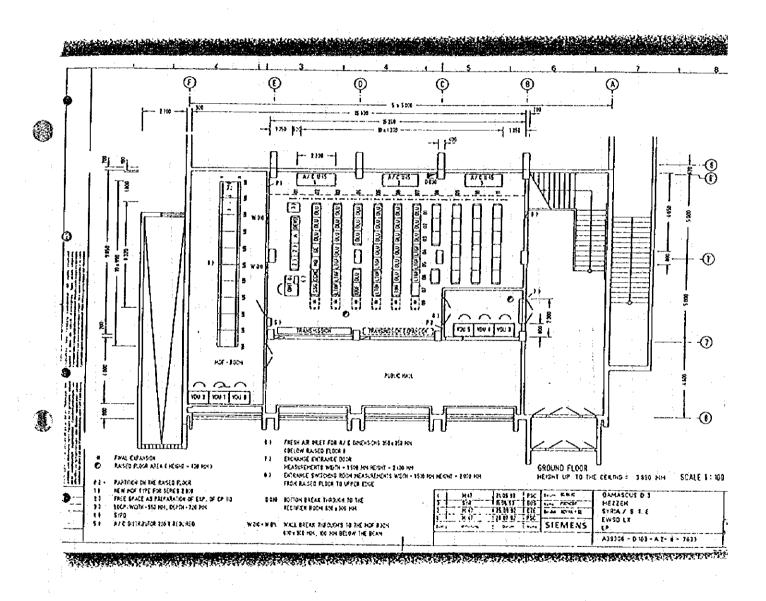


### WAL-BEAK RECORD TO RECORD TO THE WEST-SCON NO. 20 PM I FLOOP CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOP CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOP CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS HAT SEED TO SCON NO. 20 PM I FLOOR CORE LOSS AS

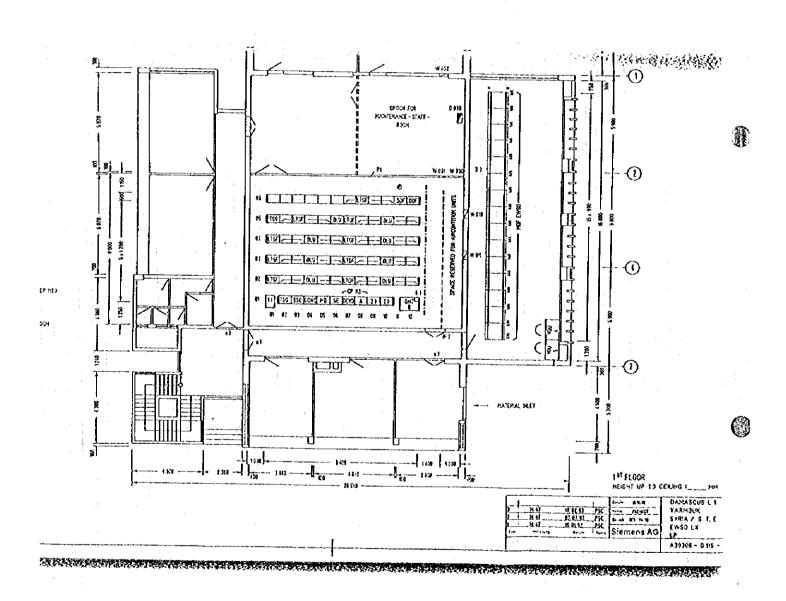


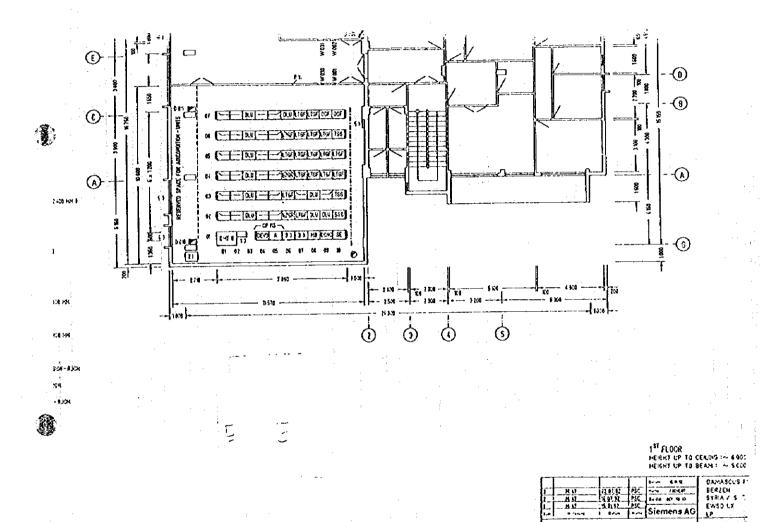


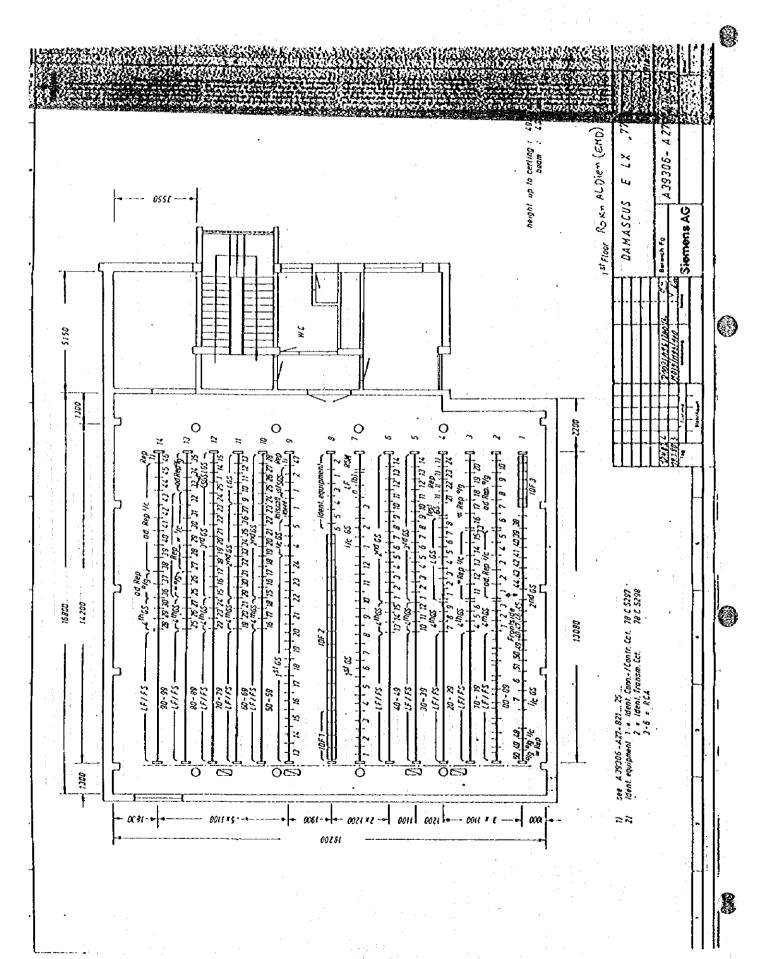


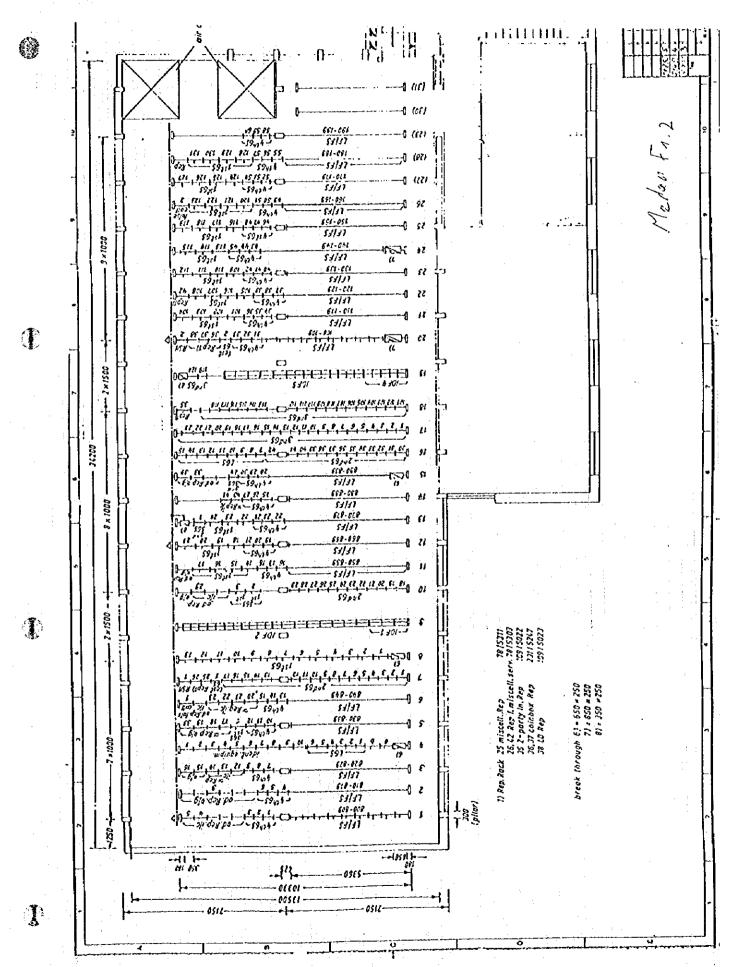


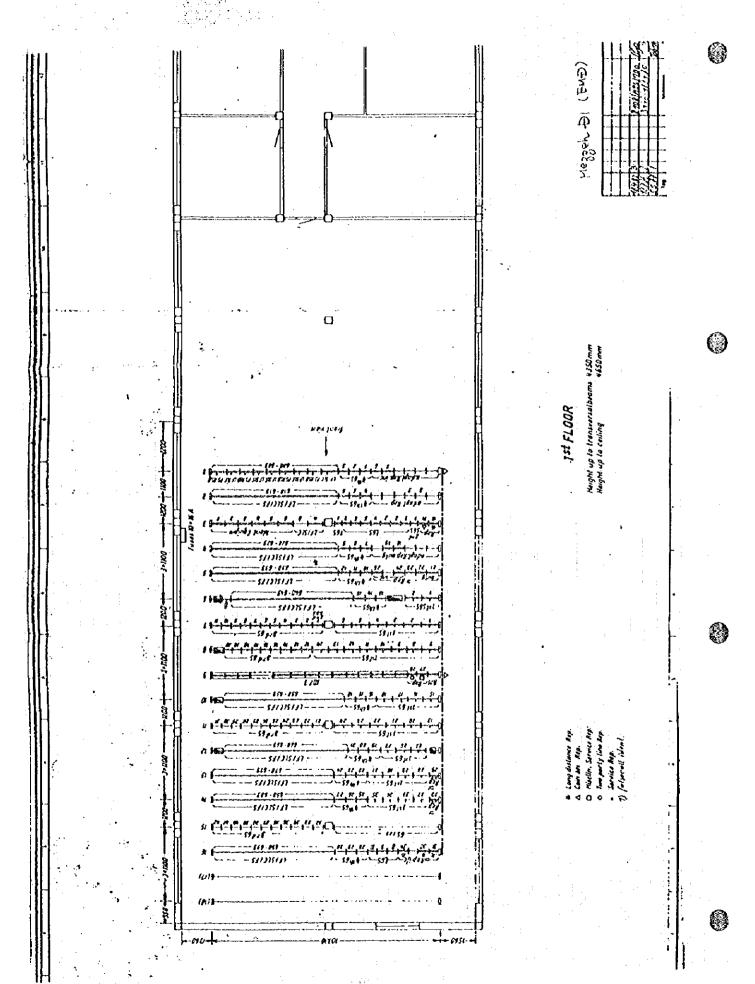


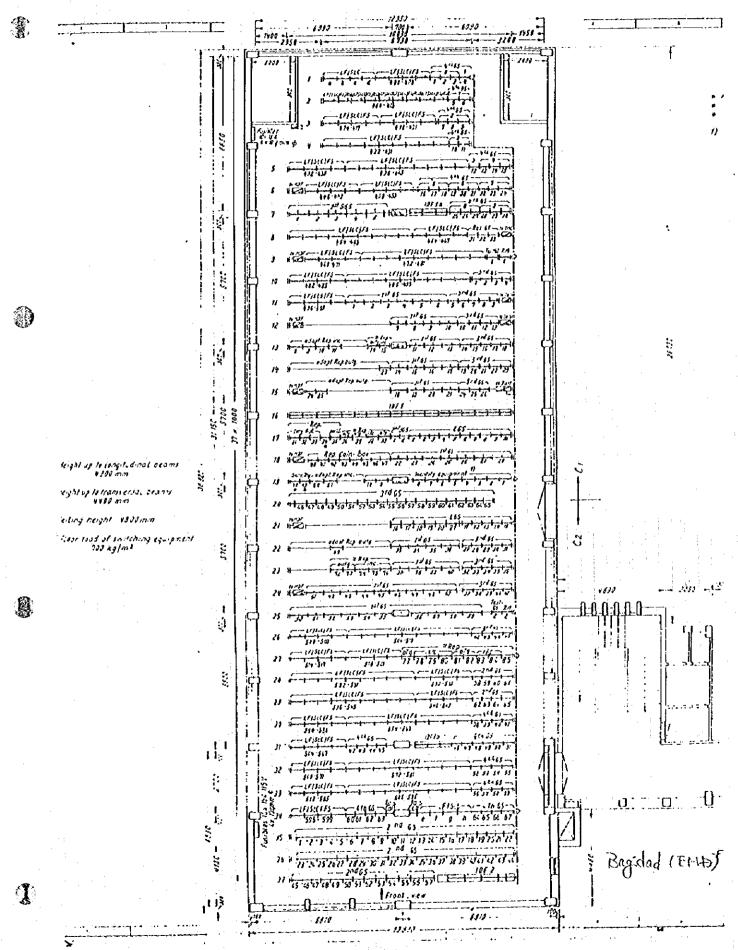


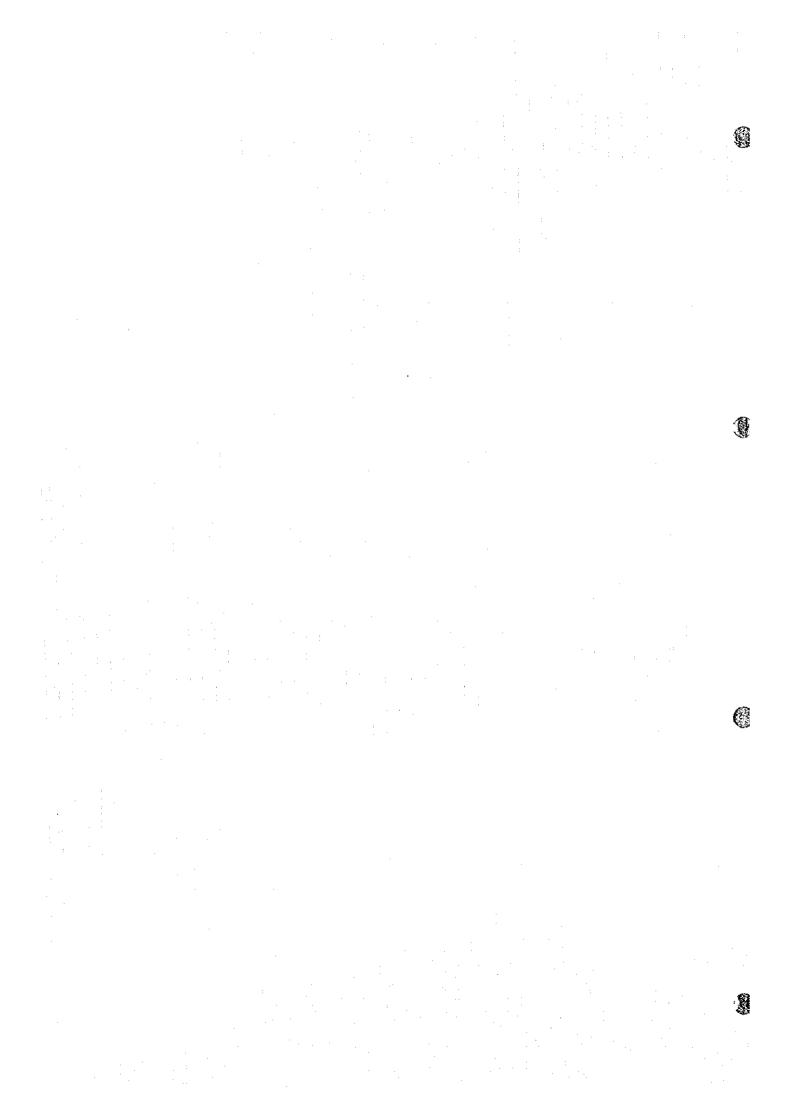




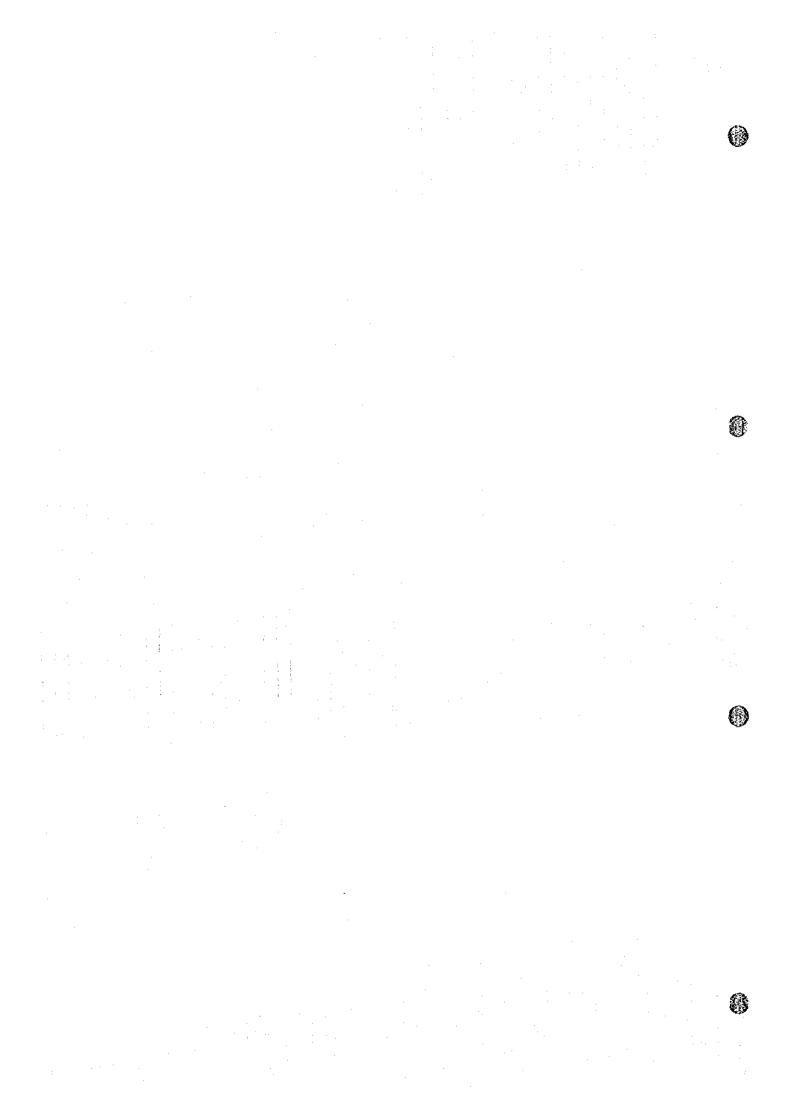


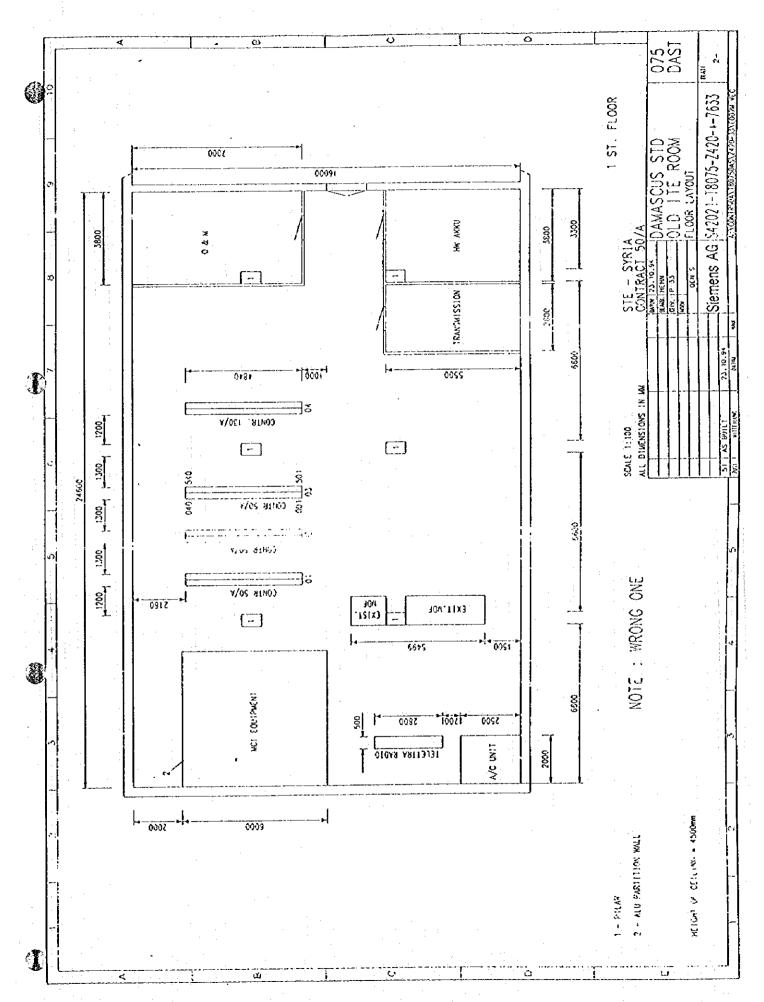


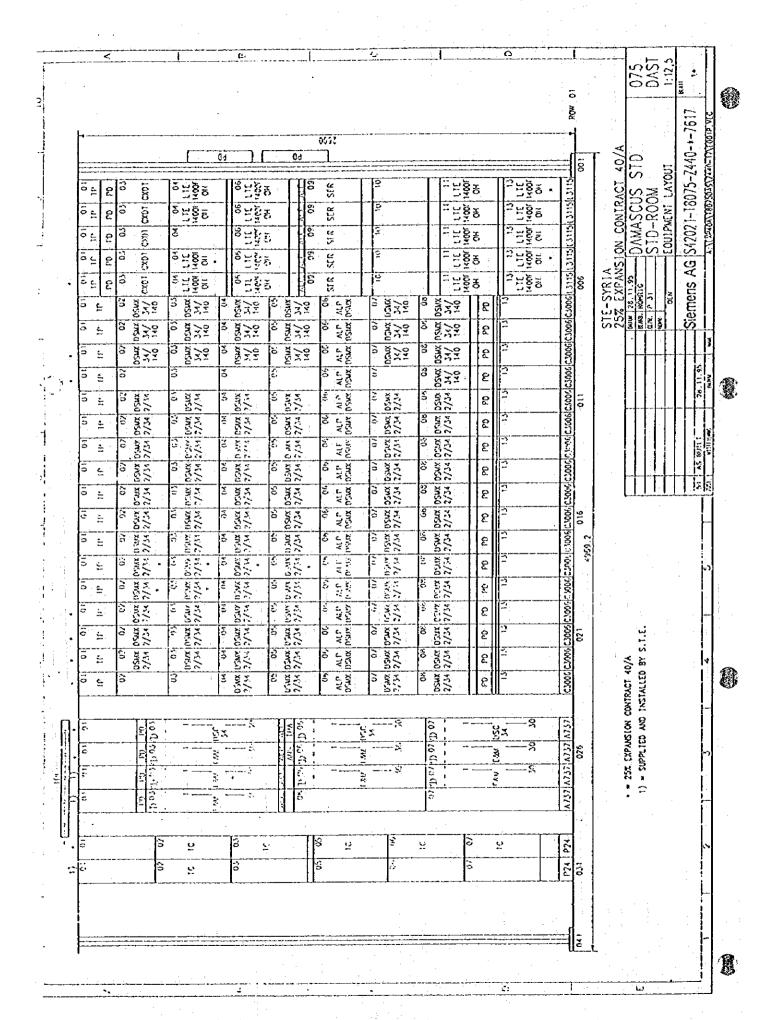


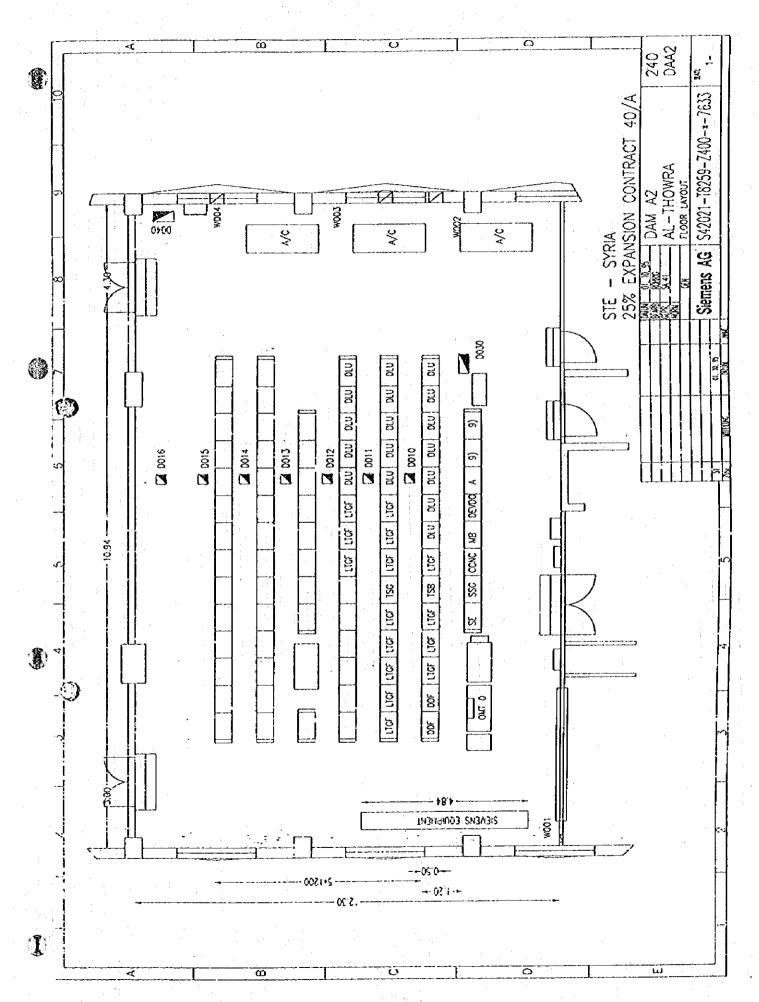


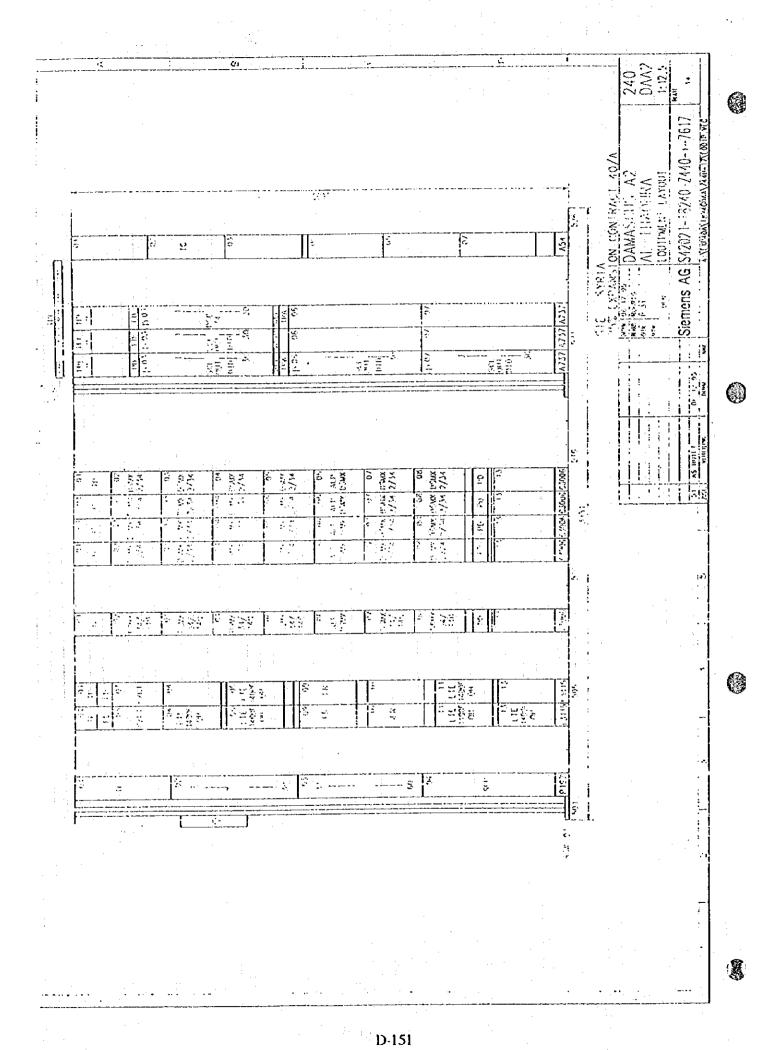
D-11
Floor Plan (Transmission)

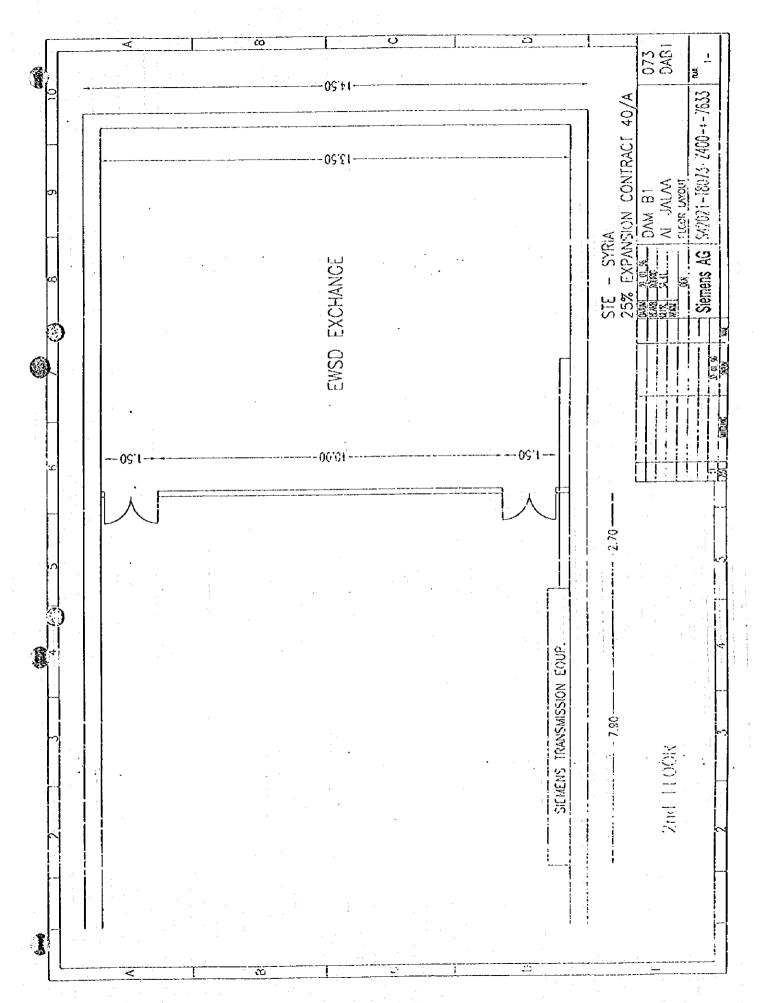


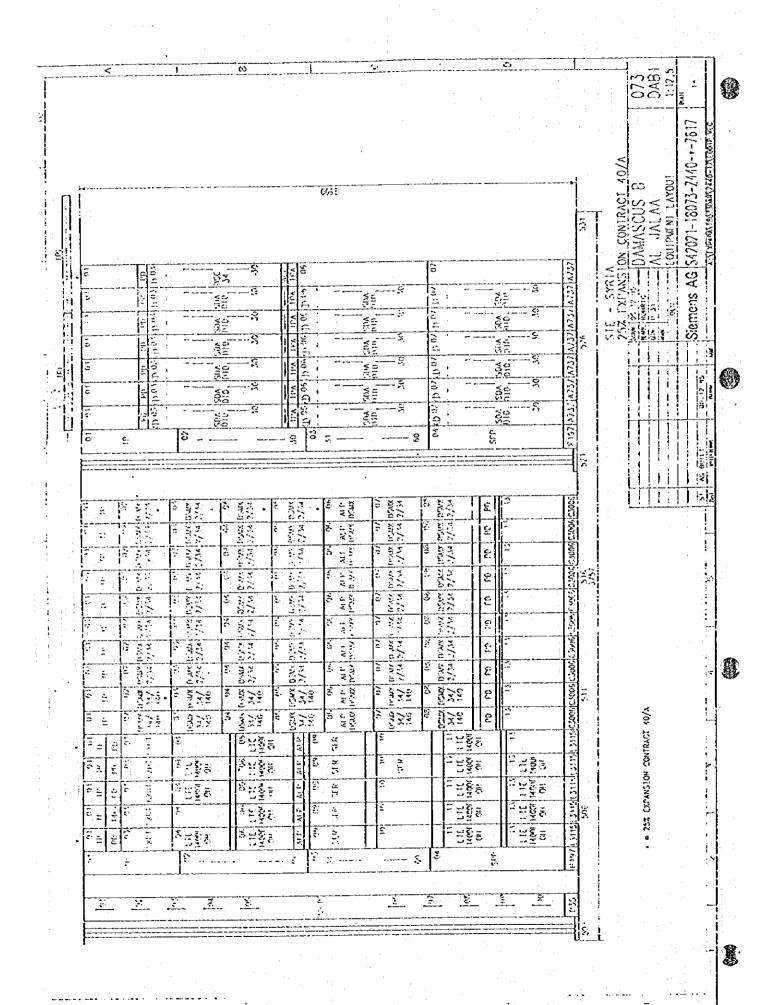


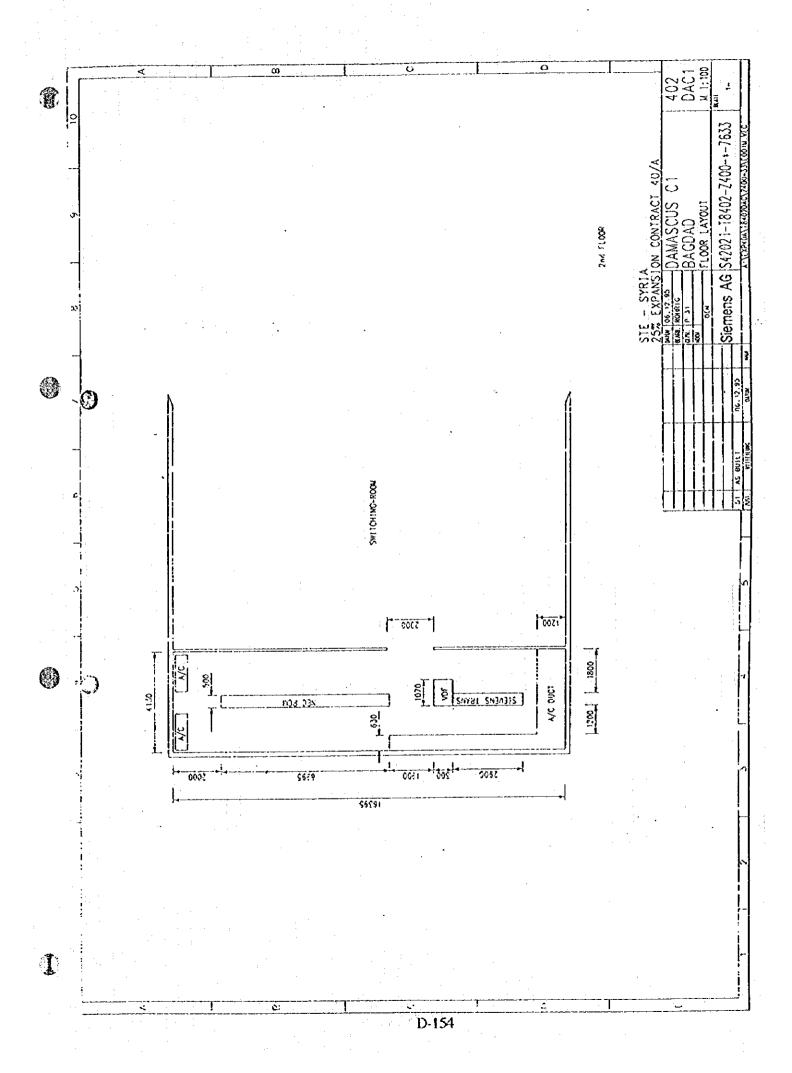


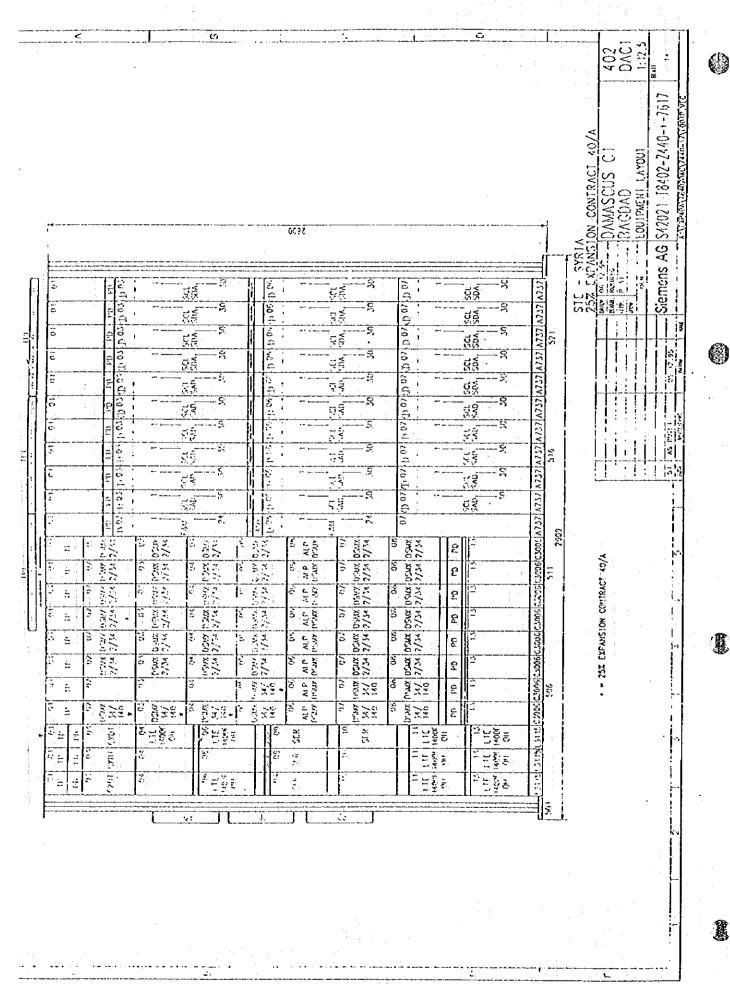




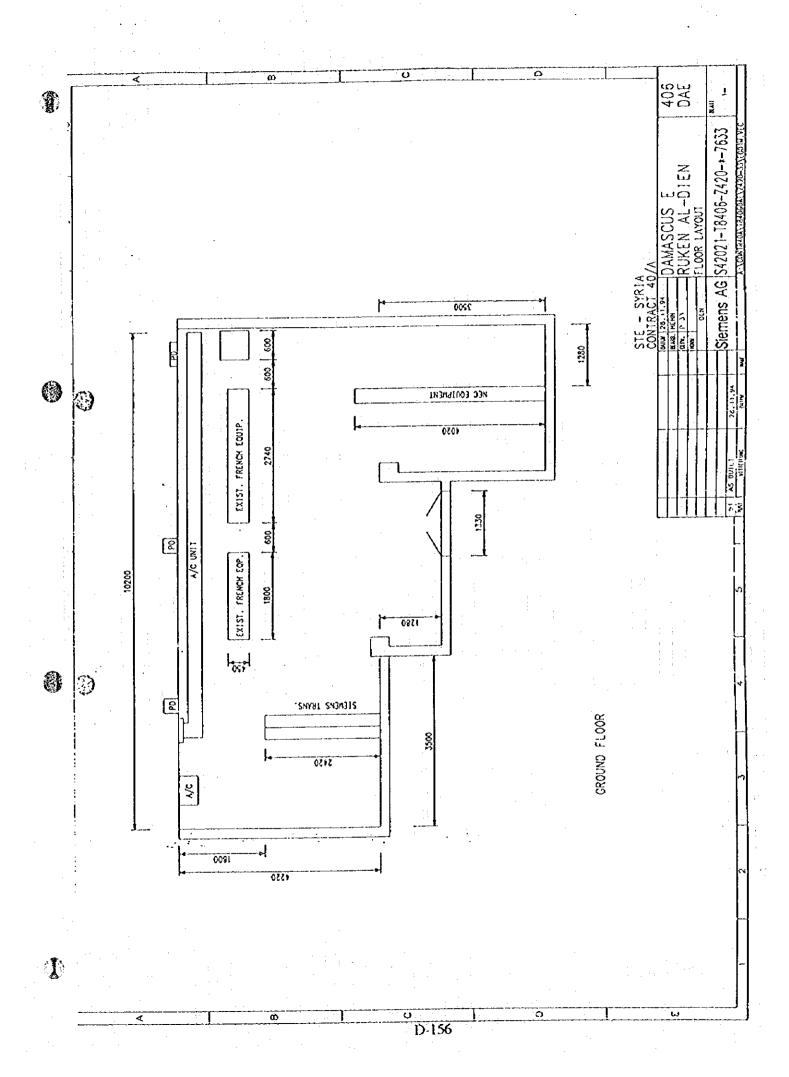


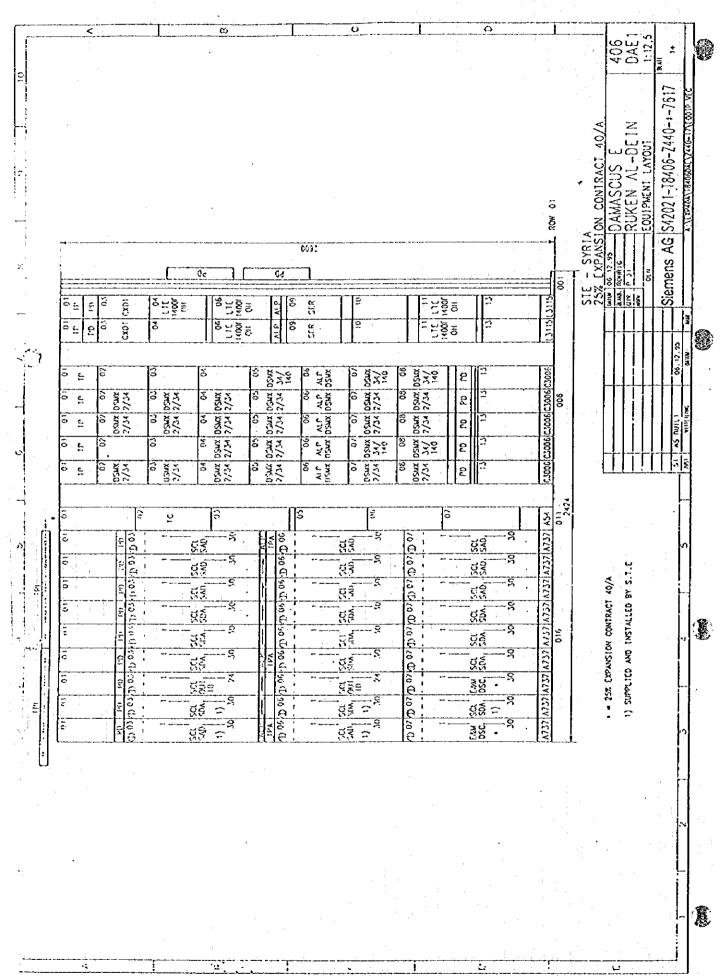




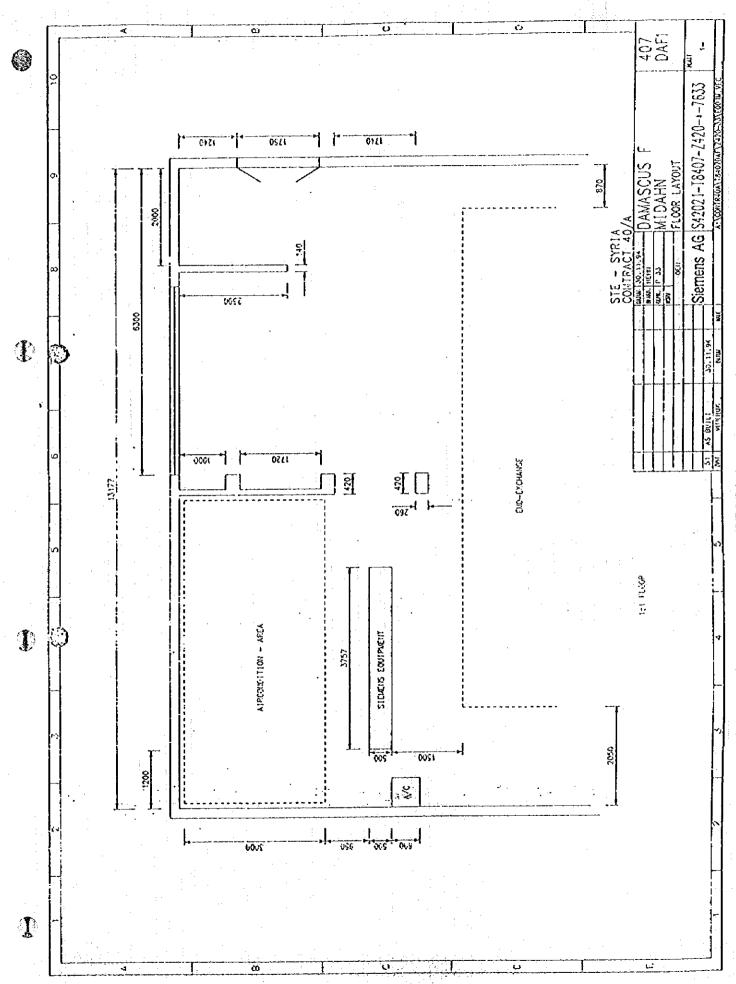


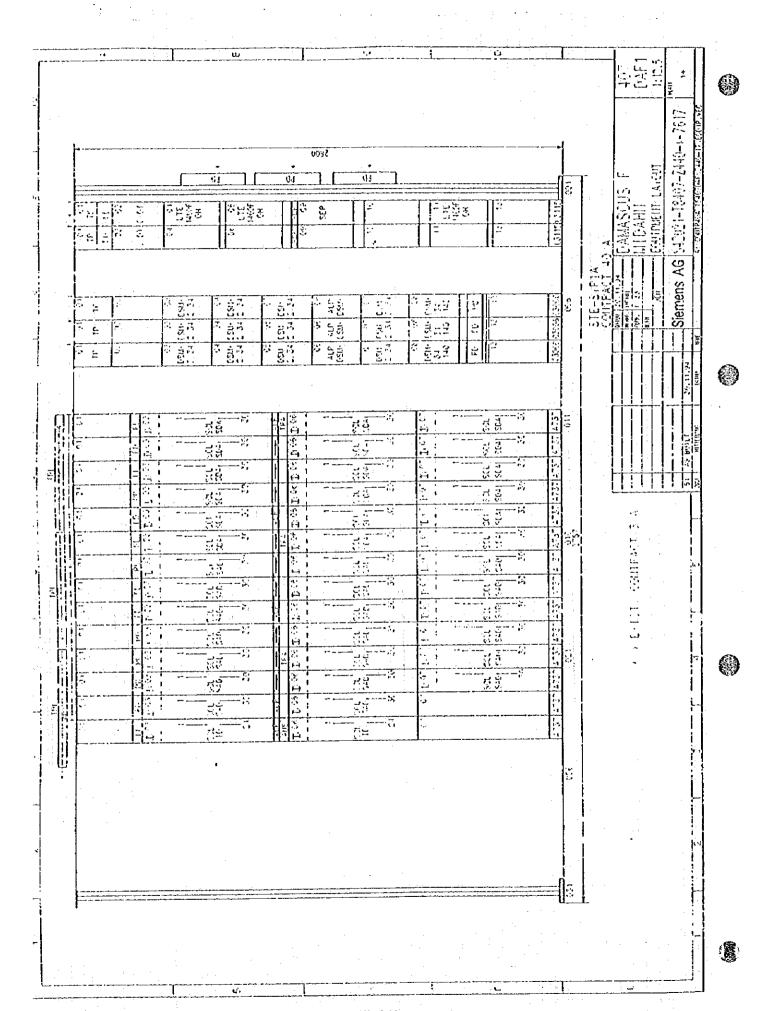
D-155

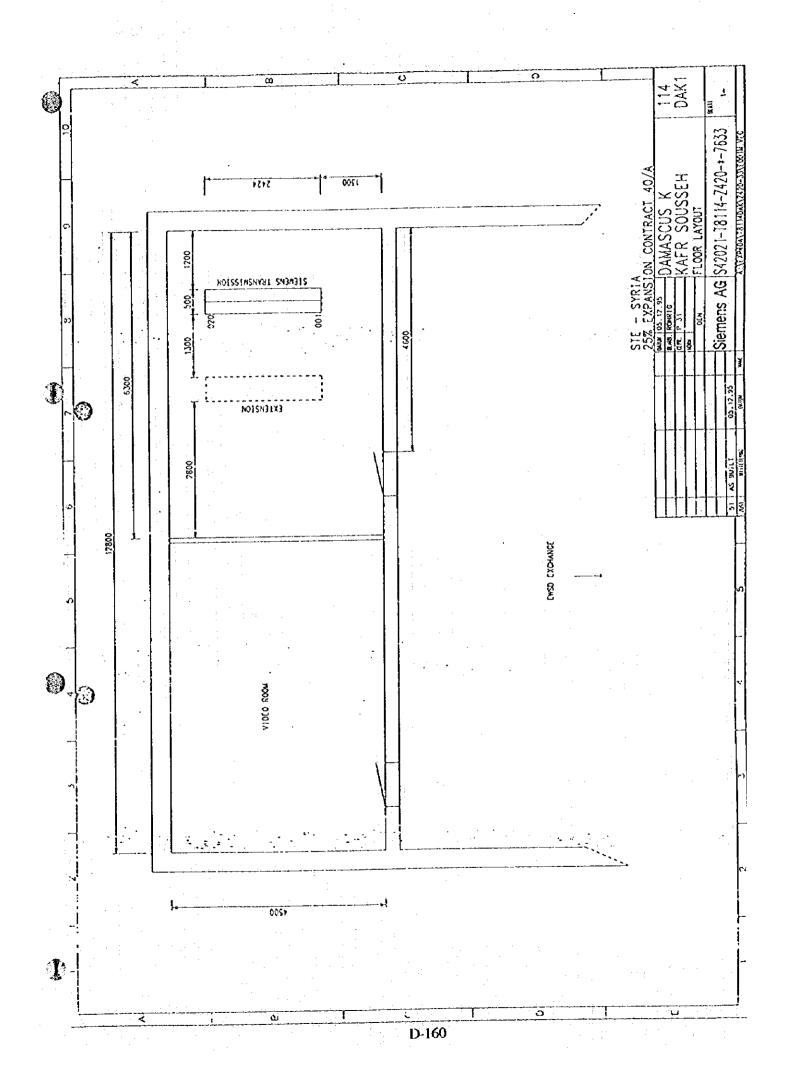


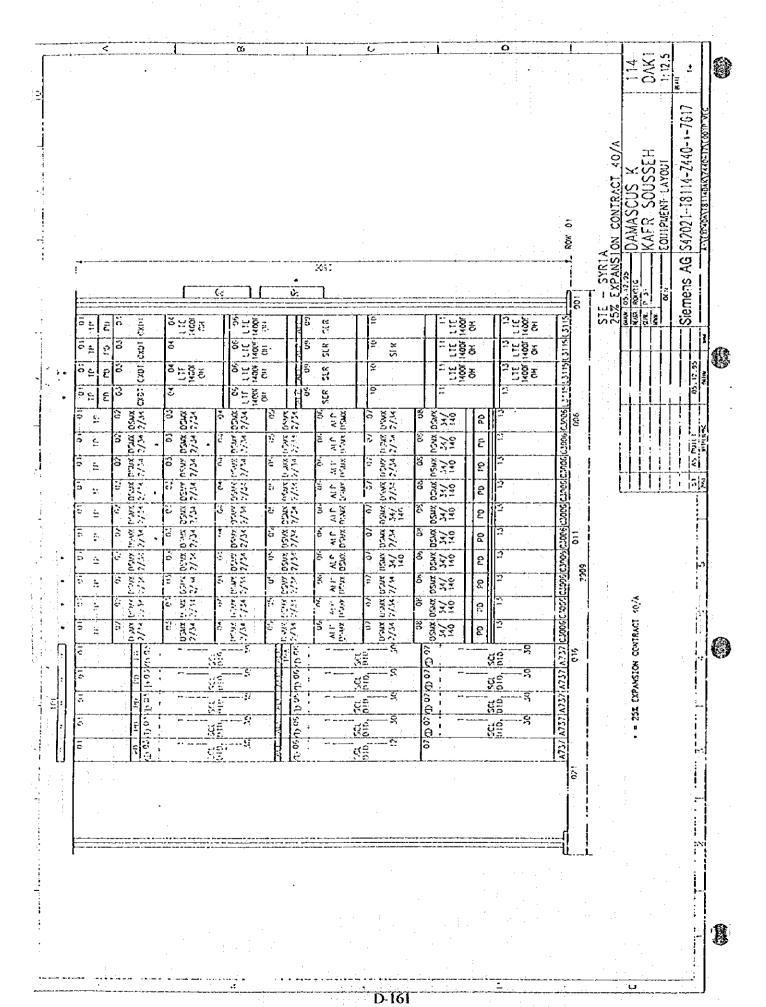


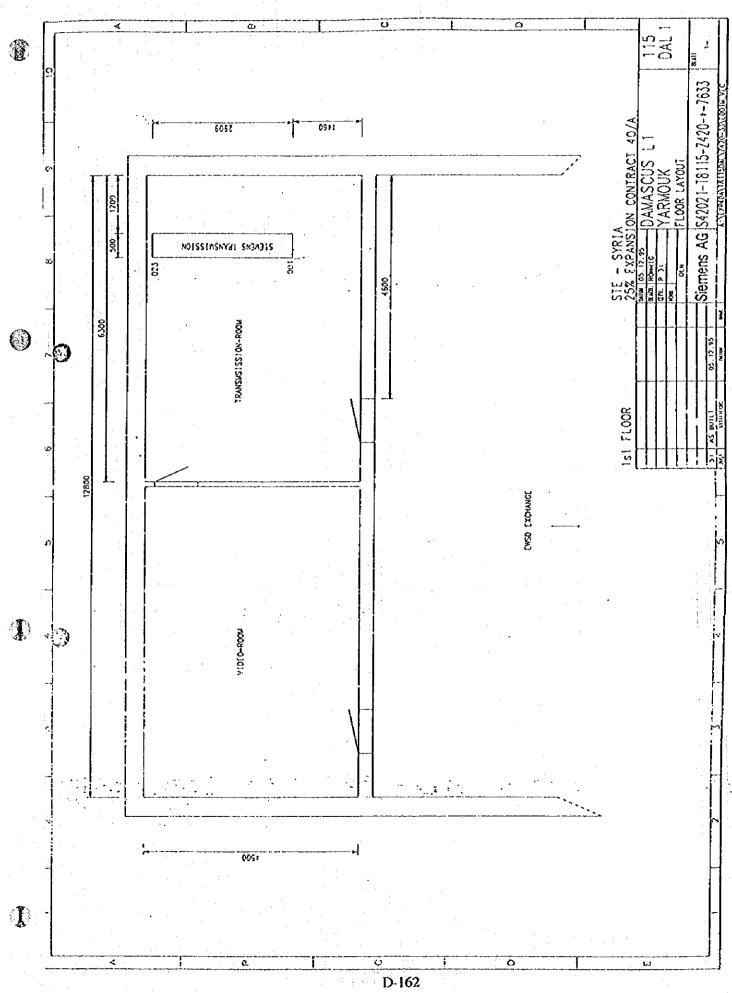
D-157

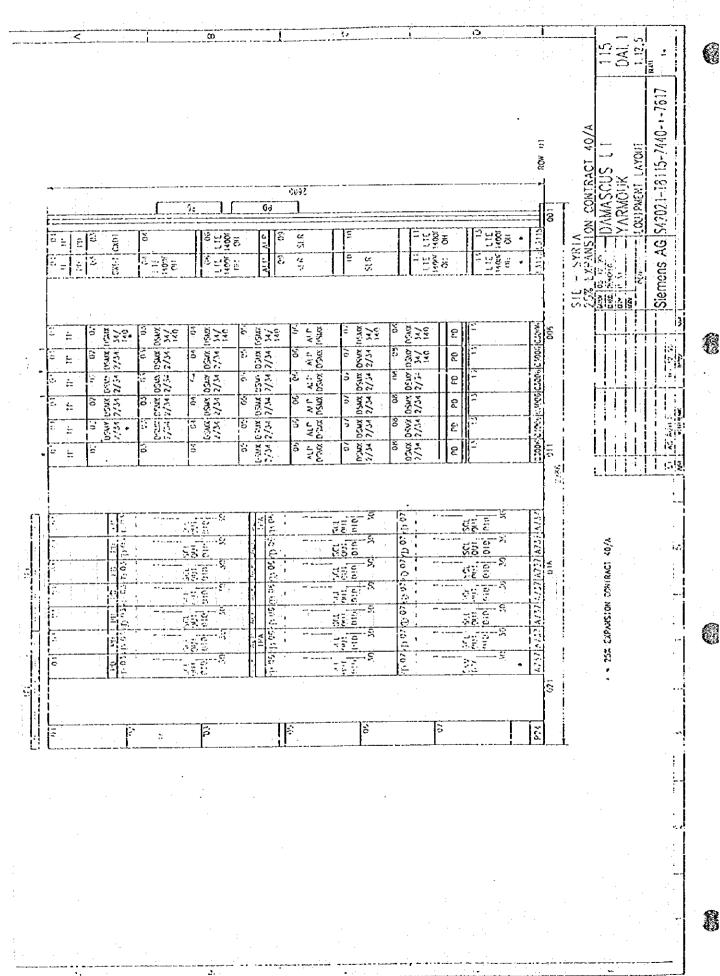




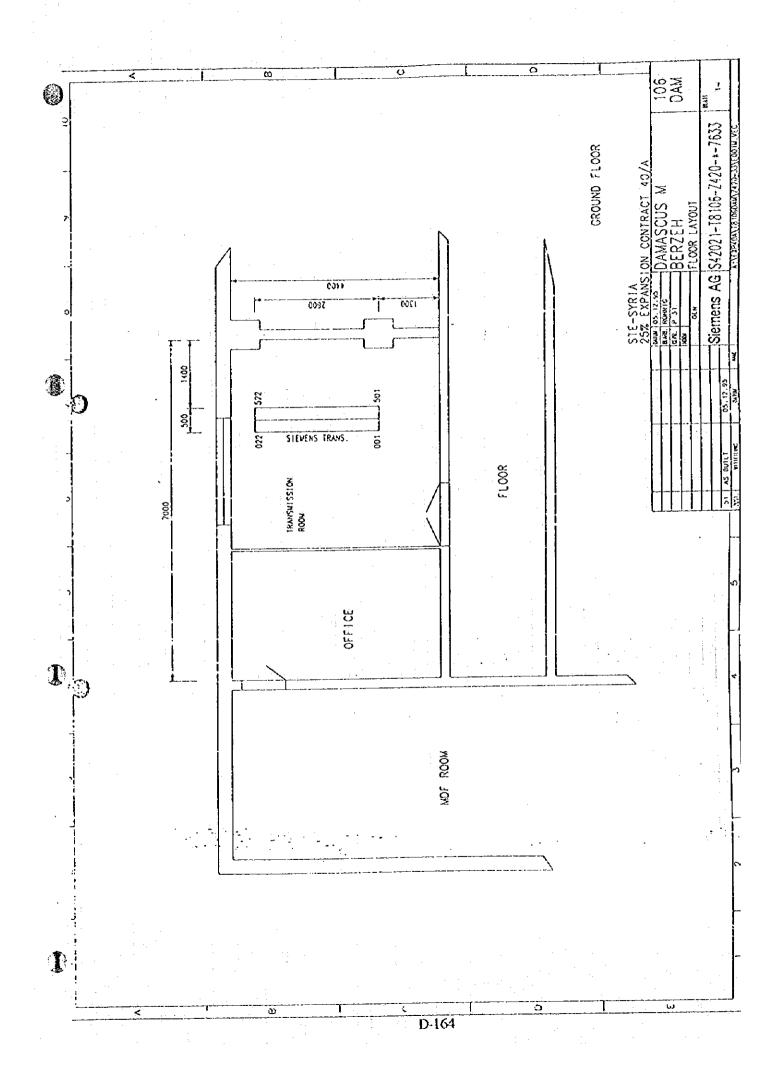


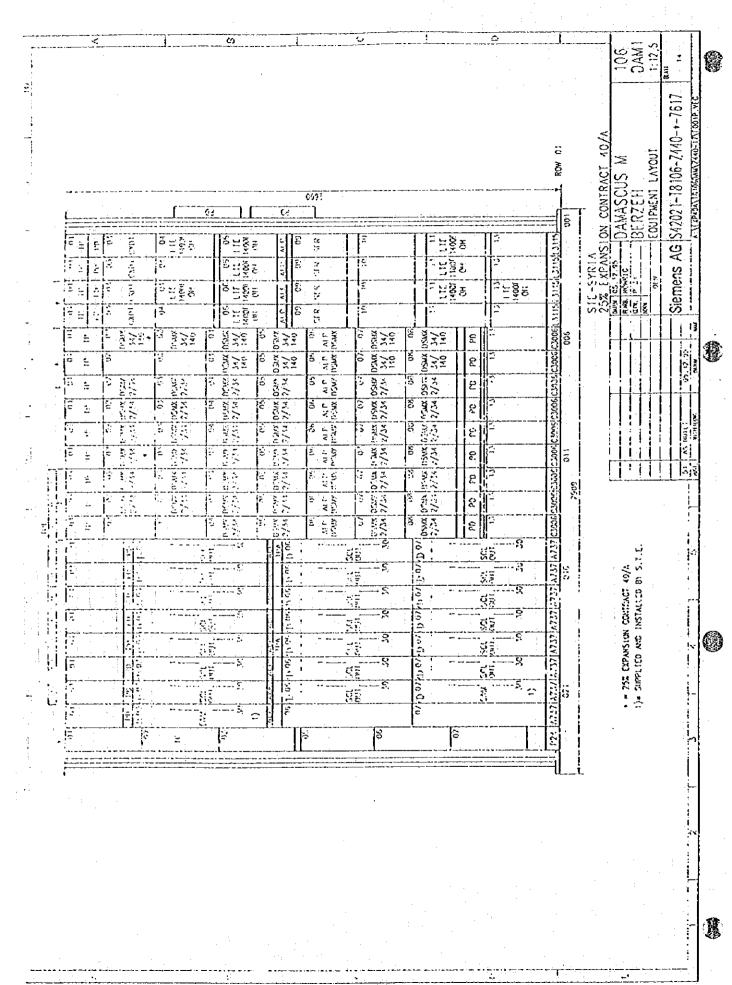


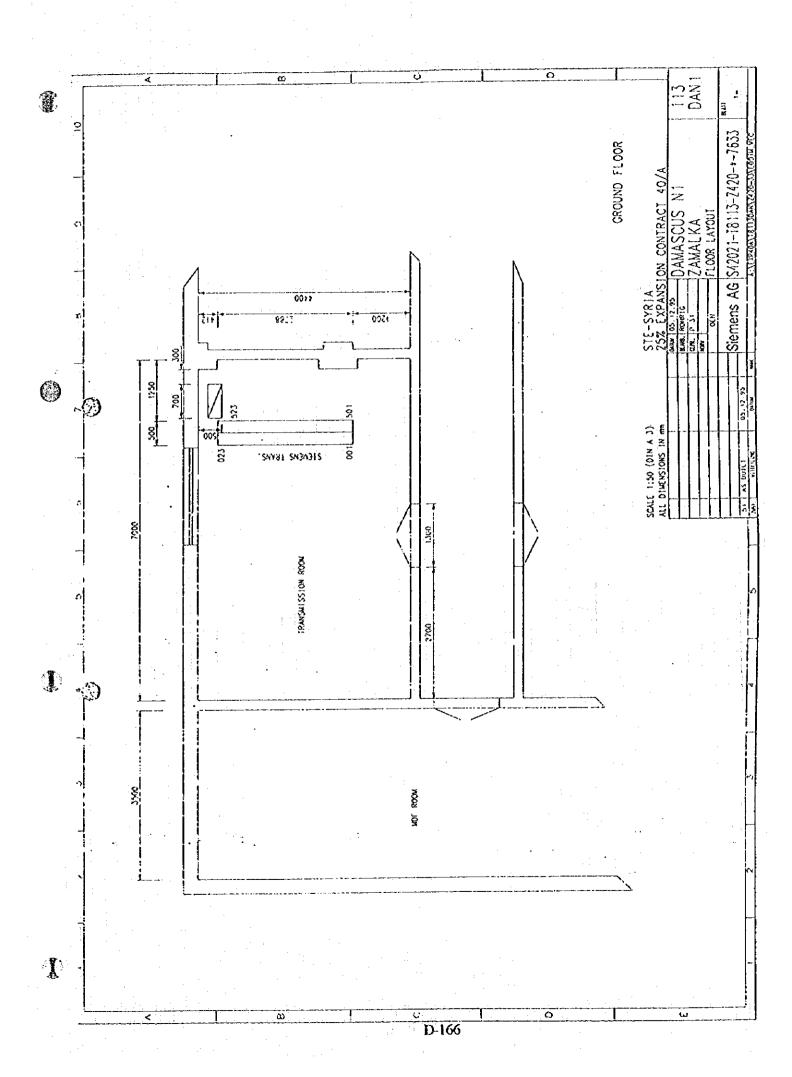


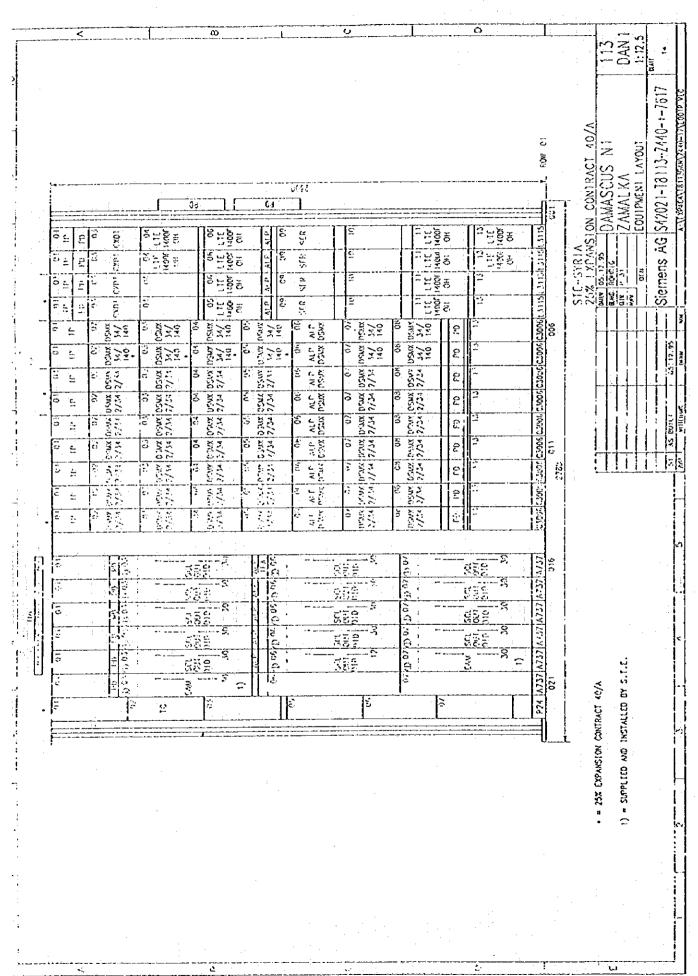


D-163







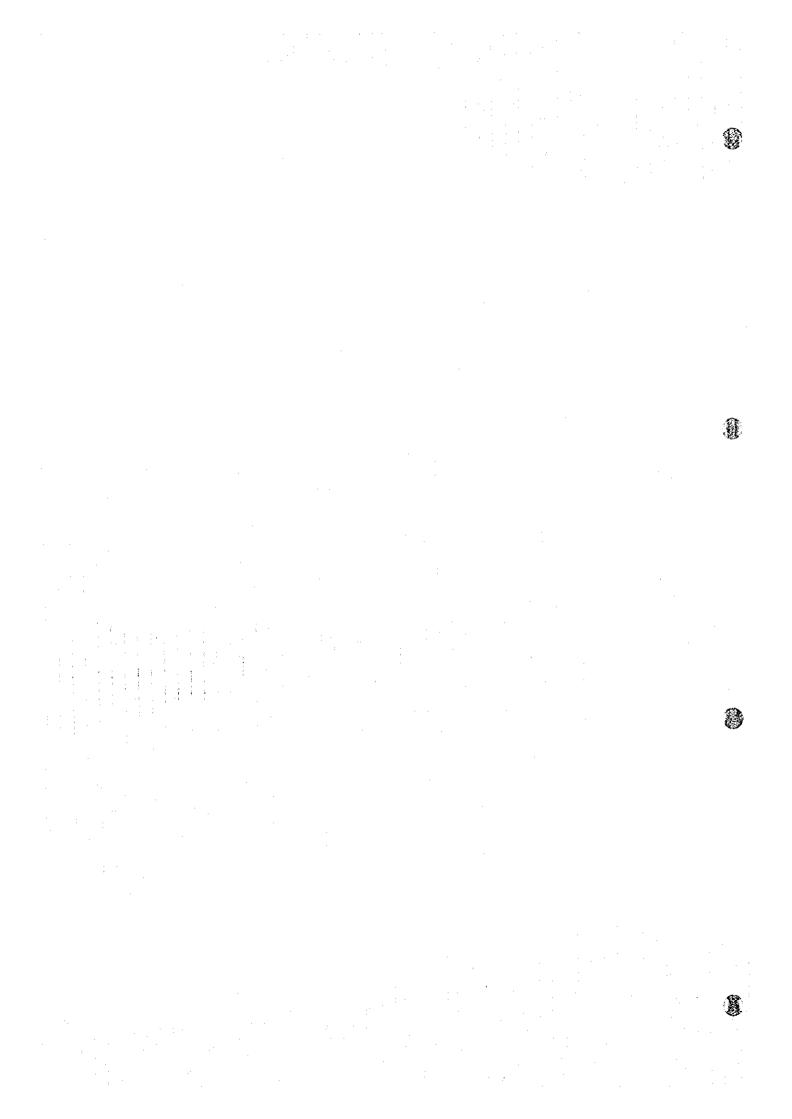


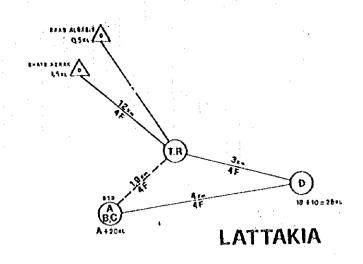
0

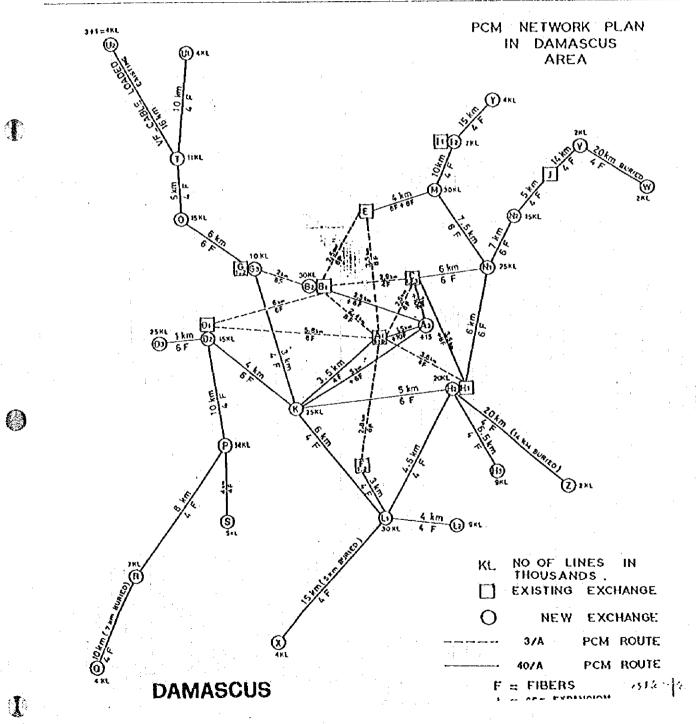
D-167

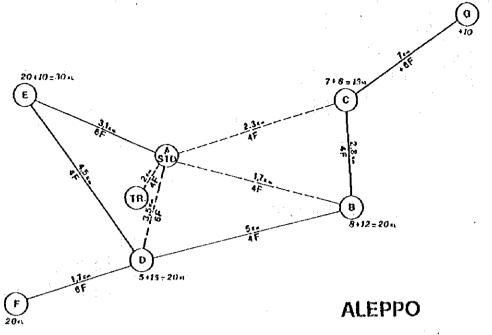
D-12

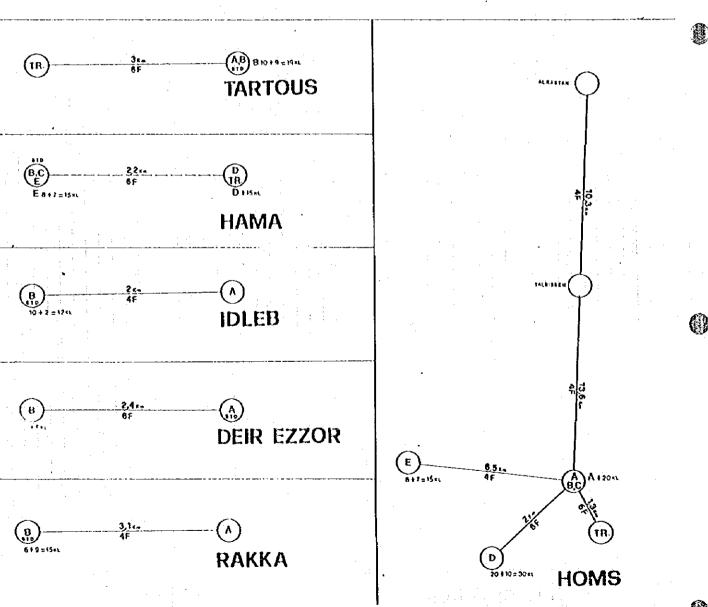
Junction Network





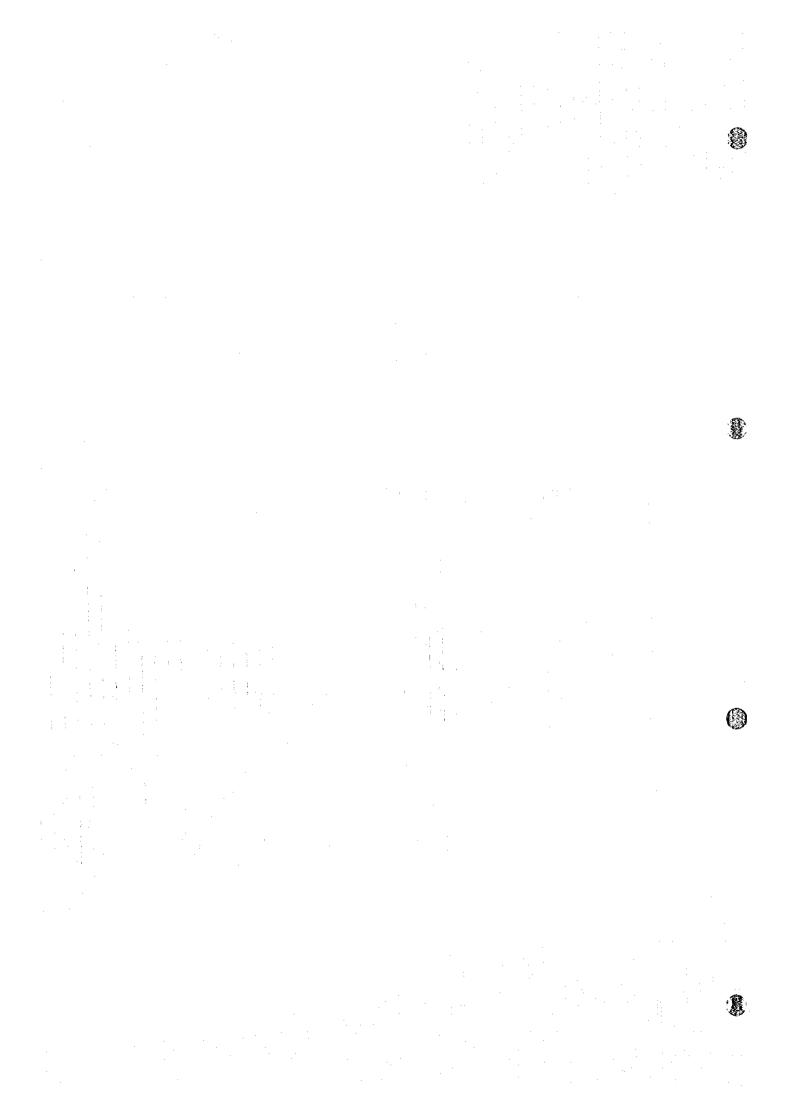


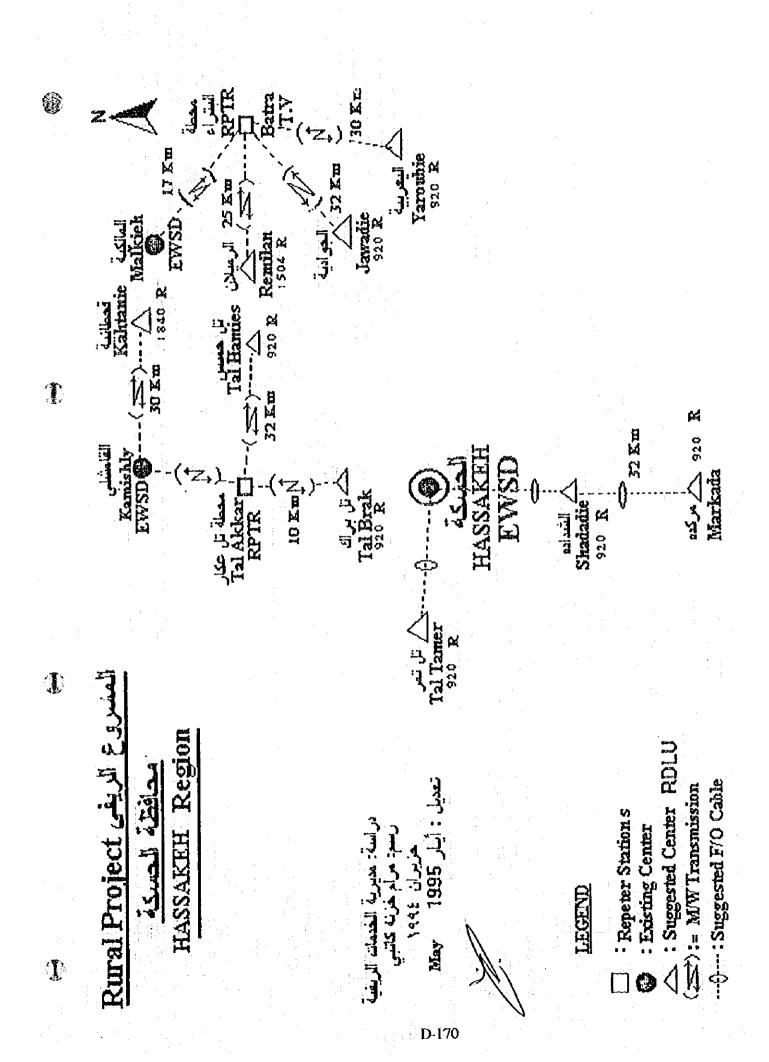


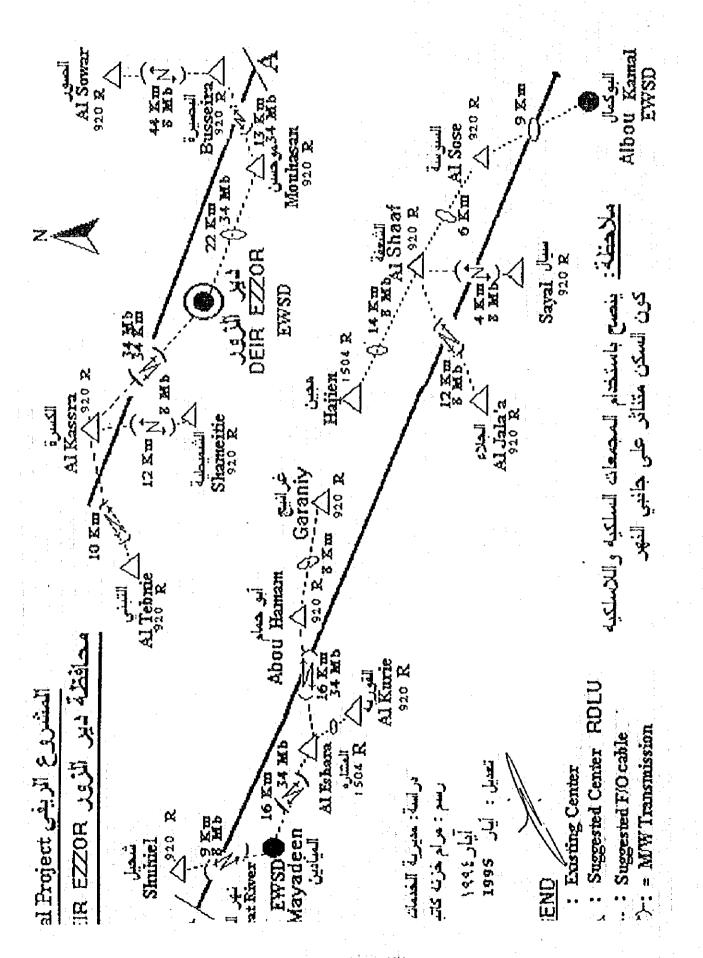


D-13
Rural Project

()

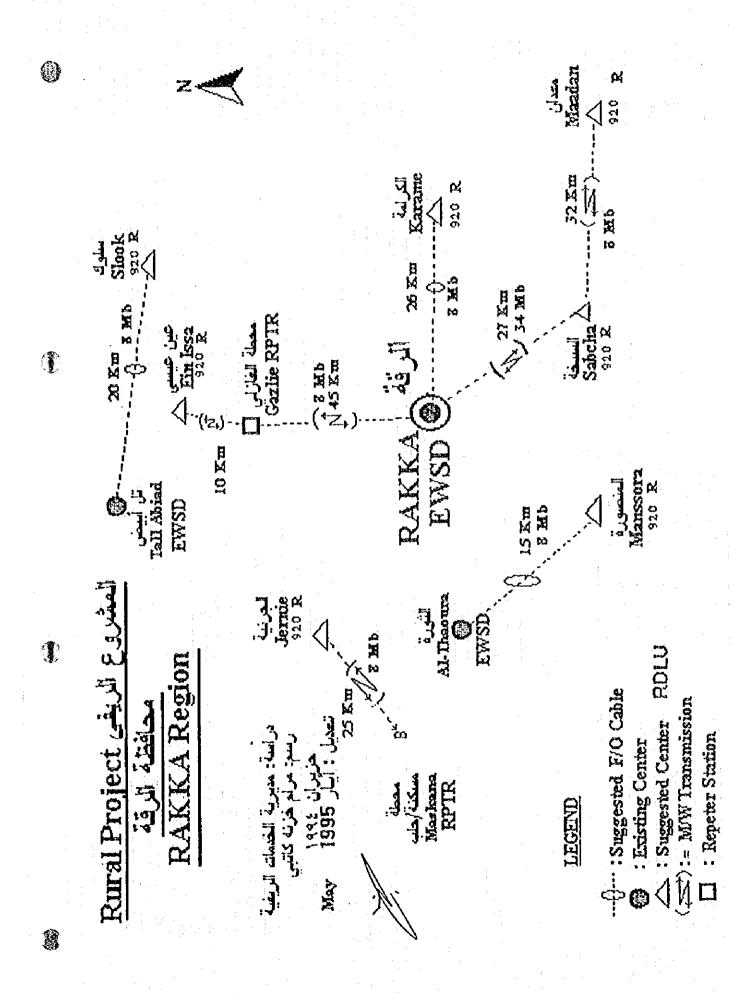


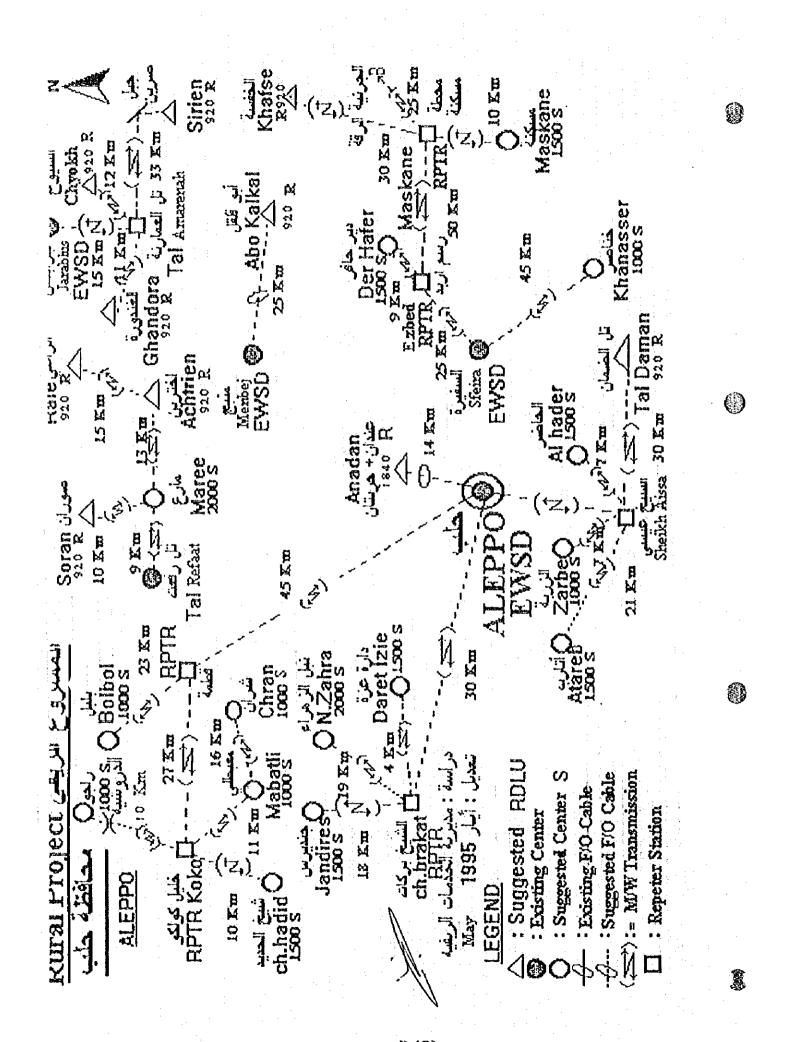


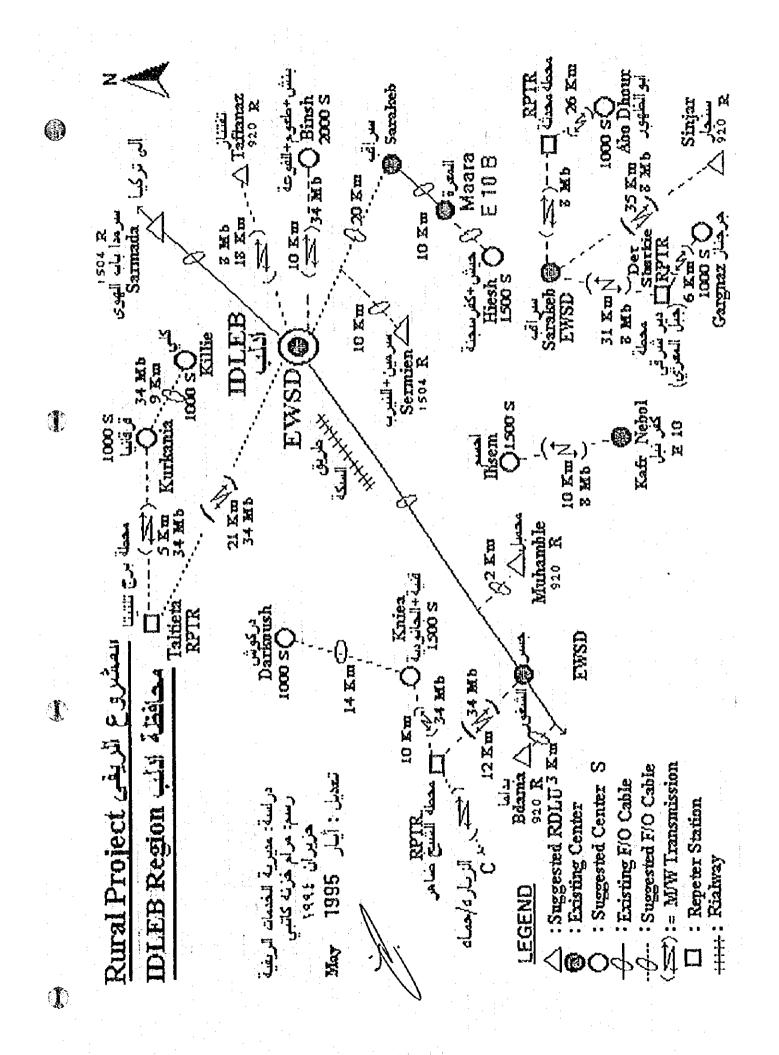


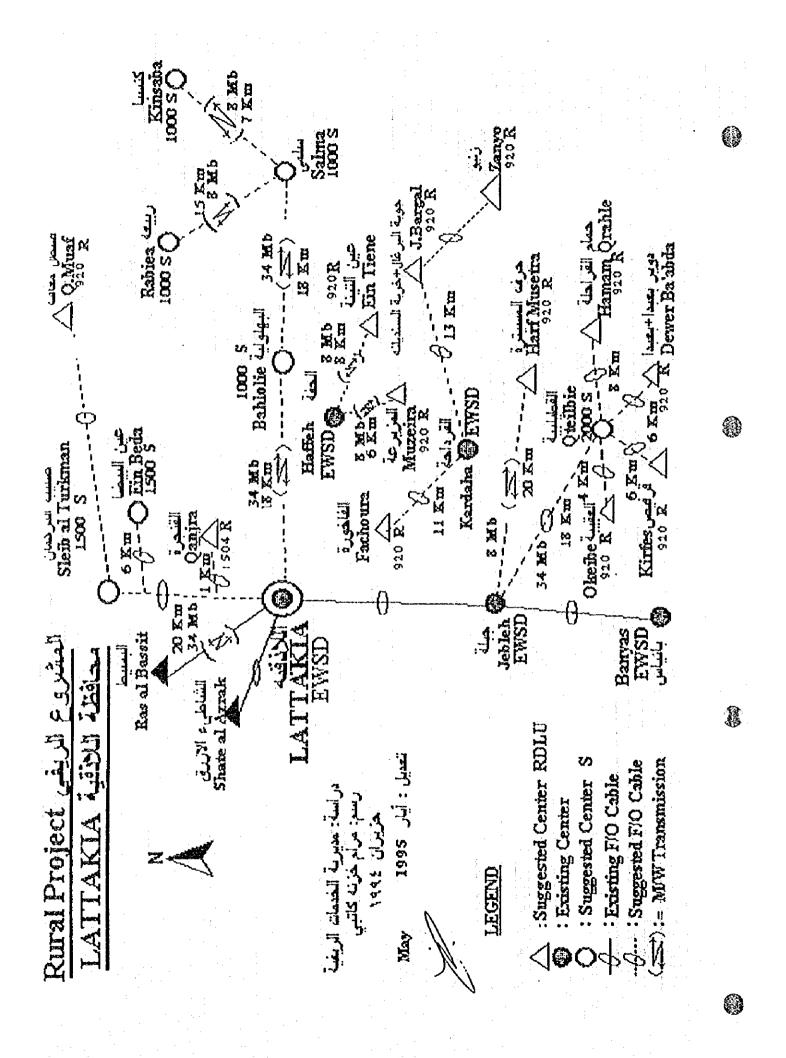
(

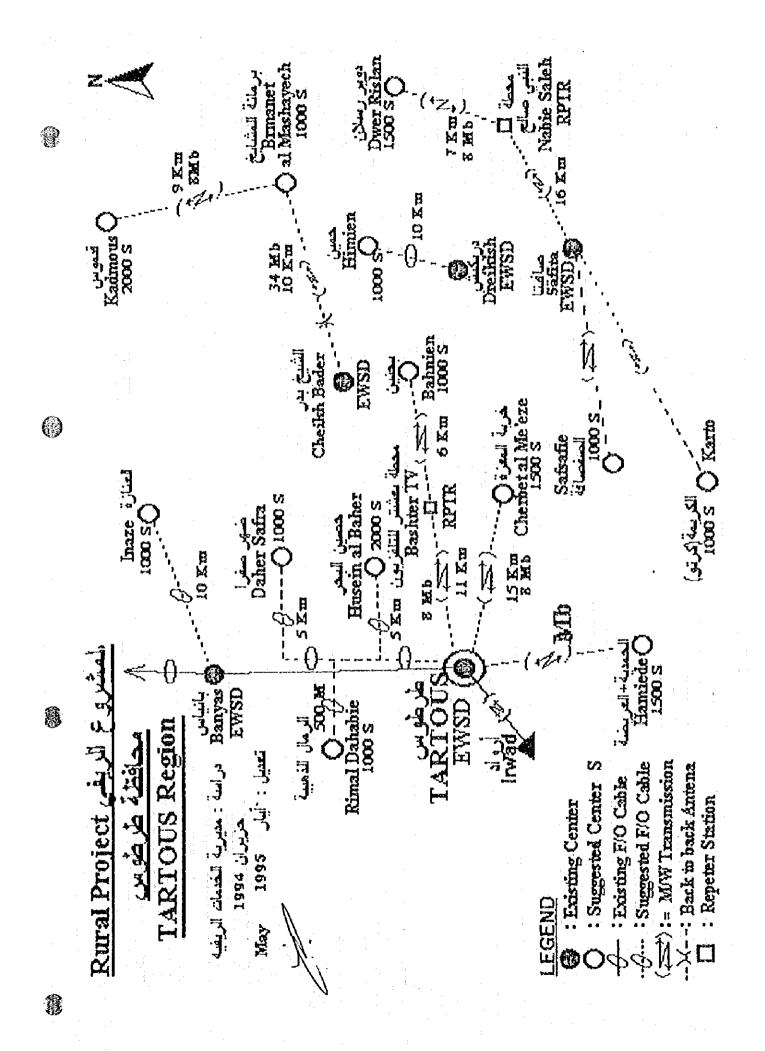
(

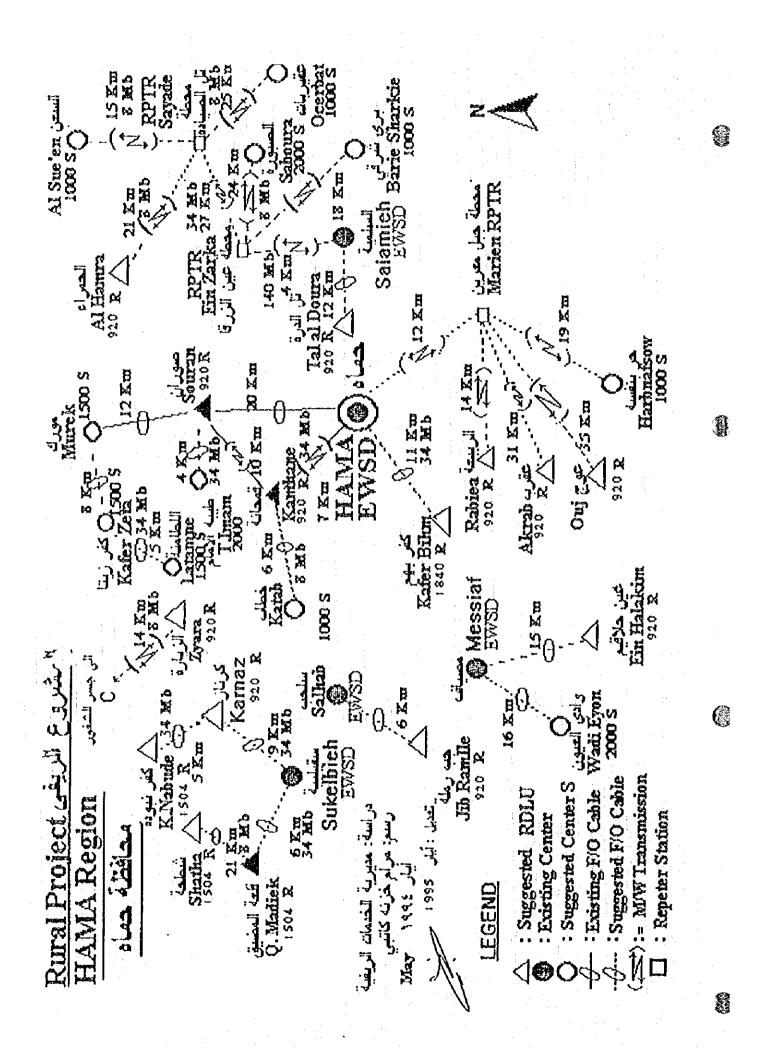


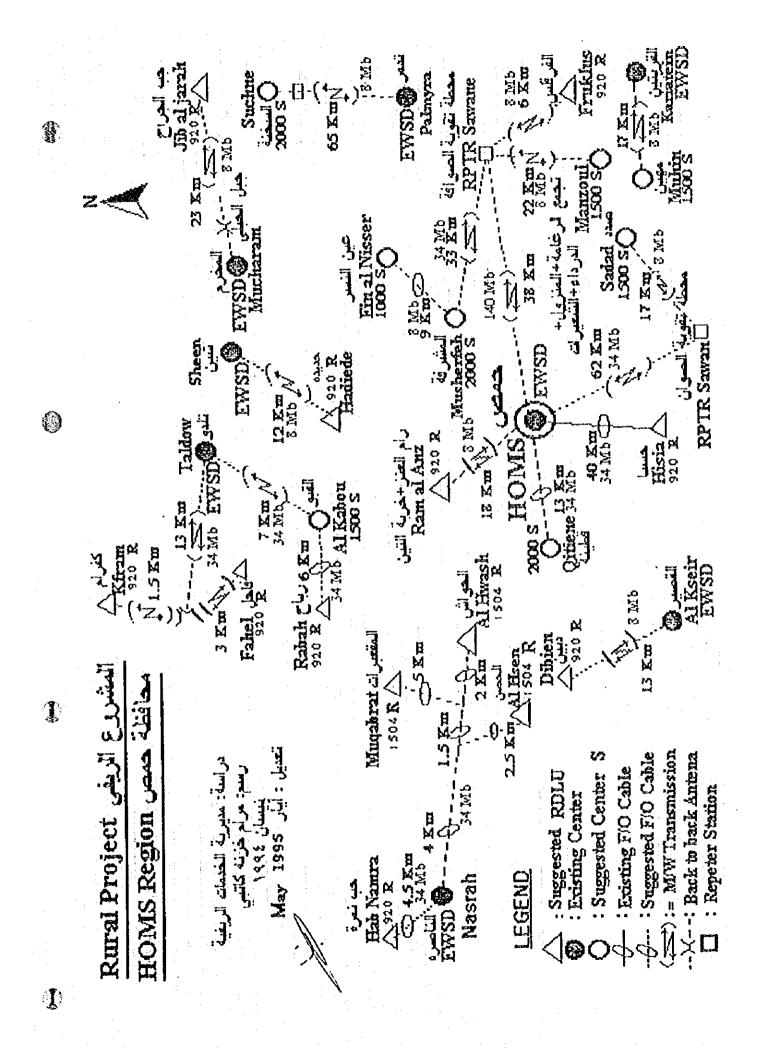


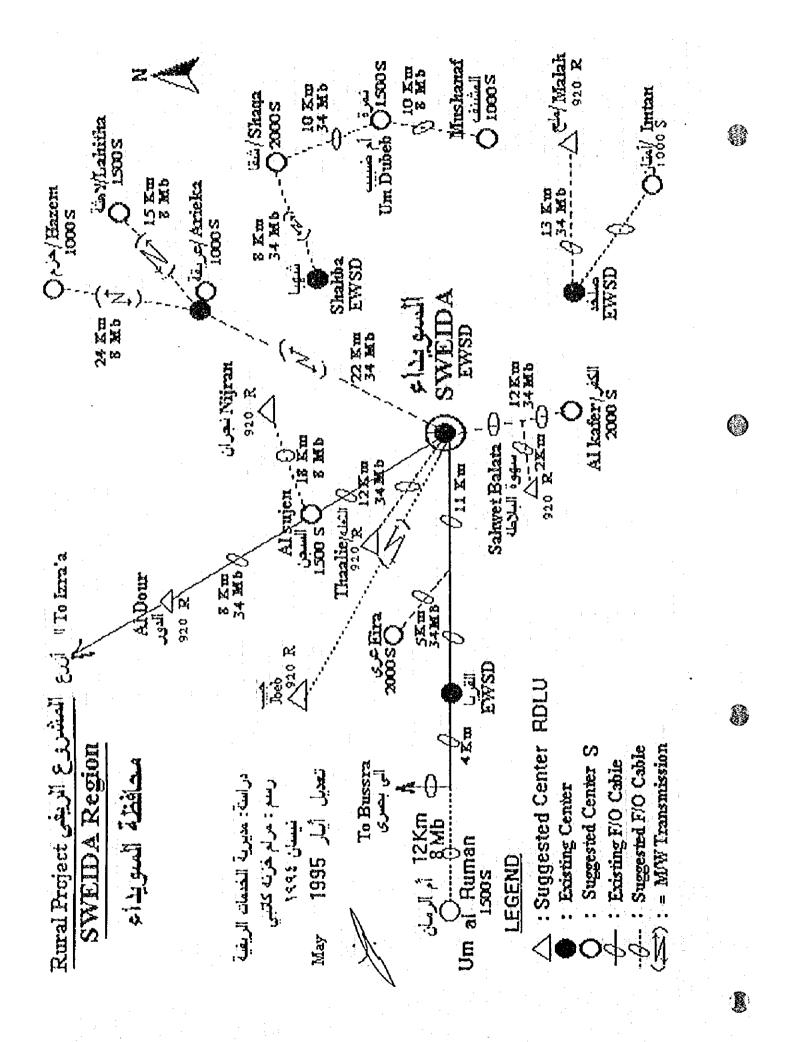


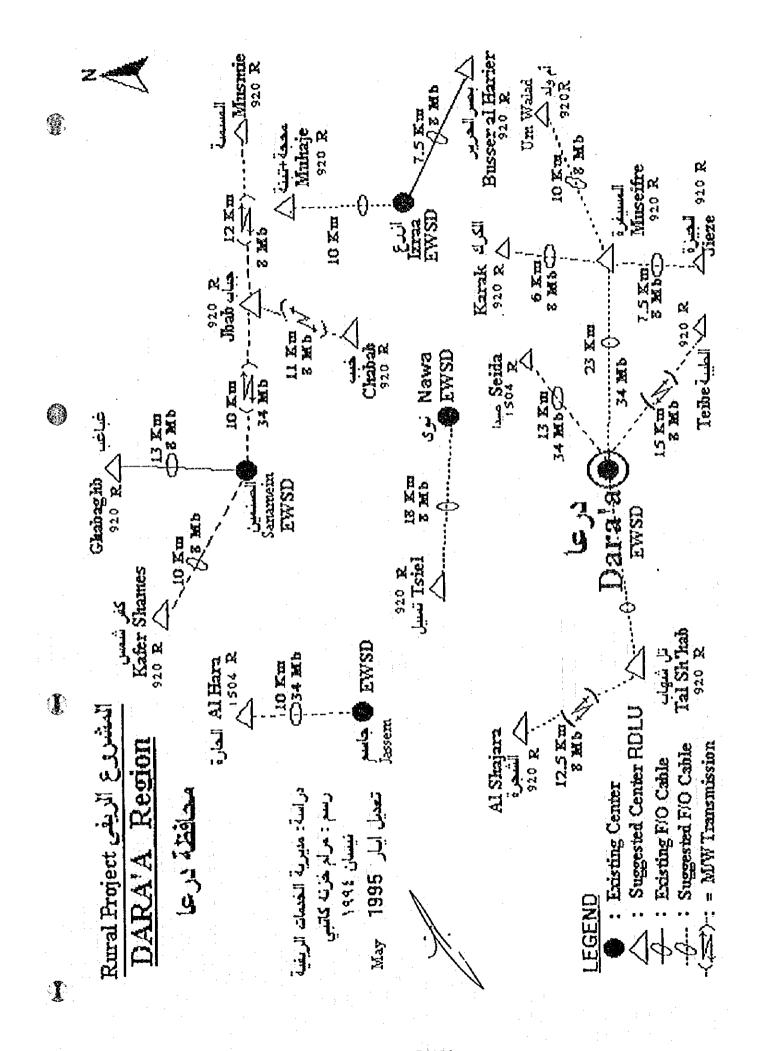


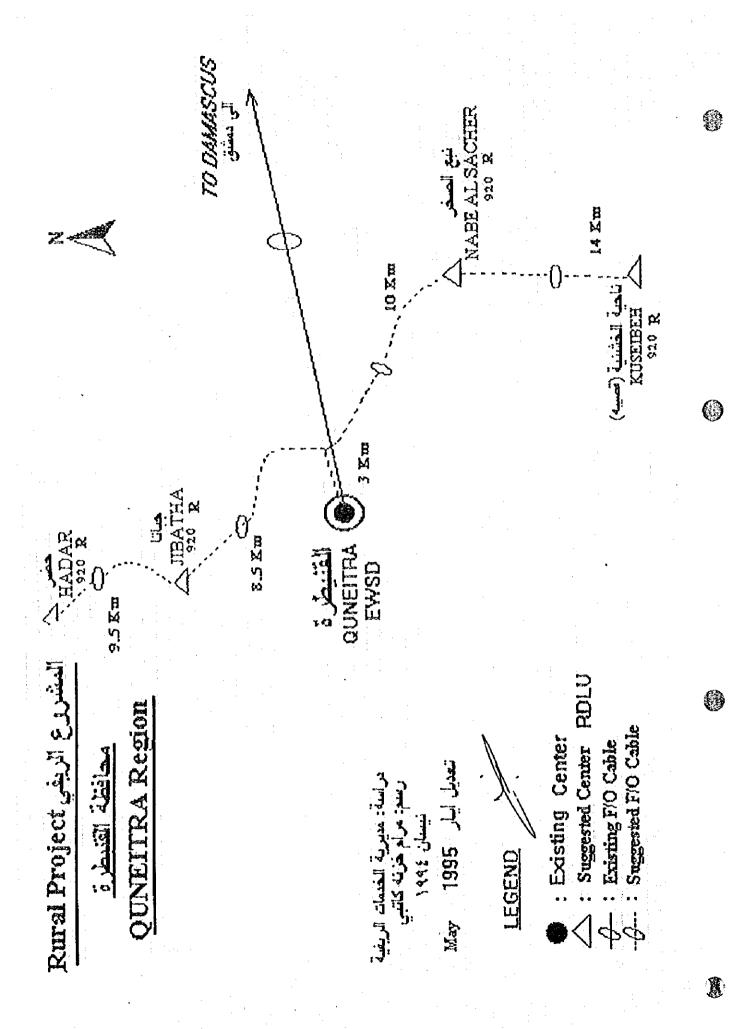


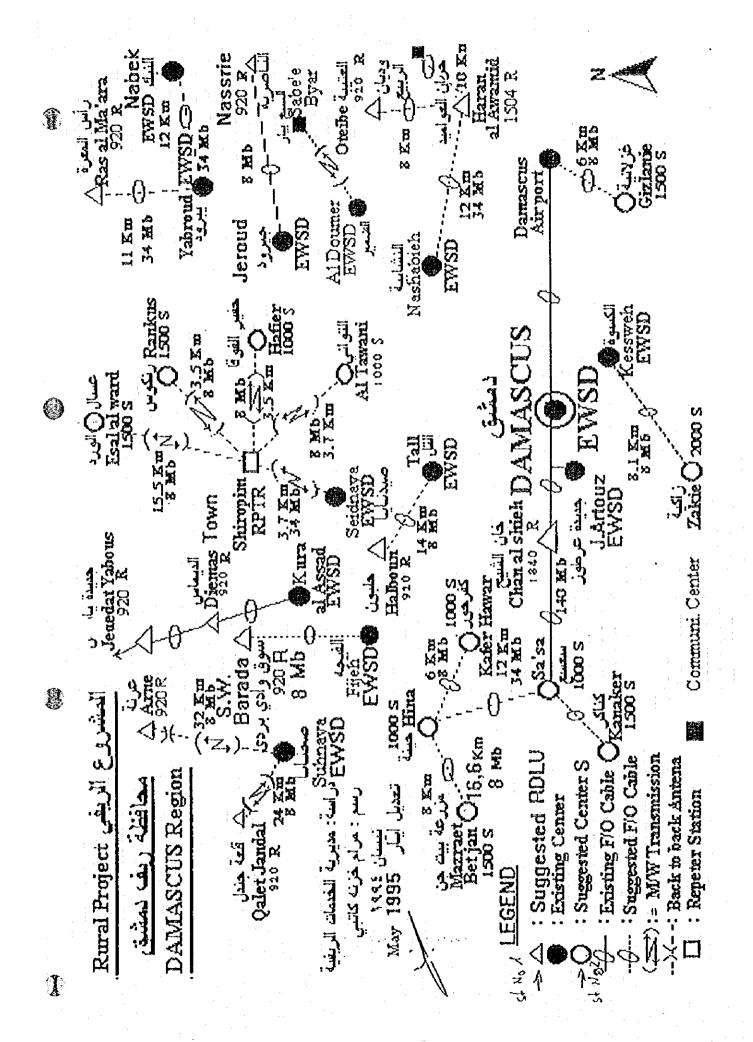


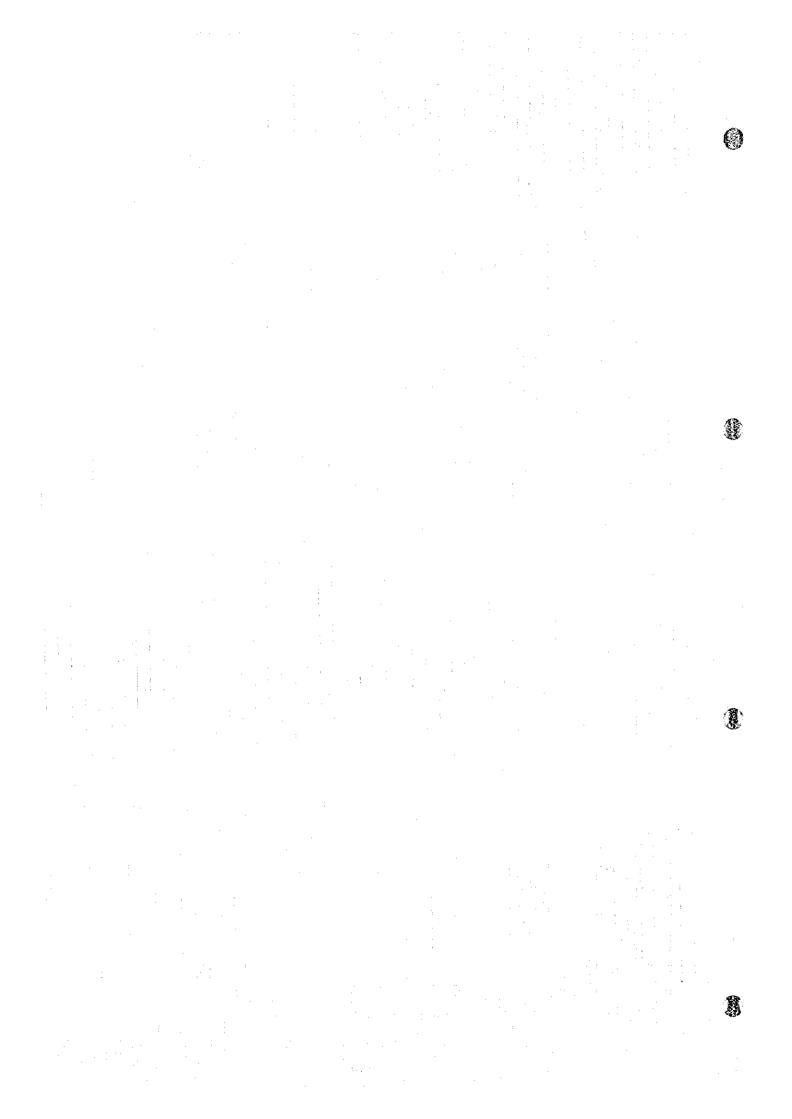












### D-14

Data Records Damascus Network Exchanges, End of one Million

No. of in 1996



B

Damascus outside plant

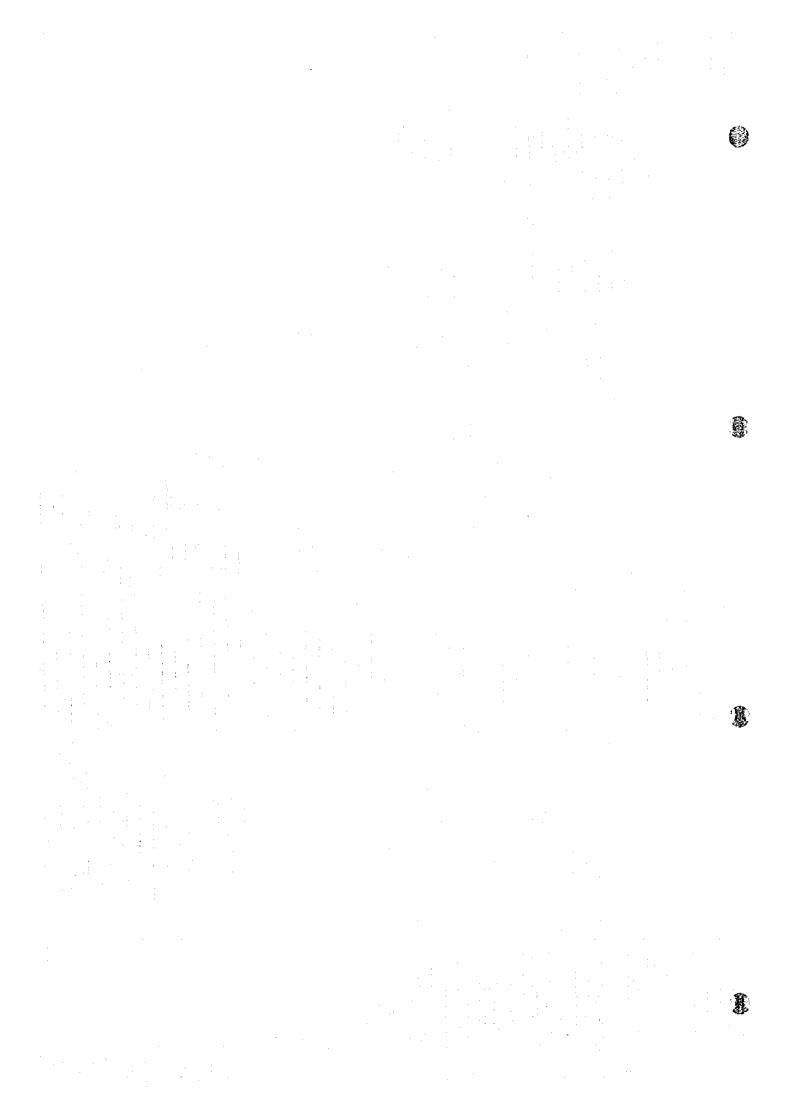
DATA records for Damascus network Exchanges, end of one milion NO. in 1996

1

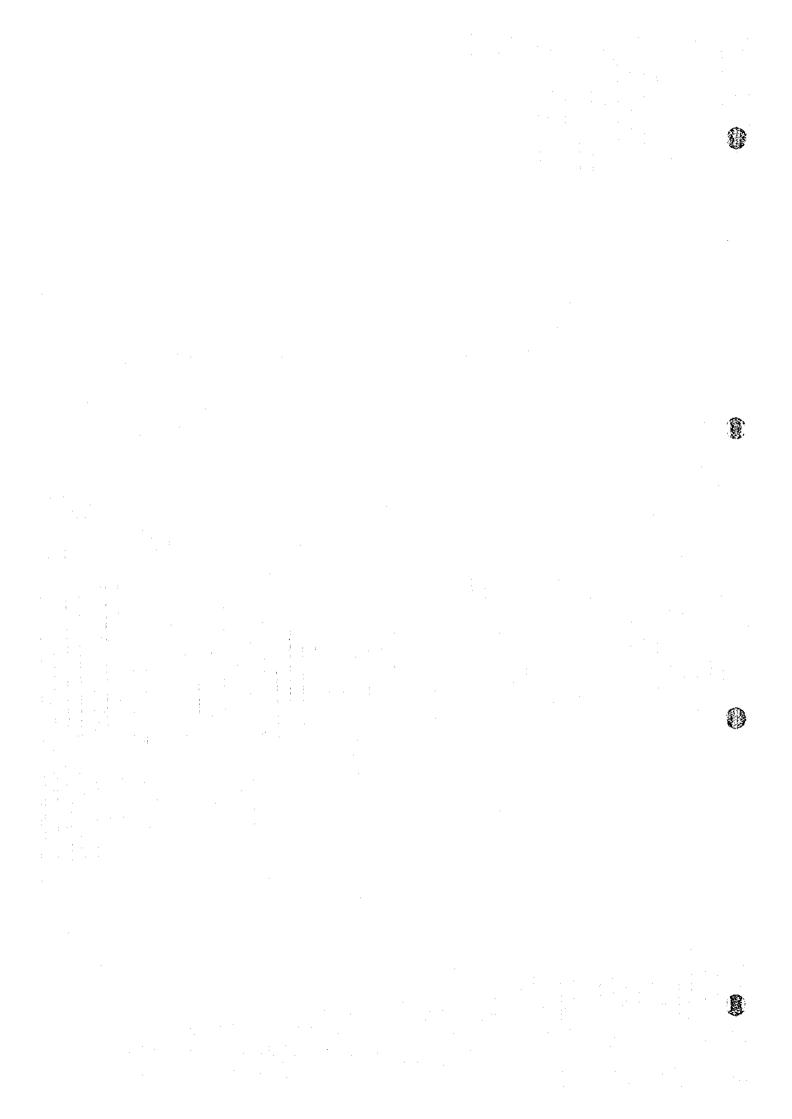
0

1

						**************************************	l enerth Of		-	Length	Multipled	NO. o.
- <del></del> -		<del>-</del>		Primary		Secondary	Primary		NO. of Primary	ŏ	By NO. Of	Distribution
الماسون مر	Center Code   Capacity	Capacity	u.C	Cable's length	NO. of cabinet	Cable Pairs	Cables	NO. Cabinet	Cable Pairs	Ducts	Ducts	Boxes
†	4	40 000	64 000	29.000	219.00	95,000	59,000	219.00	60,500	9,800	150,000	5,350
acciac	ن	40 000	85.400	63,000	209.00	80,500	63,000	209.00	62,000	11,000	170,000	4.000
2000	u	17 000	24 000	32,000	76.00	31,000	31,000	76.00	22,000	13,000	142,000	1.600
ika At Dein	. w	10,000	16.200	22,165	51.00	31,800	22,165	51.00	13,350	7,459	91,900	1,098
ala'a	ı e	30 000	38.000	39,000	114.00	54,000	29,000	114.00	36,500	9.000	103,000	2.800
ubacirien	0	23.000	28,000	16,000	72.00	31,000	16,000	72.00	26,500	6.200	38,000	1.800
abSharoi	20	30,000	36.000	3,669	89.00	51,600	36, 190	89.00	29,800	14,750	116,200	2,450
id Mezzeh	D1 & D2	25.000	27.200	29,000	85.00	33,000	29,000	85.00	26,500	11,000	117,000	2,500
armouk		30 000	63,000	85,000	350.00	135,000	85,000	350.00	61,500	21,000	230,000	7,800
arrzeh	Z	30 000	46,000	98,000	135.00	69,000	68,000	135.00	42,000	18,000	198,000	3,900
ummar	0	15,000	16,000	23,000	48.00	23,000	21,000	48.00	14,800	000'6	93,000	1,400
"ifrSiteah	×	25,000	30,500	32 000	93.00	42.000	31,000	93.00	28,000	11,500	85,000	2,100
ew Mezzeh	23	25,000	47,000	28,000	62.00	38,000	8,000	62.00	26,000	9.500	103,000	1,950
hawreh	-	15,000										
ND.		355,000	521,300	499,834	1603.00	714,900	498,355	1603.00	449,450	151,209	151,209 1,637,100	38,748



Statistical Table Analysis for Telephone Troubleshooting for 1995



# Satistical Table Analysis For Telephon Troubleshooting For 1995

D-184

The city center	Subscriber's average, NO			Percentage
Al naser	40000	7224	4684	3.9033333
Al jala'a	30000	3700	2876	3.1955555
Bagdad	40000	5450	4650	3.875
Al mazeh 1-2	25000	4500	3538	4.7173333
Almazeh 3	Ō	0	0	wrong
Rukn Aldein	10800	5285	2619	8.0833333
Al Midan	17000	9500	8570	16.803921
Al Muhajiren	16100	2862	2274	4.7080745
Bab Sharqi	17900	2520	2206	4.1080074
Kufr Suseh	0	0	0	wrong
Al Thawreh	0	0	0	wrong
Dumnier	0	0	0	wrong



## second qurater

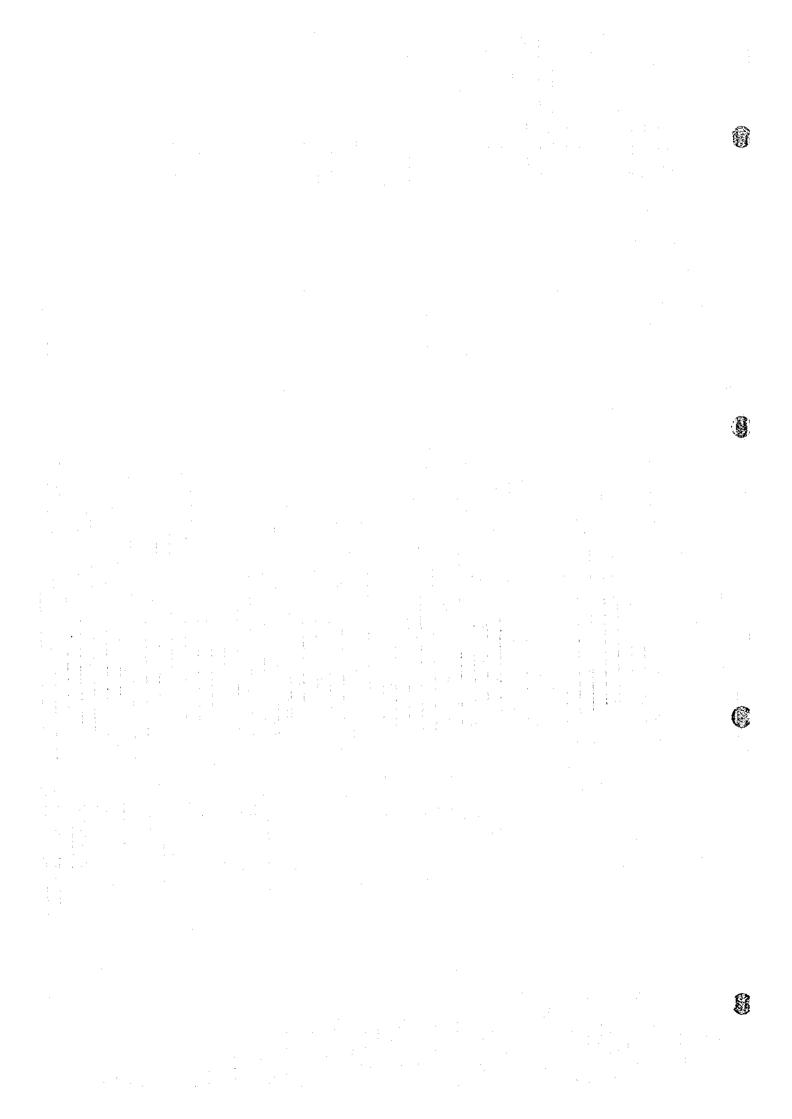
The city center	Subscriber's average NO	Complaince sum	Troubleshooting sum	Percentage
Al naser	40000	6508	4751	
Al jala'a	20000	5217	1814	2.0155555
Bagdad	40000	10174	4520	3.7666666
Al mazeh 1-2	25000	4629	2310	3.085333
Almazeh 3	0	0	0	wrong
Rukn Aldein	10800	4670	2050	6.3271604
Al Midan	17000	11365	7704	15,10588
Al Muhajiren	23000	2898	2098	3.04057
Bab Sharqi	18000	685	581	1.075925
Kufr Suseh	0	0	0	4.1080074
Al Thawreh	0	0	0	wrong :
Dummer	0	0	0	wrong

#### third quarter

The city center	Subscriber's average NO.	Complaince sum	Troubleshooting sum	Percentage
Al naser	40000	7209	5593	4.66083
Al jala'a	30000	4883	2798	3.1088888
Bagdad	40000	8203	3850	3.2083333
Al mazeh 1-2	25000	5414	3053	4.0706666
Almazeh 3	0	0	0	wrong
Rukn Aldein	10800	2000	2100	6,48
Al Midan	17000	12680	6267	12.305883
Al Muhajiren	23000	2218	1813	2.6275366
Bab Sharqi	0	2954	2140	2.3777777
Kufr Suseh	0	0	0	wrong
Al Thawreh	0	0	0	wrong
Dummer		0	0	wrong

#### fourth quar

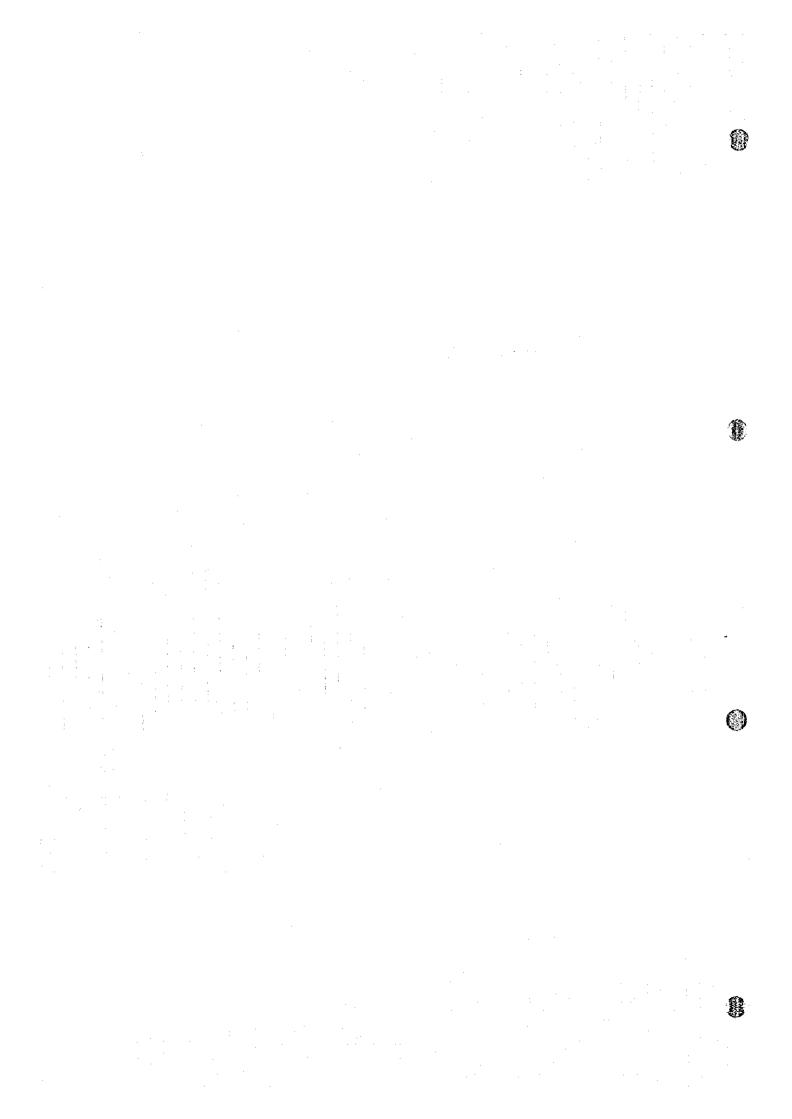
The city center	Subscriber's average NO.	Complaince sum	Troubleshooting sum	Percentage
Al naser	40000	5963		2.7558333
Al jala'a	30000	6319	4846	5.3844444
Bagdad	40000	10299	6308	5.256666
Al mazeh 1-2	25000	5867	4390	5.8533333
Almazeh 3	0	0	0	wrong
Rukn Aldein	10800	2050	2115	6.527
Al Midan	17000	13810	6150	12.058
Al Muhajiren	22000	2746	2309	3.346376
Bab Sharqi	30000	3054	2537	2.8188888
Kufr Suseh	0	. 0	0	wrong
Al Thawreh	0	0	0	wrong
Dummer	15000	1290	1057	2.348888



# D-16

Cost Analysis of Typical Network Construction Projects

1



# **Ducts & Monhol**

### Ducts of three routes

The first: it's length is 1500 m X 6 ducts in it 21 rooms.

The second: it's length 2000 m X 8 ducts in it 25 rooms

The third: it's length 1000 m X 6 ducts in it 15 rooms

#### Ducts length are:

9000 + 16000 + 6000 = 31000 m It's costs are: 31000 x 220 = 6820000 S.P (Extending)

## It's digging cost are:

1

4500 x 0.680 x 1.1 = 3000 m3 x 500 = 1500000 S.P (for Soils). 2700 m2 (Asphalt) x 300 = 810000 S.P 61 rooms x 75000 = 4575000 S.P Total Ducts costs are: 68200000 + 150000 + 810000+4575000 = 13705000 S.P

# Secondary network digging costs:

 $35000 \times 0.40 \times 0.60 = 8400 \text{ m}$ 

6500 m3

Soils 6500 in 3 Diggings 8400 x 350 = 29400000 S.P

Soils 6500 x 350 = 2275000 S.P.

Asphalt 14000 x 300 = 4200000 S.P

Extending:  $55000 \times 5 = 275000 \text{ S.P}$ 

# Sample

9690000 S.P

# Exchange capacity 10000 numbers

Primary network: 15000 = 7 cables x 1800 = 12600

Secondary Network:

Total:

20000 line: = 2 cables x 1200 = 2400



42 sets capacity 900 each one with 300 primary. 12 sets capacity 600 each one with 200 primary.

Total

52 sets

ì

Distribution boxes:

300 boxes with capacity 30 lines = 9000 400 boxes with capacity 20 lines = 8000 300 boxes with capacity 10 lines = 3000

#### Connections:

length of Armed cables diggings: are 35000 m

with capacity x 20 300 x 6000 connections capacity x 50 200 x 10000 connections

capacity x 200 150 x 30000 connections

Capacity x 150 100 x 15000 connections Capacity x 250 75 X 18000 connections Capacity x 200 50 X 5000 connections

Capacity x 100 30 X 3000 connections

Sum = 87000 connections

Secondary cables:

Capacity (300) = 1200 m Capacity (100) = 4500 m Capacity (30) = 13000 m Capacity (200) = 2500 m Capacity (75) = 7500 m Capacity (20) = 8000 m Capacity ( 150 ) = 6000 m Capacity ( 50 ) = 4000 m capacity ( 10 ) = 7500 m

Primary Cables:

1800 x 3000) m

1200 X 4000 m

600 x 4500 m

# Costs of network installation

Subject Name	Unit	Estimated Quantity	Price S.P	Total S.P
Injected Plastic cable 1800 x 2 x 0.4	Meter	3000	1290.00	387000.00
Injected Plastic cable 1200 x 0.4	Meter	4000	892.00	3588000.00
Injected Plastic cable 900 x 0.4	Meter	6500	717.00	4660500.00
Injected Plastic cable 600 x 0.4	Meter	4500	493.00	2218500.00
Injected Plastic cable 300x 0.4	Meter	800	259.00	207200.00
Armed Plastic cable 300 x 0.4	Meter	1500	324.00	486000.00
Armed Plastic cable 200 x 0.4	Meter	2500	231.00	577500.00
Armed Plastic cable 150 x 0.4	Meter	6000	187.00	1122000.00
Armed Plastic cable 100 x 0.4	Meter :	4500	133.00	598500.00
Armed Plastic cable 75 x 0.4	Meter	7500	111.00	832500.00
Armed Plastic cable 50 x 0.4	Meter	4000	88.00	352000.00
Armed Plastic cable 30 x 0.5	Meter	13000	79.00	1027000.00
Armed Plastic cable 20 x 0.5	Meter	8000	65.00	520000.00
Armed Plastic cable 10 x 0.5	Meter	7500	47.00	352500.00
Final Plastic connection	Number	9	4950.00	44550.00
Plastic connection to cable 1800	Number	45	3306.00	82650.00
Plastic connection to cable 1200	Number	31	3006.00	93186.00
Plastic connection to cable 900	Number	38	2546.00	96784.00
Plastic connection to cable 600	Number	27	1976.00	53352.00
Plastic connection to cable 300 - 200	Number	70	1178.00	82460
Plastic connection to cable 150 - 100	Number	350	950.00	332500.00
Plastic connection to cable 75 - 30	Number	450	874.00	393300.00
Wires connection	Number	840000	3.30	2770000.00
Distribution sets with capacity 900 line	Number	42	14700.00	617400.00
Distribution sets with capacity 600 line	Number	12	12465.00	149580.00
Distribution box 30 line	Number	300	823.00	246900.00
Distribution box 20 line	Number	400	705.00	282000.00
Distribution box 10 line	Number	300	646.00	193800.00
iron Duct	Meter	3000	50.00	150000.00
Installation costs of 61 inspection rooms (44)	Meter	61	75000.00	4575000.00
Ducts Installation costs	Meter	4500		9130000.00
Costs of civil work to the secondary networ	Meter	. !		9690000.00

# Worker's cost for STE Staff

	Estim	ated costs	for S.T.E work	er	
Items	N.O	Days N.O	Daily cost S.P	Total value S.P	Remarks
Engineer	. 1	350	250.00	87500.00	
Technical assistant	1	350	200.00	70000.00	
Test Director	1	200	200.00	40000.00	
Cable's workshop					
Director	1	90	200.00	18000.00	
Welder	10	300	250.00	750000.00	
Welder Assistance	10	300	180.00	540000.00	
Specialist worker	1	150	150.00	22500.00	
Normal worker	6	90	120.00	64800.00	
Car Driver	.1	350	150.00	52500.00	
Lorry driver		90	200.00	18000.00	
Sum				1663300,00	
					:
Ε	stimated cost	ls for Transp	ortation & Oil		7 7 7 7
Item	N.O	Days N.O	Daily cost S.P	Total value	
Carditver	.1	350	500.00	175000.00	
Lorry daixer	1	90	1500.00	135000,00	
Sum		1		310000.00	
					· · · · · · · · · · · · · · · · · · ·
	0	verall value		. 1	<del></del>
Estimated value				49375626.00	
workers cost		1		1663300.00	
vehicles cost		l		31000.00	
Sum			<del></del>	51,069,926	







# Typical network exchange with capacity 10000 numbers

#### Ducts network:

#### It consists of three routes:

The first is 1500 m length included 6 ducts with 21 rooms. The second is 2000 m included 8 ducts with 25 rooms. The third is 1000 m length included 6 ducts with 15 rooms.

So ducts length are:

9000 + 16000 + 6000 = 31000 m

And It's cost are:  $31000 \times 220 \text{ S.P} = 6820000 \text{ S.P}$ 

Diggings cost

 $4500 \times 0.6 \times 1.1 = 3000 \text{ m} 3 \times 500 \text{ S.P} = 500000 \text{ S.P}$ 

Asphalt costs

2700 m<sub>2</sub> x 300 = 810000 S.P

61 rooms x 75000 S.P = 4575000 S.P.

Total ducts cost

682000 + 1500000 + 810000 + 4575000 = 13705000 S.P.

# Secondary network diggings cost are: 8400 ms

- Digging cost

- Soil cost

- Asphalt cost

8400 m3 x 350 = 2940000 S.P

6500 ms x 350 = 2275000 S.P.

14000 nn x 300 = 4200000 S.P

- Armed cables

Extending cost

55000 x 5

= 272000 S.P

Total of secondary network costs

9690000 S.P

Material costs are: 25980626 S.P. Workers cost are: 1663300 vehicle costs are: 310000

D-193

# Secondary connection:

Connections: 8700 X 2 = 174000 connections

Number of connected lines are: 87000 + 20000 (boxes) = 107000

713 days 713 days 200 days 200 drivers 200 cars welding welding assistant technical assistant

## Workers & vehicle costs:

#### Ducts:

Technical assistant		1	150 days
Specialist worker		1	150 days
Cars		1	150 days
Car drivers	* .	1	150 days

#### Primary cables (extended by S.T.E)

Technical assistant	4.5		90
Workshop director			90
6 workers			90
Holder cars			90
Lorry			90
Big cars		4	90

## Primary connections:

## 325600 connection points

2170 days		welding
2170	•	Welding assistant
200 days		Cars
200 days		Technical assistant
200 days		drivers

# Estimated cost

	USS	In Syrian currency
Exchange	150	9100 S.P
Connections Between cities	50	
Local network	130	42 S.P = 1 US\$ 11,255 S.P =1US\$
National & international	40	11.233 ().1 1004

370 US\$ + 9100 S.P

Single line cost is 600 US\$

Sum

	Syrian currency		Foreign currency		
Buildings	734	•			÷ .
lands	133			_l	
National & International				1 -	
Exchange for subscribers	50	* .		1800	
Connection networks					
Between centers	134	4 2	1	525	
Local subscribers networks	2616		1.1.7	1425	
Vehicles	200			-	
Custom fees	2200		* 4 4	•	
Sum	6067			3750	•
				:	

6067 + 3750 = 9817

11

1

