

PARRISH, BLESSING & ASSOCIATES, INC.

ECONOMIC CONSULTANTS

RECEIVED

NOV 14 1997

November 14, 1997

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Secretary
Federal Communication Commission
Room 222
1919 M. St. N.W.
Washington, DC 20544

DOCKET FILE COPY ORIGINAL

RE: USF Date Request for Puerto Rico Telephone Company (CC Docket 96-45)

Dear Secretary:

Enclosed is Puerto Rico Telephone Company's (PRTC) response to Question No. 2 (Loop Length Study) contained in the USF Data Request for non-rural incumbent local exchange carriers. On August 14, 1997, the Commission issued an order (DA 97-1728) extending the deadline for responding to Question 2 until November 15, 1997.

Any questions concerning this information should be direct to PRTC's Mr. Wilfredo Garcia at (787) 792-9770 or to the undersigned.

Respectfully Submitted,



Scott Schultheis

On behalf of the
Puerto Rico Telephone Company

cc: International Transcript Services, 1231 20th St, N.W., w/ diskette
Sheryl Todd, Universal Service Branch, 2100 M. St, N.W., Room 8611, w/ diskette
Mr. Wilfredo Garcia

Puerto Rico Telephone Company

CC Docket 96-45

USF Data Request

November 14, 1997

Items Included:

Main Excel Spreadsheet

Filenames on Diskette

PRTCMAIN.XLS

Additional Items:

Loop Length Study for Question No. 2

Approved by OMB			
3060-0781			
Expires 12/31/97			
Federal - State Joint Board on Universal Service			
Data Request			
Holding company		Puerto Rico Telephone	
Study area	PRPR	PRCC	Study Area 3
Contact Person:			
1. Loops:			
(For Wire Center Data, Fill Out Attachment 1)		(see Attach. 1)	(see Attach. 1)
a. Switched Working Loops			
i. residential (no.)		859,410	134,325
ii. single line business (no.)		130,505	14,297
iii. multi-line business (no.)		51,528	5,770
b. Non-Switched Working Loops (no.)		33,935	2,156
c. Non-Working Loops (no.)		2,120,170	216,561
d. Non-Revenue Loops (no.)		14,647	2,037
2. Loop Length Studies:			
Study Included? (Y/N)		Y, 11/14/97 submission contains 50 add'l loops	
Sample Size (no.)		100	
Was Stratified Sample based on density cells, study area, or wire centers? (D,S,W)		W	
Non-working loops included? (Y/N)		N	
Glossary Included? (Y/N)		Y	
Loop lengths (list lengths below)		Number of loops for each length (list number below)	
a. 0-5,000		33	
b. 5,001-10,000		27	
c. 10,001 +		38	
3. Subscriber Line Usage:			
Study Included? (Y/N)		N	N
Date(s) of Study		9/2/97-9/8/97	9/2/97-9/8/97
Sample Size (no. of lines)		600	300
Wire centers Included (no.)		66	12
Minutes of Use (no.)		See Schedule 3Q	See Schedule 3Q
Glossary Included? (Y/N)		N	
4. Residential Basic Service:			
Free Calls (no.)		See Attachment 4 in Original Submission 8/15/97	
Free Minutes (no.)		See Attachment 4 in Original Submission 8/15/97	
5. Cable Investment/Loop Length:			
(For Wire Center Data Fill Out Attachment 1)		(see Attach. 1)	(see Attach. 1)
a. Gross investment in distribution plant		878,756,750	155,982,688
i. Percent Buried Cable (%)		34.2%	68.9%
ii. Percent Underground Cable (%)		9.1%	5.0%
iii. Percent Aerial Cable (%)		56.8%	26.1%
b. Gross investment in feeder plant		106,708,874	11,899,116
i. Percent Buried Cable (%)		20.1%	14.2%
ii. Percent Underground Cable (%)		70.4%	72.4%
iii. Percent Aerial Cable (%)		9.6%	13.4%
c. Distribution loop length		1,544	1,765
i. Percent Buried Cable (%)		21.4%	47.8%
ii. Percent Underground Cable (%)		14.7%	6.1%
iii. Percent Aerial Cable (%)		63.9%	46.0%
d. Feeder loop length		7,306	6,165

i. Percent Buried Cable (%)			13.2%	15.9%	
ii. Percent Underground Cable (%)			73.5%	70.8%	
iii. Percent Aerial Cable (%)			13.3%	13.2%	
6. Installation Cost Data for Cable Facilities:					
Has data been provided? (Y/N)			N	N	
Dates of data to commission(s)					
To what commission was data submitted?					
Commission docket/case number					
Glossary Included? (Y/N)					
7. Subscriber Cable Utilization:					
(For Wire Center Data, Fill Out Attachment 1)			(see Attach. 1)	(see Attach. 1)	(see Attach. 1)
Study Included? (Y/N)				N	
Feeder (%)			54.14%	52.94%	
Distribution (%)			25.06%	32.30%	
Glossary Included? (Y/N)				N	
8. Structures Sharing Percentage:					
a. Poles (%)			14.87%	14.87%	
i. interoffice			14.87%	14.87%	
ii. subscriber			14.87%	14.87%	
b. Conduits (%)			0%	0%	
i. interoffice			0%	0%	
ii. subscriber			0%	0%	
c. Trenches (%)			0%	0%	
i. interoffice			0%	0%	
ii. subscriber			0%	0%	
9. Residential Multi-line Customers:					
Total residential customers (no.)			859,410	134,325	
Multi-line residential customers (no.)			0	0	
Percent multi-line (%)			0%	0%	
For multi-line residential customers, channels served by basic rate ISDN (no.)			0	0	
(For Wire Center Data, Fill Out Attachment 1)					
10. Poles:					
Cost of 40' class 4 pole in 1996 (\$)			228.60	228.60	
Cost of Installation in 1996 (\$)			829.24	829.24	
11. Digital Switching -- DCPR:					
Format specified in data request			310624568	33284868	
			ASCII	ASCII	
12. Digital Switching -- Cost and Lines Served					
Provide material cost, installed cost, and lines served for each digital switch purchased in 1995/1996.					
(For Individual Switch Data, Fill Out Attachment 2)			(see Attach. 2)	(see Attach. 2)	(see Attach. 2)
13. Switching Manufacturer Contracts:					
(For Contract Data, Fill Out Attachment 2)			(see Attach. 2)	(see Attach. 2)	(see Attach. 2)
a. Copy of contract provided? (Y/N)			Y in Original Submission 8/15/97		
b. Define following terms, if necessary, on a separate sheet:					
new switch					
growth to new switch					
growth to embedded switch					
remote switch					
remote switching module					
c. Price includes removal of old switch? (Y/N)			N		
d. Time period of contract			(see Attach. 2)	(see Attach. 2)	(see Attach. 2)
e. How many lines committed to install?			(see Attach. 2)	(see Attach. 2)	(see Attach. 2)

14. Digital Line Carrier Devices:						
(For DLC Data, Fill Out Attachment 2)						
a. Material and Installed cost of each device						
i. Common Equipment				(see Attach. 2)	(see Attach. 2)	(see Attach. 2)
ii. Per-line Equipment				(see Attach. 2)	(see Attach. 2)	(see Attach. 2)
b. No. of lines served at end of 12 months of service						
				(see Attach. 2)	(see Attach. 2)	(see Attach. 2)
15. Drop Lines for Residential Customers:						
Single family (no.)				3	3	
Multi-family (no.)				3	3	
b. No. of fiber DS-0 trans. channels (no.)				1	1	
c. If a different no. of pairs when using aerial vs. buried, provide the number of aerial and buried pairs.				Aerial = 1 Buried = 3	Aerial = 1 Buried = 3	
16. Maintenance Expenses for switching, circuit, and cable and wire facilities:						
a. Most recent estimates incorp. into study filed with a state or federal commission provided? (Y/N)						
i. Name of Commission				Telecommunication Regulatory Board of Puerto Rico		
ii. Date of study				1995		
iii. Associated docket/case number				Docket 97-0034-AR		
b. Is a copy of calculations provided? (Y/N)				Y in Original Submission		
c. Is explanation of difference between fiber and copper provided? (Y/N)				N	N	
d. Is explanation of differences in maintenance expenses among aerial, underground, and buried cable provided? (Y/N)				N	N	
17. Riser Cable:						
a. Do you currently install riser cable in multi-unit residential housing or commercial buildings? (Y/N)						
				Y		
b. Is an explanation of under what conditions installed riser cable is part of regulated total plant in service provided? (Y/N)						
				Y		
c. Percent of the installed riser cable included in regulated total plant in service (%)						
				100%		
18. For residential, single-line business, and multi-line business customers May 1997, provide:						
a. Total local service revenue (\$)				34,481,807	4,170,777	
Number of customers (no.)				1,041,443	154,392	
b. Sum of taxes and 911 surcharges (\$)				499,262	150,106	
c. Total of billings for which you provided the toll service (\$)				74,547,314	6,521,990	
d. Total of billings for which another carrier provided toll services (\$)				14,053,737	1,561,526	
e. For multi-line residential customers provide the revenue generated by the purchase of the additional lines (\$)				0	0	
19. Number of square miles served (no.)						
(For Wire Center Data, Fill Out Attachment 1)						
				2942.96	435.5	
20. Cost of Land and Buildings:						
(For Wire Center Data, Fill Out Attachment 1)						
Cost of Land (\$)				15073018	1111405	
Cost of Buildings (\$)				85118568	14602965	
Number of Switches (no.)				142	91	
21. DLC Manufacturer Contracts:						
(For Contract Data, Fill Out Attachment 2)						
				(see Attach. 2)	(see Attach. 2)	(see Attach. 2)

October 15, 1997

PUERTO RICO TELEPHONE COMPANY

LOOP LENGTH STUDY

I- Introduction

The PRTC has been divided in two main operational areas, Metro Area and Island Area. Each one consists of five districts.

During the first quarter of 1997, a Loop Length Study or Loop Survey of the Metro Area was conducted. As requested by the FCC, a Loop Length Study of the Island Area, was conducted during September of 1997.

As required, the purpose of this document is to explain the process used in the study.

II- Sample Selection Process (For Island Area Study)

The five districts of the Island Area are the following:

- North District (19 Exchanges)
- South District (16 Exchanges)
- East District (9 Exchanges)
- West District (17 Exchanges)
- Central District (12 Exchanges)

A statistical sample of the loop population of each district was selected using the following criteria:

- 1- The exchange in each district, with the greatest number of in service lines was selected.
- 2- The remaining exchanges of each districts were classified in two groups: exchanges with 7,500 or more lines in service and exchanges with less than 7,500 lines in service, (as of 8/30/97 C.O. Report).
- 3- From both of the above groups in each district, samples (exchanges) were selected on a random basis using the mechanized (software) Random Number Generator Program.
 - From the group of exchanges with 7,500 lines or more, one exchange was selected.

Loop Length Study

October 15, 1997

Page 2

- From the group of exchanges with less than 7,500 lines, three exchanges were selected.

The following are the results per district:

<u>North District</u>		<u>South District</u>	
1- Arecibo	(33,352)	1- Ponce	(58,148)
2- Manatí	(13,631)	2- Coamo	(7,945)
3- Barranquitas	(7,098)	3- Guayanilla	(4,833)
4- Florida	(2,342)	4- Jayuya	(3,489)
5- Quebradillas	(6,225)	5- Peñuelas	(4,800)

<u>East District</u>		<u>West District</u>	
1- Humacao	(20,647)	1- Mayaguez	(38,108)
2- Fajardo	(15,272)	2- Moca	(8,068)
3- Ceiba	(7,052)	3- Lajas	(6,982)
4- Luquillo	(6,168)	4- Hormigueros	(3,628)
5- Naguabo	(5,787)	5- Rincón	(4,098)

<u>Central District</u>	
1- Caguas	(50,687)
2- Las Piedras	(8,769)
3- Aguas Buenas	(6,285)
4- Culebra	(783)
5- Vieques	(3,363)

A sample size of 500 stations (telephone numbers) per district (100 per exchange) was used. The samples were selected using The Random Number Generator Program.

A list of the telephone numbers obtained by the program, is enclosed.

For the FCC study, 10 stations per district were used (the first two numbers in the lists) for a total of 50 loops.

For drops purposes, a length of 250 feet was estimated for aerial plant and 150 feet for buried plant.

CAR/JLD
Enc.

LOOP LENGTH STUDY

ABBREVIATIONS :

C.O. = OC = CENTRAL OFFICE

RSC = REMOTE SWITCHING CENTER

RSU = REMOTE SWITCHING UNIT

IP = INTERFACE POINT

DLC = DIGITAL LOOP CARRIER

KFT = KF = KILOFEET

UG = U = UNDERGROUND CABLE

A = AERIAL CABLE

B = BURIED CABLE

JF = JELLY FILLED

ALP = A = ALPETH CABLE

STA = STALPETH CABLE

AC = AIR CORE CABLE

FS = FOAM SKIN CABLE

F/O = FIBER OPTIC CABLE

DW = DROP WIRE

SW = SERVICE WIRE

EXAMPLES :

- 1- 30-26 STALP. = 7.2 KILOFEET OF A 3,000 PAIRS -26 GAUGE
 UG UNDERGROUND STALPETH CABLE
 7.2 KF
- 2- 6 - 24 ALP. = 5.3 KILOFEET OF A 600 PAIRS -24 GAUGE
 A-5.3 KFT AERIAL ALPETH CABLE

LOOP LENGTH STUDY

SYMBOLS :

	CENTRAL OFFICE (C.O.)
	UNDERGROUND CABLE
	UNDERGROUND CABLE
	BURIED CABLE
	AERIAL CABLE
	RISER CABLE
	INTERFACE POINT (IP)
	DROP WIRE
	DIGITAL LOOP CARRIER (D.L.C.)
	REMOTE SWITCHING UNIT (RSU) REMOTE SWITCHING CENTER (RSC)
	FIBER OPTIC CABLE

PUERTO RICO TELEPHONE COMPANY

LOOP LENGTH STUDY

DISTRICT: ISLA EAST

DATE: OCTOBER 02, 1997

ITEM	TEL. NO.	ADDRESS	CENTRAL OFFICE	FACILITIES
1	889-2532	P.R. 193, PLAYA AZUL	LUQUILLO	C-2 T-273 2076
2	889-0811	P.R. 992, KM. 4.8	LUQUILLO	C-3 843 IP19 448
3	874-2155	CALLE A. RIOS DPTO. INST.	NAGUABO	C-1 1161 T-31
4	874-7676	P.R. 31, KM. 12.5	NAGUABO	C-1 544 IP1 114
5	860-1836	CALLE SAN ISIDRO #220	FAJARDO	C-8 1938 IP6 121
6	863-0817	P.R. 194 FRENTE O.C.	FAJARDO	C-7 2633 T-1570
7	852-9644	P.R. 3 KM. 87.8 BO. CANDELERO	HUMACAO	C-14 137 IP49 85
8	850-5581	263 CRESENT BEACH, PALMAS	HUMACAO	C-6 1256 IP14 19
9	885-4028	P.R. 975 KM. 4.5 RIO ABAJO	CEIBA	C-3 245 T-16
10	&885-2537	B3 EST. DE PRADO HERMOSO	CEIBA	C5;137 IP23 T18 328

ATTACHMENTS: LOOP SQUEMATICS 1 - 10

● C.O. Luquillo

3600 X 16 S
 W 1.89 KF

12000 X 16 S
 W .11 KF

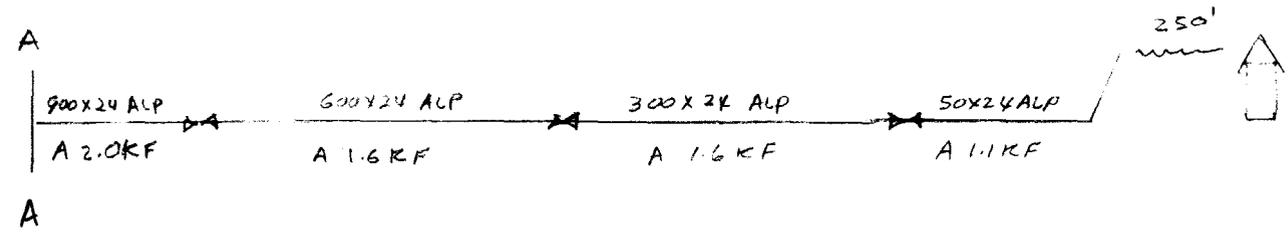
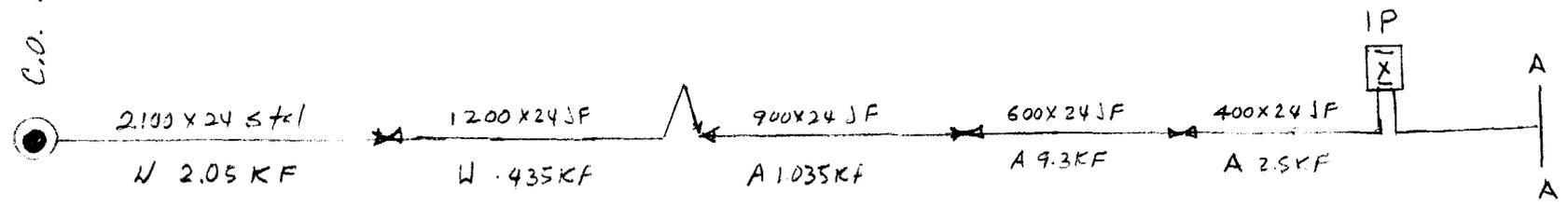
12000 X 16 S
 A .08 KF

5000 X 16 S
 W .08 KF



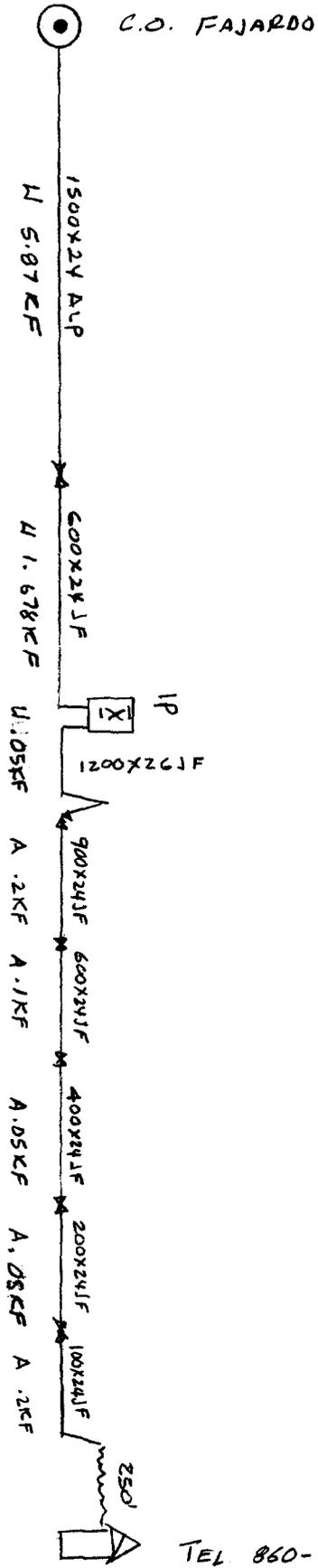
TOTAL = 2.31 KF.

C.O. Lugoillo

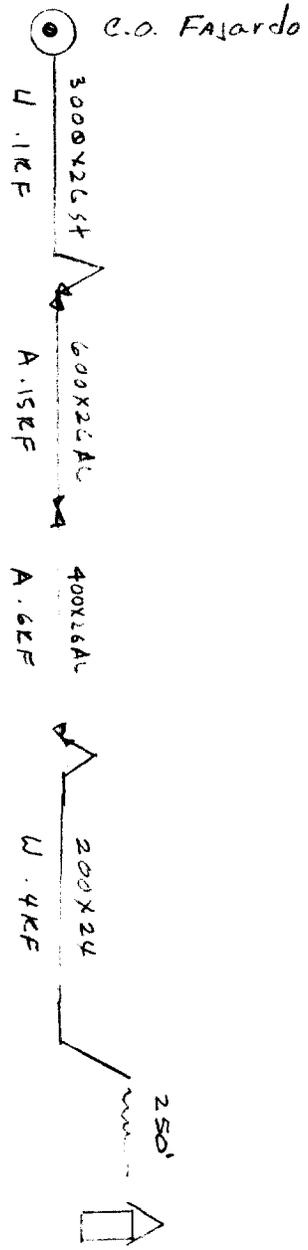


TEL 889-0811
 (Loaded)

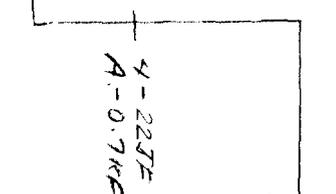
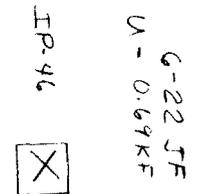
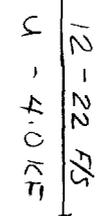
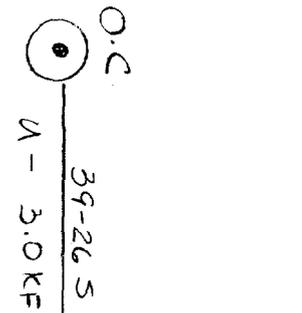
TOTAL = 24.18 KFT.



TOTAL = 8,448 KFT



TEL. 343-0819
TOTAL = 9,948KFT



TOTAL = 14.94 KF

852-9644



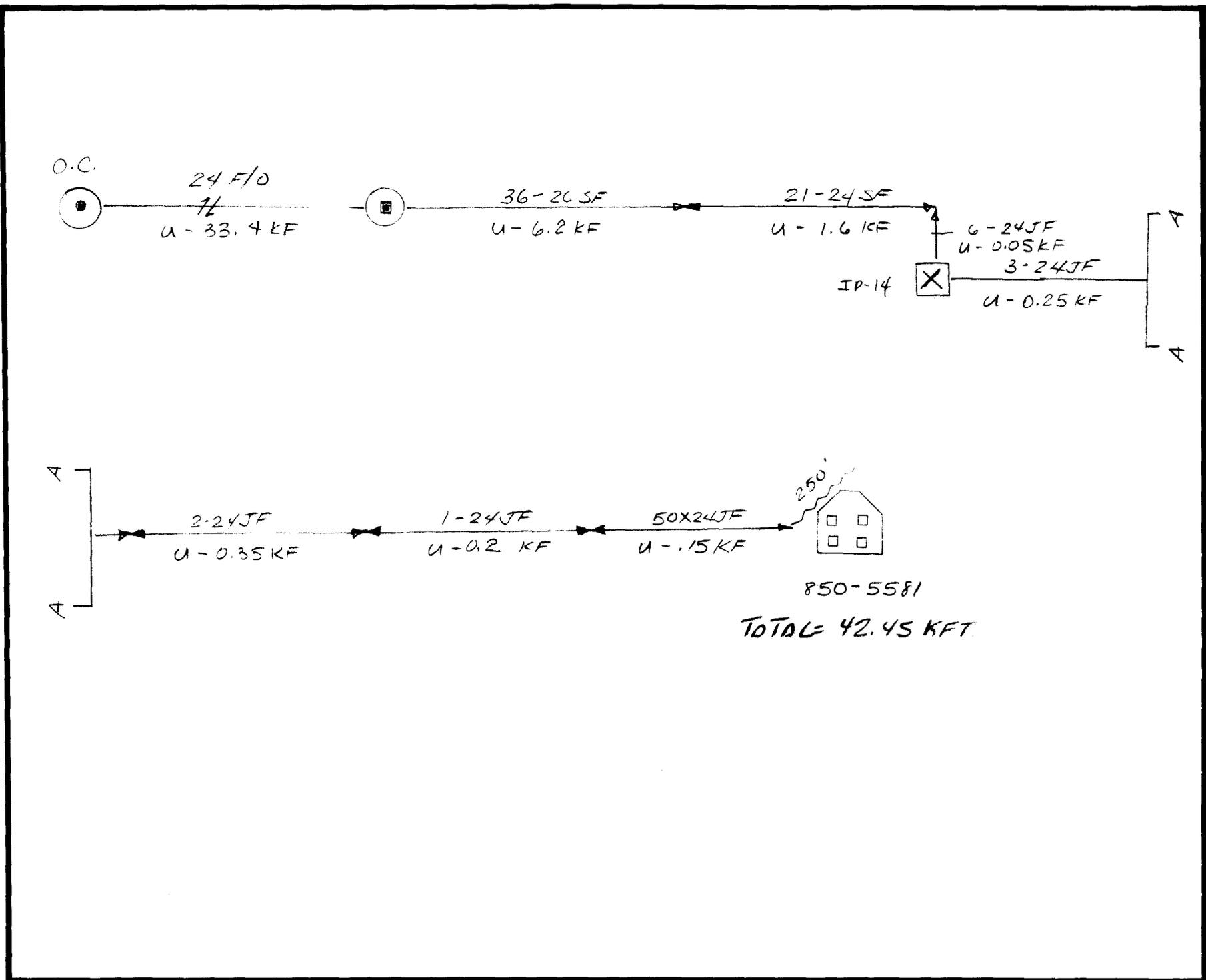


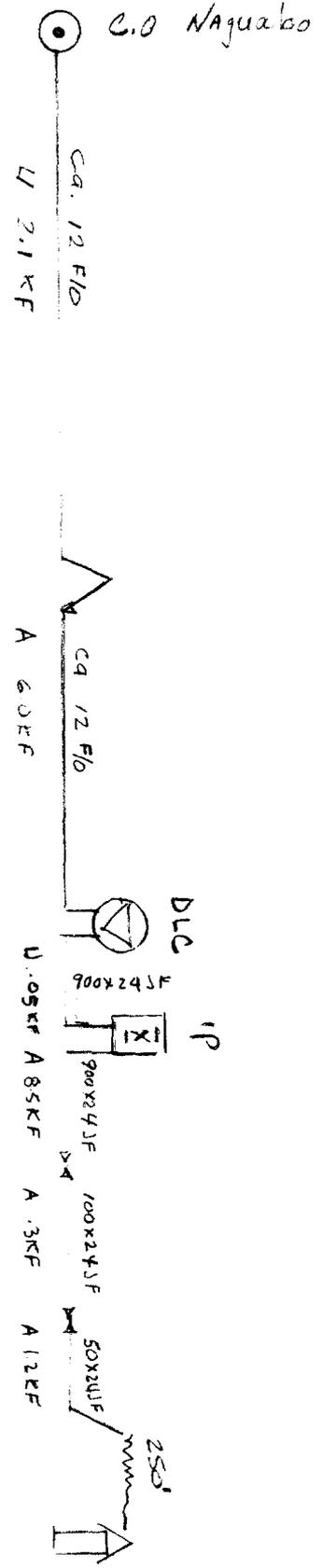
PROYECTO # *Rem. Palmas Hermanas*

HOJA 1 DE 1

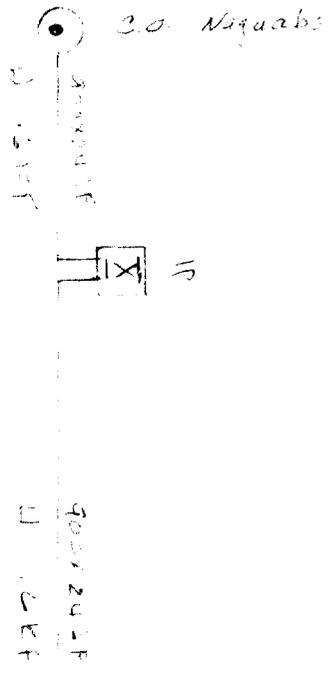
FECHA *Apr 97* POR *C. Gonzalez* COTEJADO

PROYECTO *850-5581 Crescent Beach*

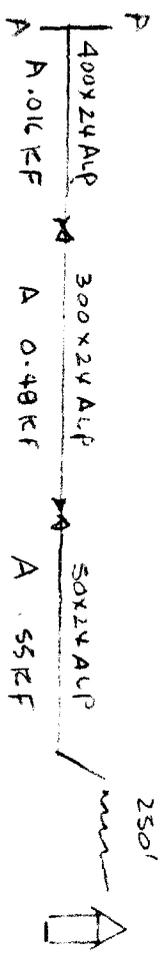
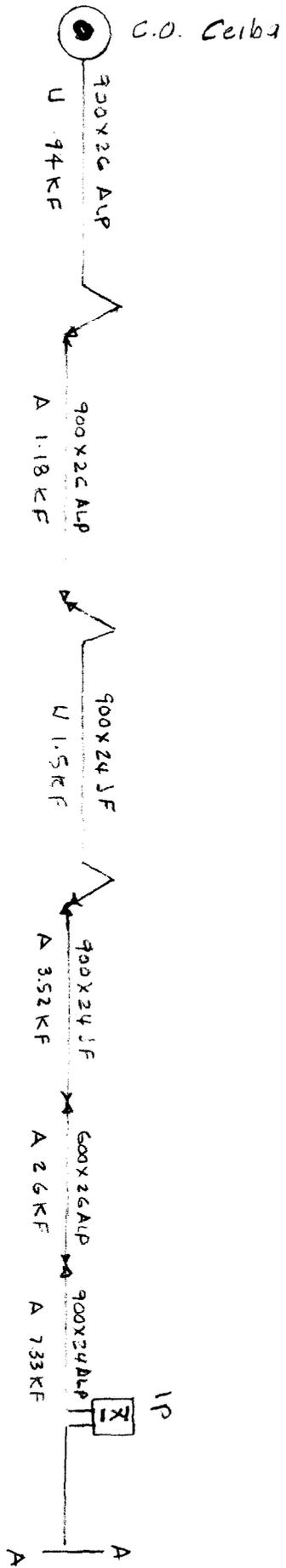




TEL 874-0223
TOTAL= 18.4 KFT.



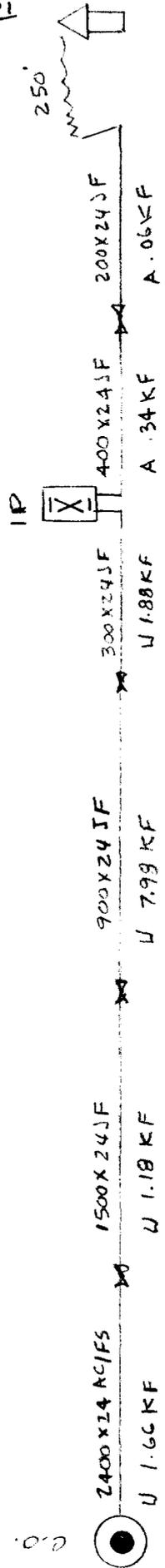
TEL. 874.2155
TOTAL = 1.95KFT



TD 885.4028
TOTAL = 18,366 KFT

TEL 885-2537

TOTAL = 31.716 KFT



C.O. Ceiba

PUERTO RICO TELEPHONE COMPANY

LOOP LENGTH STUDY

DISTRICT: ISLA CENTRAL

DATE: octubre 1ero, 1997

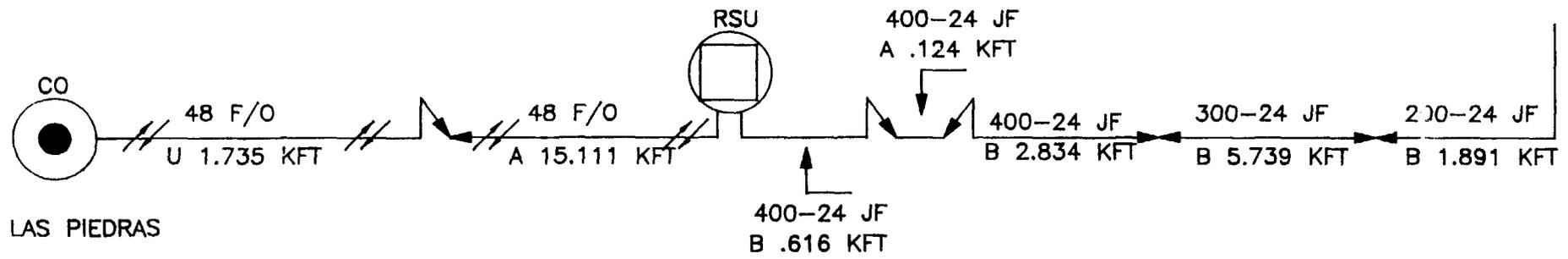
ITEM	TEL. NO.	ADDRESS	CENTRAL OFFICE	FACILITIES
1	733-9126	Carr. 917 Km.1.6 Sector La Capilla	Las Piedras	IP - 02
2	733-6921	Carr. 9921 Km. 1.4	Las Piedras	LP 01, Par. 186 T-31
3	742-0227	Parcela 140 Bda. Clark	Culebra	CU 01, Par. 196 IP-01
4	742-0500	C/ Manuel Vázquez Bda. Alayón	Culebra	CU 01, Par. 723 IP-02
5	741-2979	Santa Maria	Vieques	VQ 02, Par. 619 IP-12
6	741-1990	Calle Plinio Peterson	Vieques	VQ 03, Par. 130 T-18A
7	732-2762	Carr. 173, Km. 0.6 Bo. Jagueyes	Aguas Buenas	AB 04, Par. 112 IP-03
8	732-3896	Carr. 174, Km. 22.3 Bo. Mulas	Aguas Buenas	AB 01, Par. 702 T-10
9	286-3896	Carr. 7784, Km. 3.0 Bo. Cañaboncito	Caguas	CG-M1, Par. 3052 IP-06
10	745-8543	Calle 11, Urb. Bairoa	Caguas	CG-04, Par. 2130 IP-72

ATTACHMENTS: LOOP SQUEMATICS 1 - 10



TEL. 733-6921
TOTAL = 28.3 KFT.

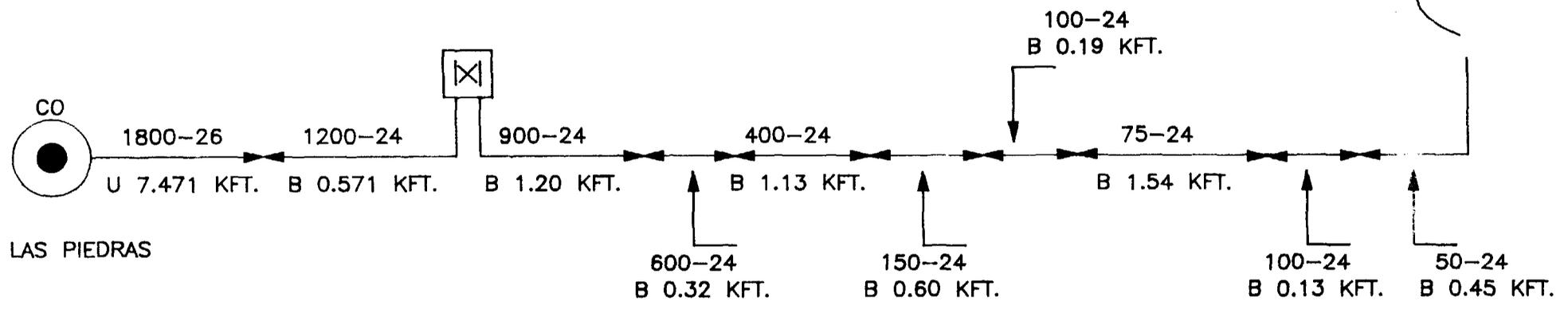
DROP = 250'



TOTAL = 13.852 KFT.
TEL. 733-9126



DROP = 250'





TEL. 742-0227
TOTAL = 5.635 KFT.

DROP = 250'

