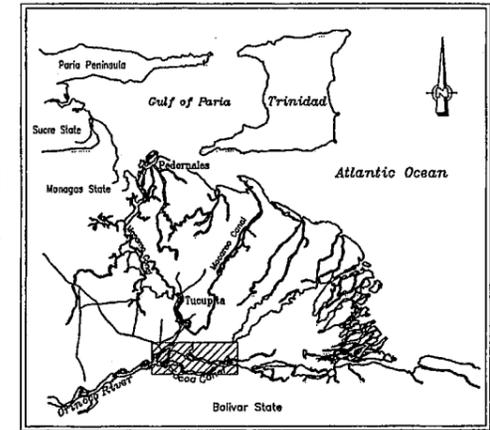
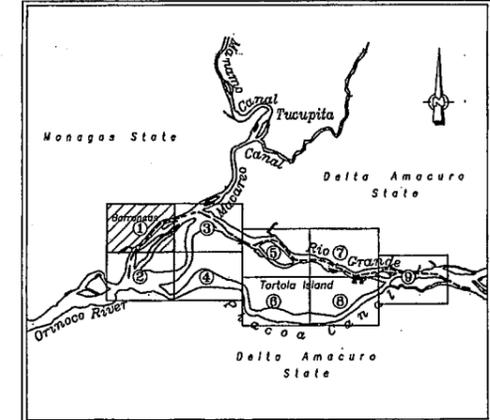


Geographic Location



Study Area



Sheet Distribution Index

Sheet: 1 of 9

Grupo Mercator LEVANTADO Y DIBUJADO POR: OCEANOGRÁFICA MERCATOR C.A.

NOTES:
 - The Coordinate System is UTM, Zone 20, Datum La Canoa.
 - Soundings in meters referenced to mean sea level (M.S.L.)
 - Sounding survey was performed in September 1999
 - Shore lines along the canals were obtained from 1:100,000 maps.

LEGEND

△	CARTOGRAFIA NACIONAL POINT
△	FLUVIOMETER
□	BENCH MARK
•	PROGRESSIVE
⊙	GPS SUPPORT POINT
2.8	DEPTH IN METER
---	LONGITUDINAL PROFILE
---	SHORE LINE

TITLE:
**SOUNDING SURVEY
 TORTOLA CANAL-PIACOA CANAL
 RIO GRANDE CANAL**

SCALE 1: 20.000

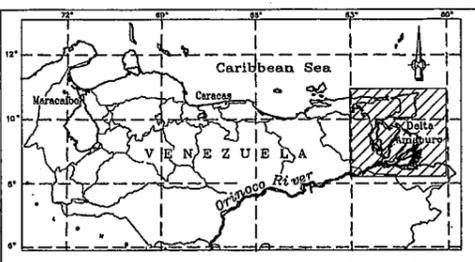
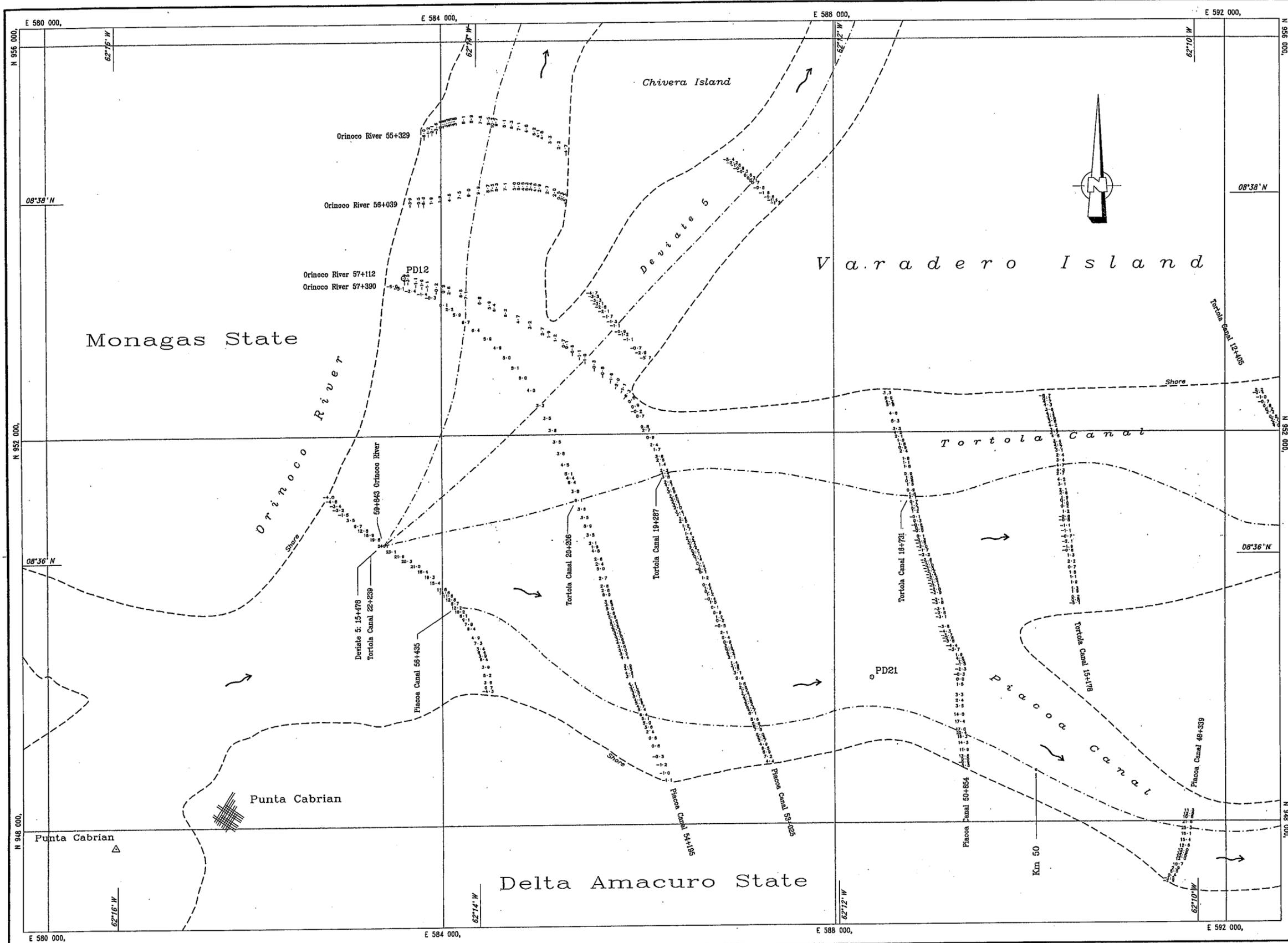
PROJECT:
**STUDY ON INTEGRATED RIVER
 IMPROVEMENT OF THE ORINOCO RIVER
 IN THE REPUBLIC OF VENEZUELA**

**PACIFIC CONSULTANTS INTERNATIONAL
 PASCO INTERNATIONAL**

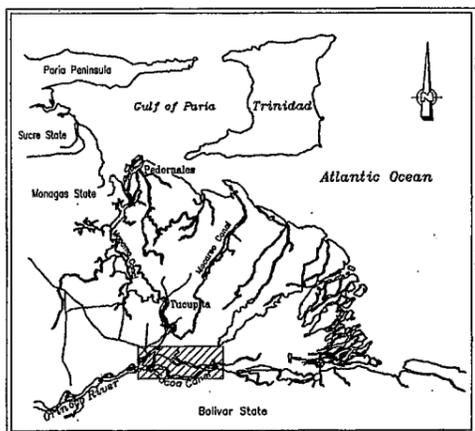
JAPAN INTERNATIONAL
 COOPERATION AGENCY



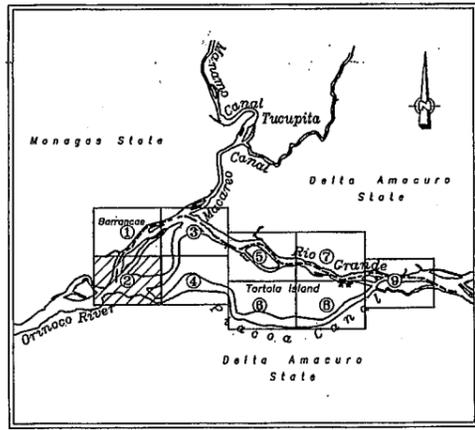
Sheet No.



Geographic Location



Study Area



Sheet Distribution Index

COORDINATE

POINT	NORTE	ESTE	ELEVATION
PD12	953 813,15	583 614,08	13,20
PD21	949 488,77	588 378,19	10,38
Punta Cabrian	947 806,12	580 981,02	11,28

Sheet: 2 of 9

LEVANTADO Y DIBUJADO POR:
OCEANOGRÁFICA MERCATOR C.A.

NOTES:

- The Coordinate System is UTM, Zone 20, Datum La Canoa.
- Soundings in meters referenced to mean sea level (M.S.L.)
- Sounding survey was performed in September 1999
- Shore lines along the canals were obtained from 1:1,000,000 maps.

LEGEND

△	CARTOGRAFIA NACIONAL POINT
△	FLUVIDIMETER
⊙	BENCH MARK
•	PROGRESSIVE
⊙	GPS SUPPORT POINT
2.5	DEPTH IN METER
---	LONGITUDINAL PROFILE
---	SHORE LINE

TITLE:
**SOUNDING SURVEY
TORTOLA CANAL-PIACOA CANAL
RIO GRANDE CANAL**

SCALE 1: 20.000

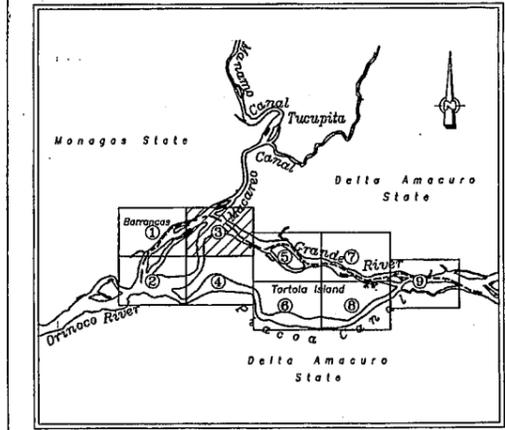
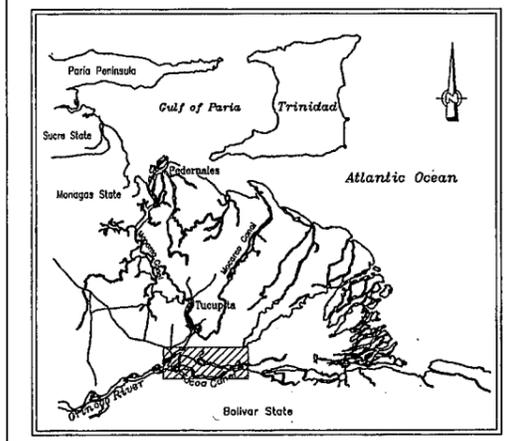
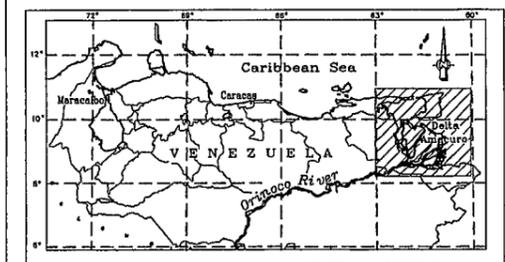
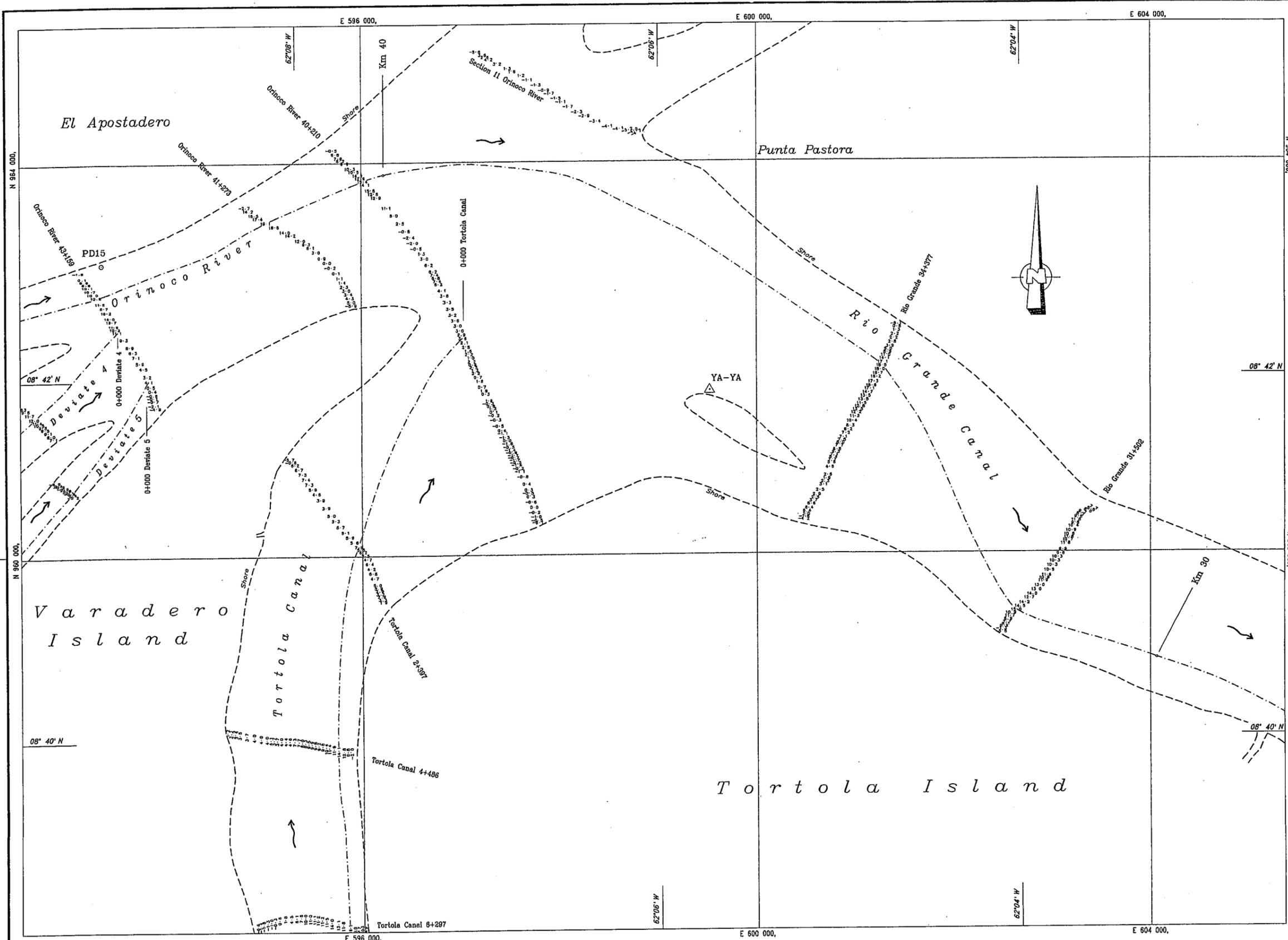
PROJECT:
**STUDY ON INTEGRATED RIVER
IMPROVEMENT OF THE ORINOCO RIVER
IN THE REPUBLIC OF VENEZUELA**

**PACIFIC CONSULTANTS INTERNATIONAL
PASCO INTERNATIONAL**

JAPAN INTERNATIONAL
COOPERATION AGENCY

JICA

Sheet No.



COORDINATE

POINT	NORTE	ESTE	ELEVATION
PD15	982 981,98	993 365,25	7,95
YA-YA	981 681,28	999 521,71	10,10

Sheet: 3 of 9

LEVANTADO Y DIBUJADO POR:
OCEANOGRAFICA MERCATOR C.A.

NOTES:

- The Coordinate System is UTM, Zona 20, Datum La Canoa.
- Soundings in meters referenced to mean sea level (M.S.L.).
- Sounding survey was performed in September 1999
- Shore lines along the canals were obtained from 1:100.000 maps.

LEGEND

△	CARTOGRAFIA NACIONAL POINT
▲	FILYOMETER
⊕	BENCH MARK
•	PROGRESSIVE
○	GPS SUPPORT POINT
2-8	DEPTH IN METER
---	LONGITUDINAL PROFILE
---	SHORE LINE

TITLE:
 SOUNDING SURVEY
 TORTOLA CANAL-PIACOA CANAL
 RIO GRANDE CANAL

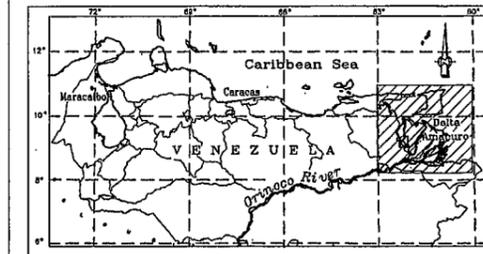
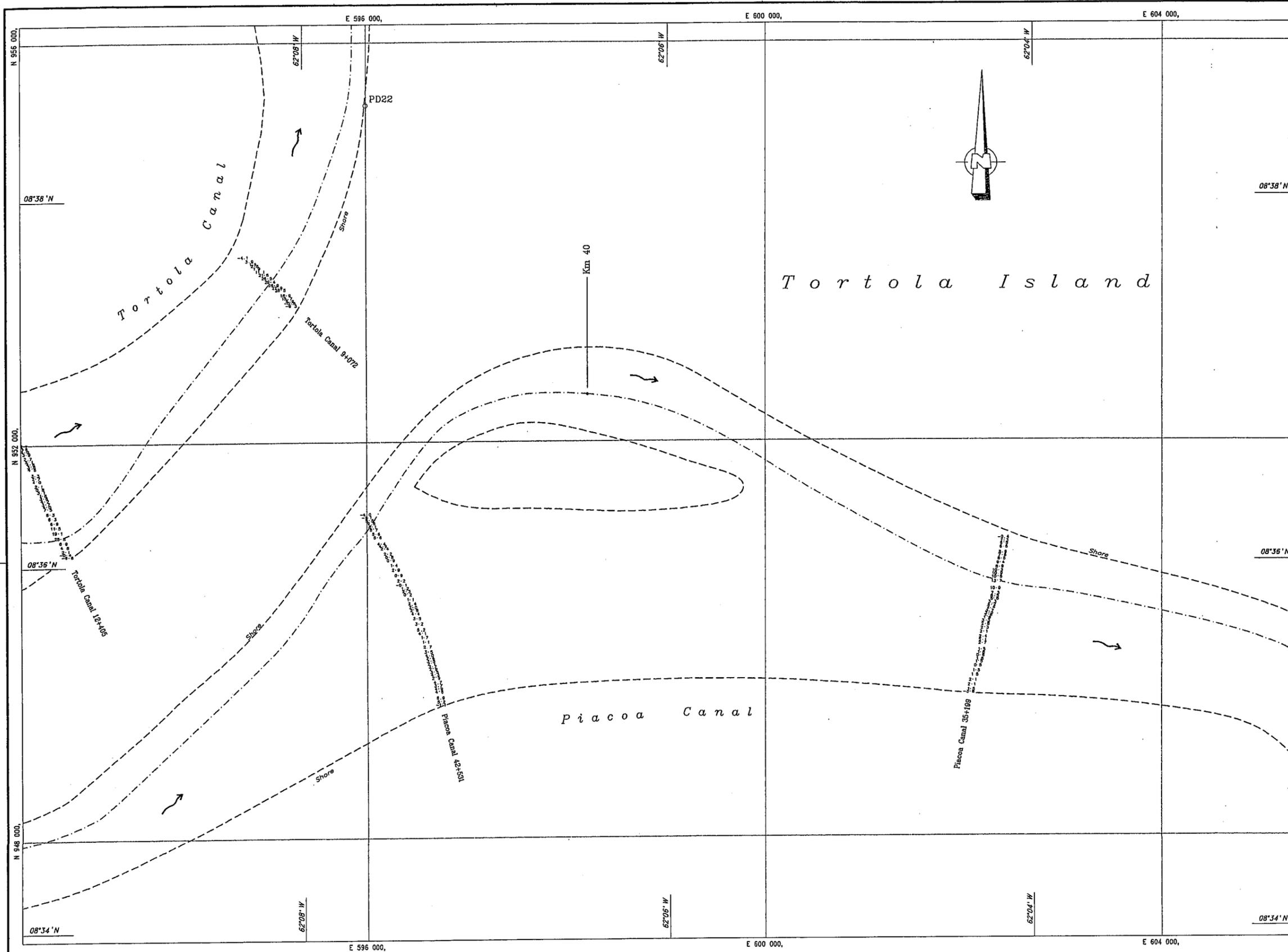
SCALE 1: 20.000

PROJECT:
 STUDY ON INTEGRATED RIVER
 IMPROVEMENT OF THE ORINOCO RIVER
 IN THE REPUBLIC OF VENEZUELA

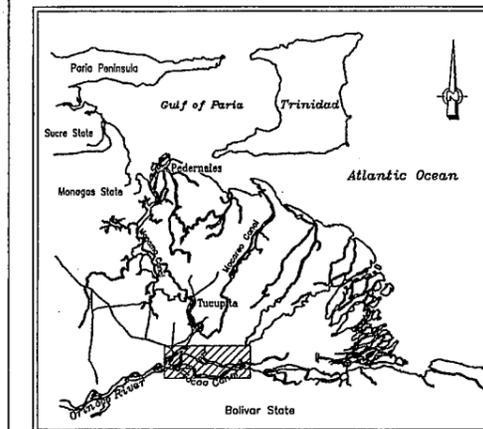
PACIFIC CONSULTANTS INTERNATIONAL
PASCO INTERNATIONAL

JAPAN INTERNATIONAL COOPERATION AGENCY

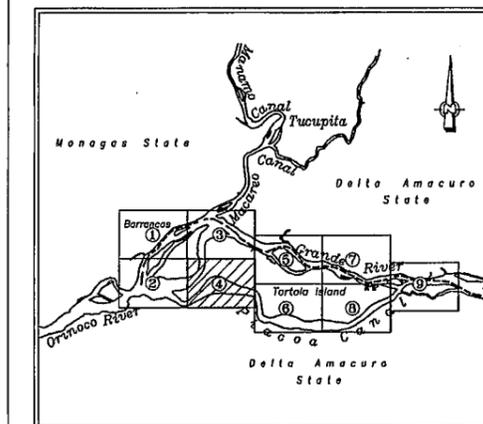
Sheet No. _____



Geographic Location



Study Area



Sheet Distribution Index

COORDINATE			
POINT	NORTE	ESTE	ELEVATION
PO22	955 377,89	595 994,62	8,04

Sheet: 4 of 9

Grupo Mercator LEVANTADO Y DIBUJADO POR: OCEANOGRÁFICA MERCATOR C.A.

- NOTES:
- The Coordinate System is UTM, Zone 20, Datum La Canoa.
 - Soundings in meters referenced to mean sea level (M.S.L.)
 - Sounding survey was performed in September 1999
 - Shore lines along the canals were obtained from 1:100,000 maps.

- LEGEND
- △ CARTOGRAFIA NACIONAL POINT
 - △ FLUVIOMETER
 - BENCH MARK
 - PROGRESIVE
 - GPS SUPPORT POINT
 - 2.5 DEPTH IN METER
 - LONGITUDINAL PROFILE
 - SHORE LINE

TITLE:
SOUNDING SURVEY
TORTOLA CANAL-PIACOA CANAL
RIO GRANDE CANAL

SCALE 1: 20.000

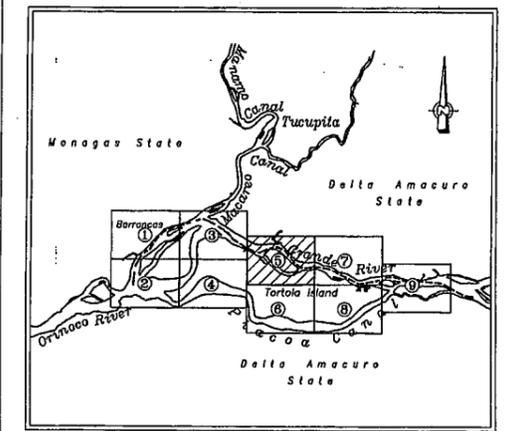
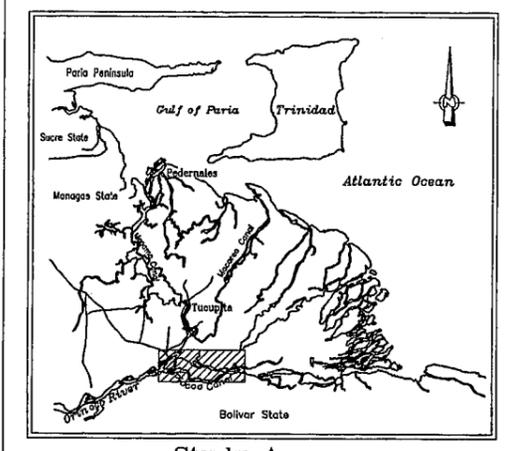
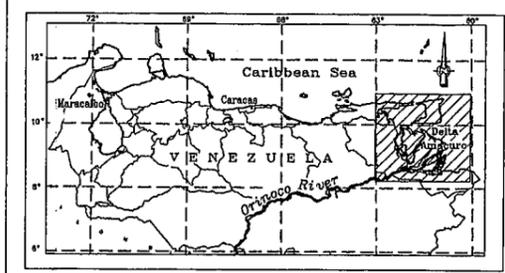
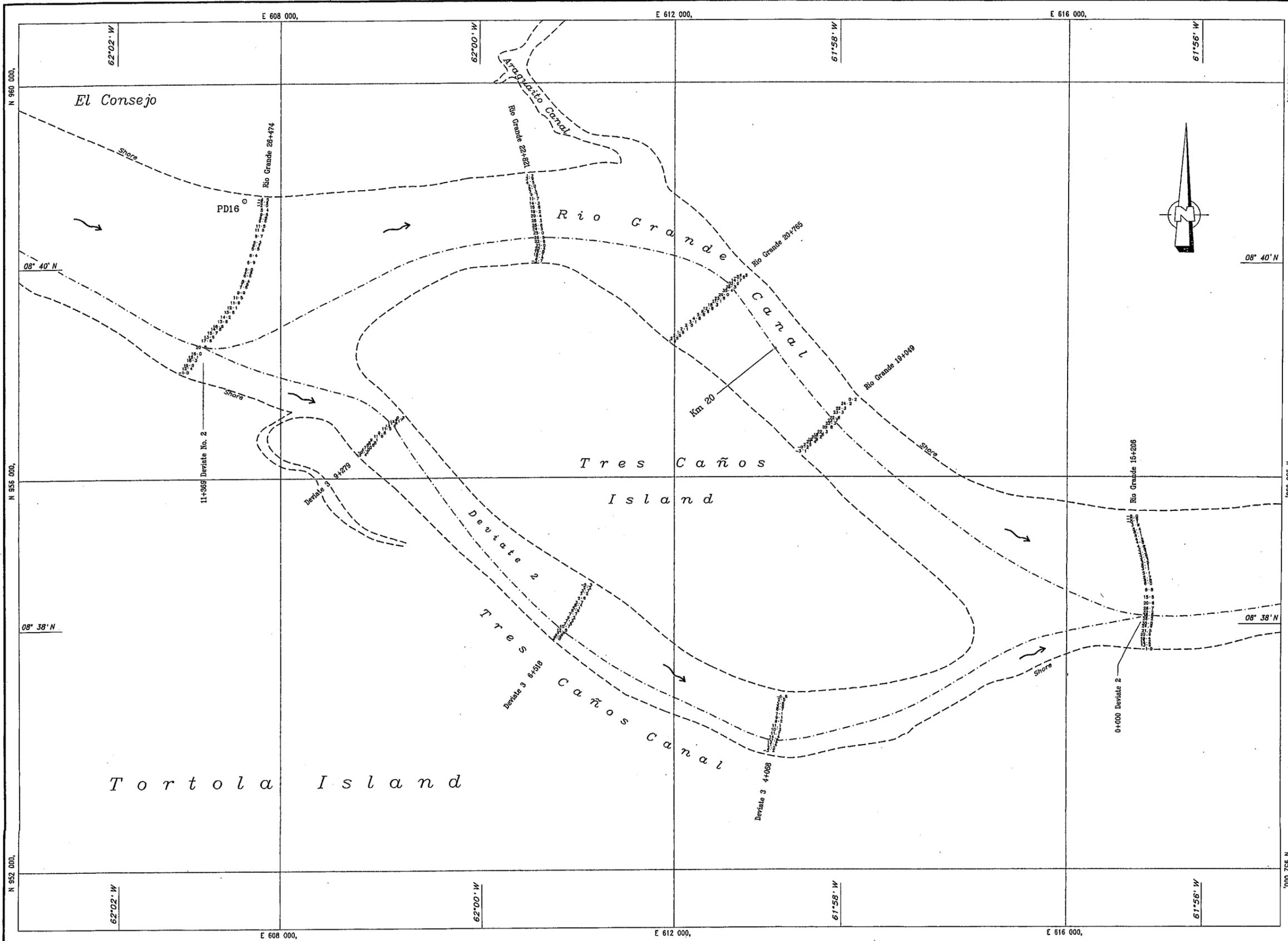
PROJECT:
STUDY ON INTEGRATED RIVER
IMPROVEMENT OF THE ORINOCO RIVER
IN THE REPUBLIC OF VENEZUELA

PACIFIC CONSULTANTS INTERNATIONAL
PASCO INTERNATIONAL

JAPAN INTERNATIONAL
COOPERATION AGENCY



Sheet No.



COORDINATE

POINT	NORTE	ESTE	ELEVATION
PD16	958 826,13	807 631,38	9,12

Sheet: 5 of 9

LEVANTADO Y DIBUJADO POR:
OCEANOGRÁFICA MERCATOR C.A.

- NOTES:
- The Coordinate System is UTM, Zone 20, Datum La Canea.
 - Soundings in meters referenced to mean sea level (M.S.L.)
 - Sounding survey was performed in September 1999
 - Shore lines along the canals were obtained from 1:100.000 maps.

- LEGEND
- ▲ CARTOGRAFIA NACIONAL POINT
 - △ FLUVIDMETER
 - BENCH MARK
 - PROGRESSIVE
 - ⊙ GPS SUPPORT POINT
 - 2.6 DEPTH IN METER
 - LONGITUDINAL PROFILE
 - - - SHORE LINE

TITLE:
**SOUNDING SURVEY
TORTOLA CANAL-PIACOA CANAL
RIO GRANDE CANAL**

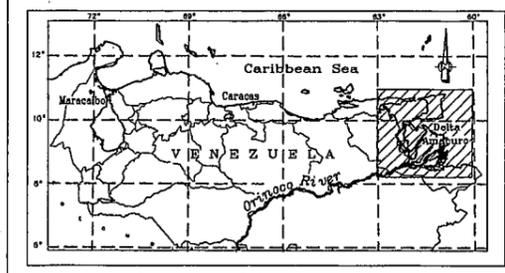
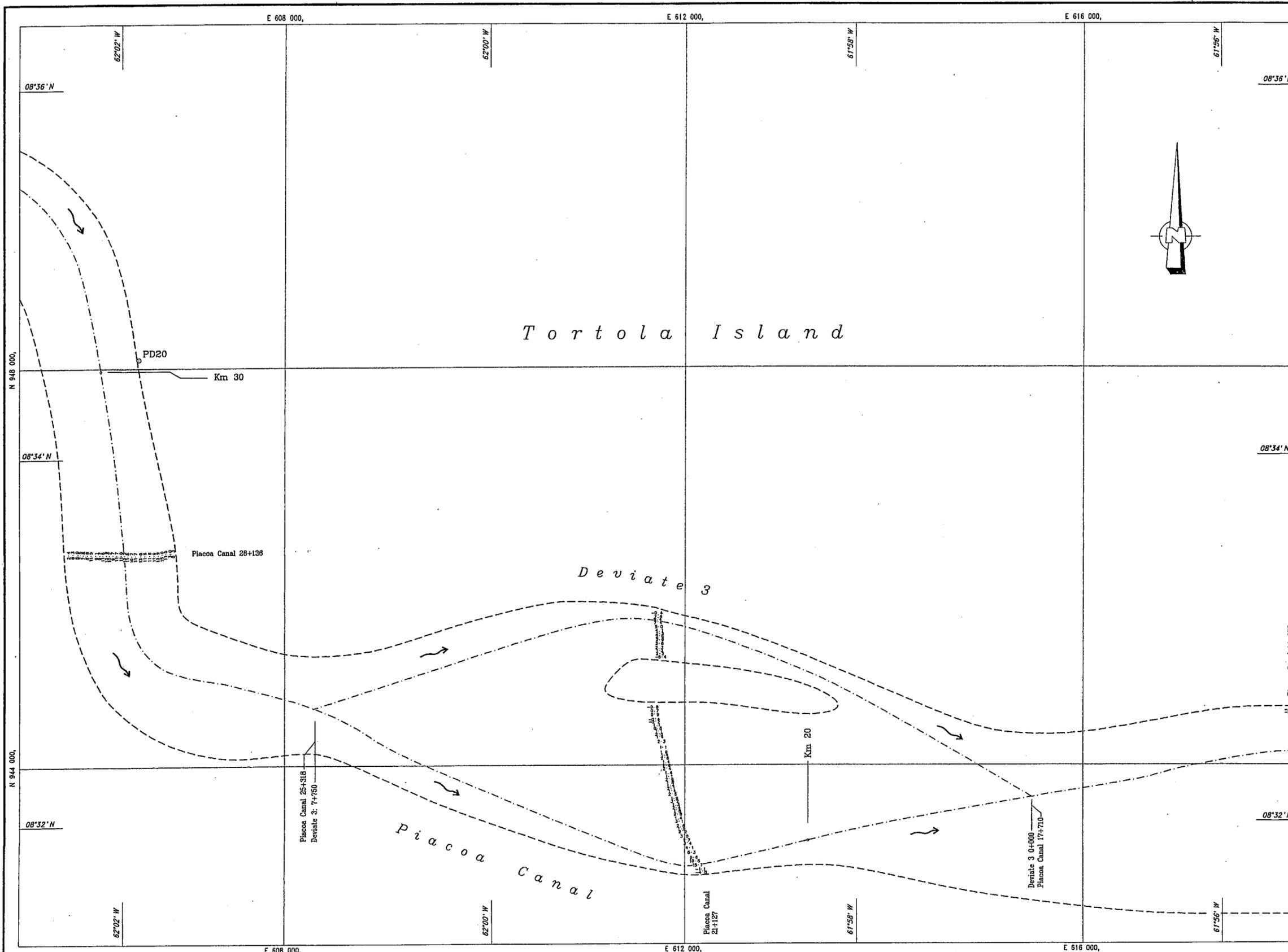
SCALE 1: 20.000

PROJECT:
**STUDY ON INTEGRATED RIVER
IMPROVEMENT OF THE ORINOCO RIVER
IN THE REPUBLIC OF VENEZUELA**

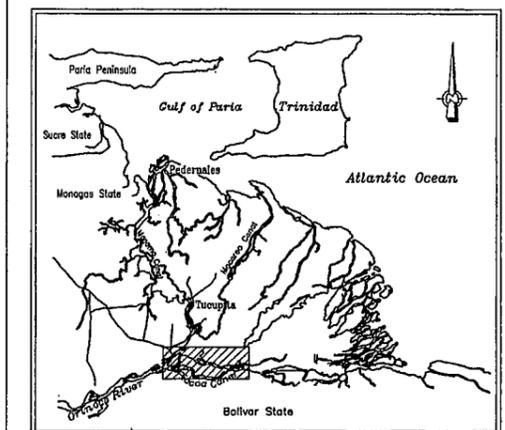
**PACIFIC CONSULTANTS INTERNATIONAL
PASCO INTERNATIONAL**

JAPAN INTERNATIONAL
COOPERATION AGENCY

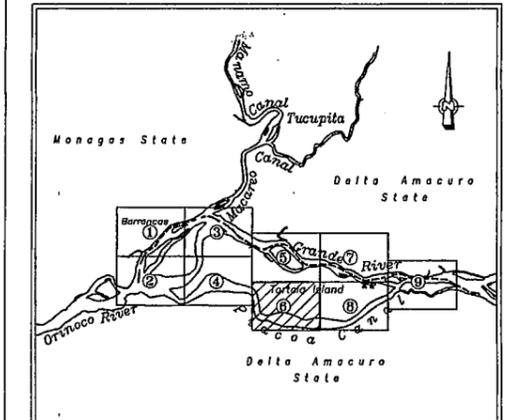
Sheet No.



Geographic Location



Study Area



Sheet Distribution Index

COORDINATE

POINT	NORTE	ESTE	ELEVATION
PD20	948 089,55	608 542,05	10,71

Sheet: 6 of 9

LEVANTADO Y DIBUJADO POR:
OCEANOGRÁFICA MERCATOR C.A.

NOTES:

- The Coordinate System is UTM, Zone 20, Datum La Canoa.
- Soundings in meters referenced to mean sea level (M.S.L.)
- Sounding survey was performed in September 1999
- Shore lines along the canals were obtained from 1:100.000 maps.

LEGEND

△	CARTOGRAFIA NACIONAL POINT
▲	FLUVIOMETER
□	BENCH MARK
+	PROGRESIVE
⊙	GPS SUPPORT POINT
2.8	DEPTH IN METER
---	LONGITUDINAL PROFILE
- - - -	SHORE LINE

TITLE:
**SOUNDING SURVEY
TORTOLA CANAL-PIACOA CANAL
RIO GRANDE CANAL**

SCALE 1: 20.000

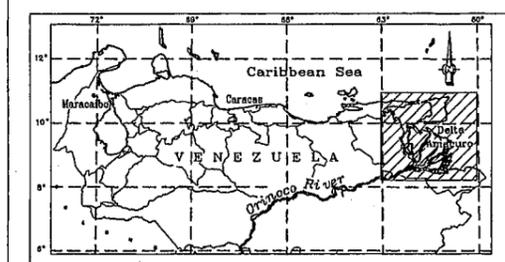
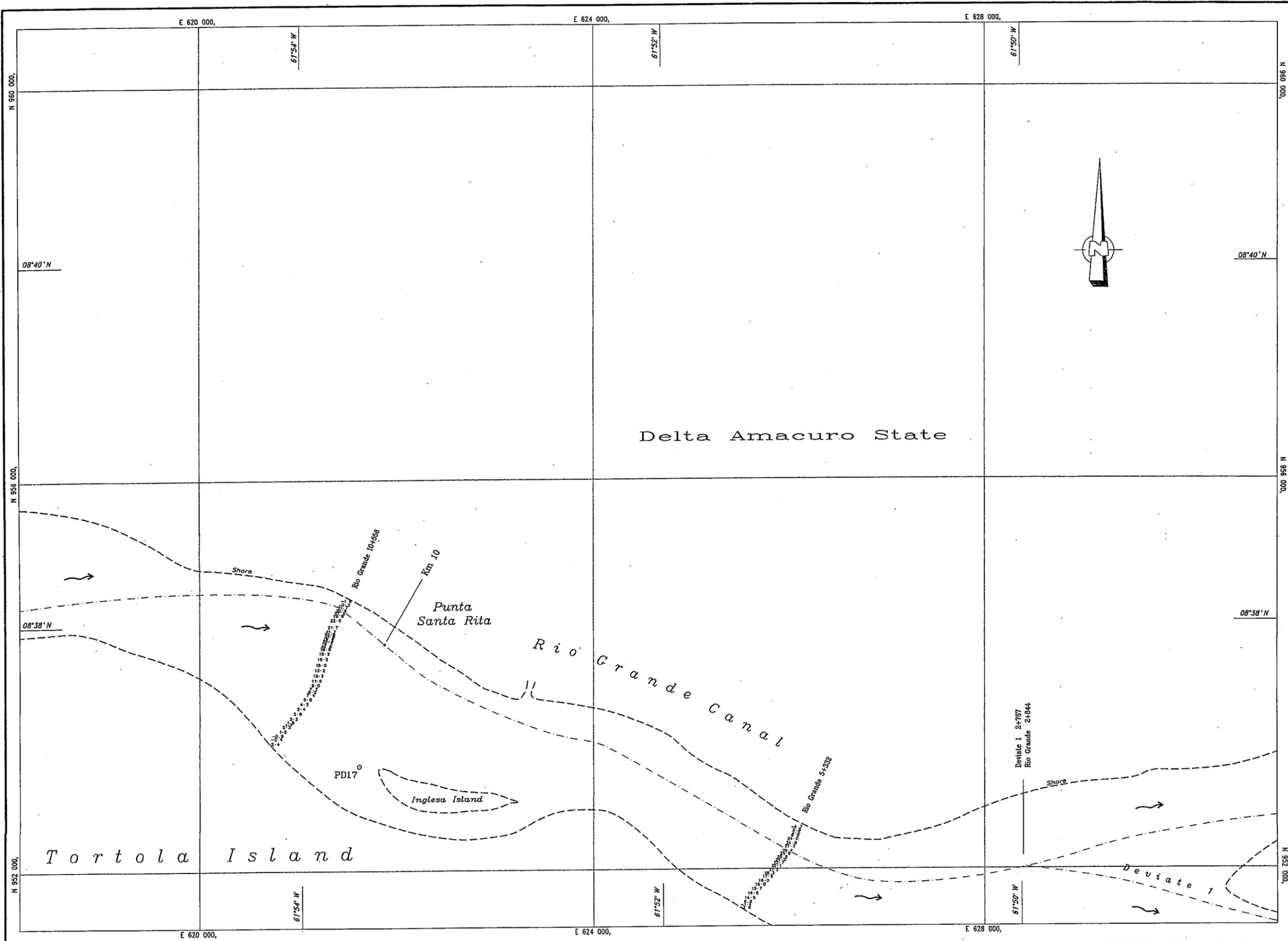
PROJECT:
**STUDY ON INTEGRATED RIVER
IMPROVEMENT OF THE ORINOCO RIVER
IN THE REPUBLIC OF VENEZUELA**

**PACIFIC CONSULTANTS INTERNATIONAL
PASCO INTERNATIONAL**

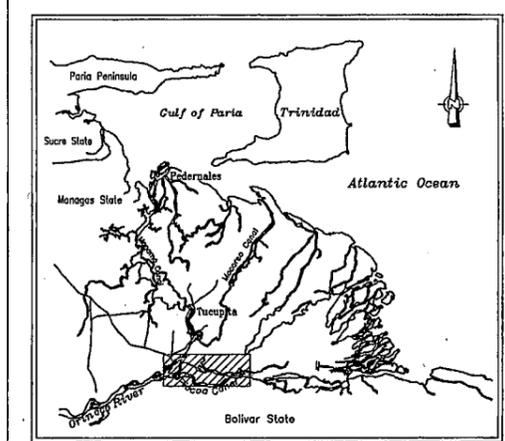
JAPAN INTERNATIONAL
COOPERATION AGENCY

JICA

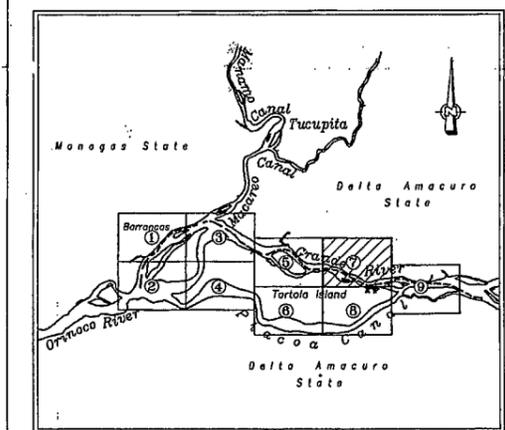
Sheet No.



Geographic Location



Study Area



Sheet Distribution Index

COORDINATE

POINT	NORTE	ESTE	ELEVATION
PD17	953 065,22	821 810,48	7,89

Sheet: 7 of 9

Grupo Mercator LEVANTADO Y DIBUJADO POR: OCEANOGRÁFICA MERCATOR C.A.

NOTES:

- The Coordinate System is UTM, Zone 20, Datum La Canoa.
- Soundings in meters referenced to mean sea level (M.S.L.).
- Sounding survey was performed in September 1999
- Shore lines along the canals were obtained from 1:100,000 maps.

LEGEND

△	CARTOGRAFIA NACIONAL POINT
▲	FLUVIOMETER
□	BENCH MARK
○	PROGRESSIVE
⊙	GPS SUPPORT POINT
2-3	DEPTH IN METER
---	LONGITUDINAL PROFILE
---	SHORE LINE

TITLE:
**SOUNDING SURVEY
 TORTOLA CANAL-PIACOA CANAL
 RIO GRANDE CANAL**

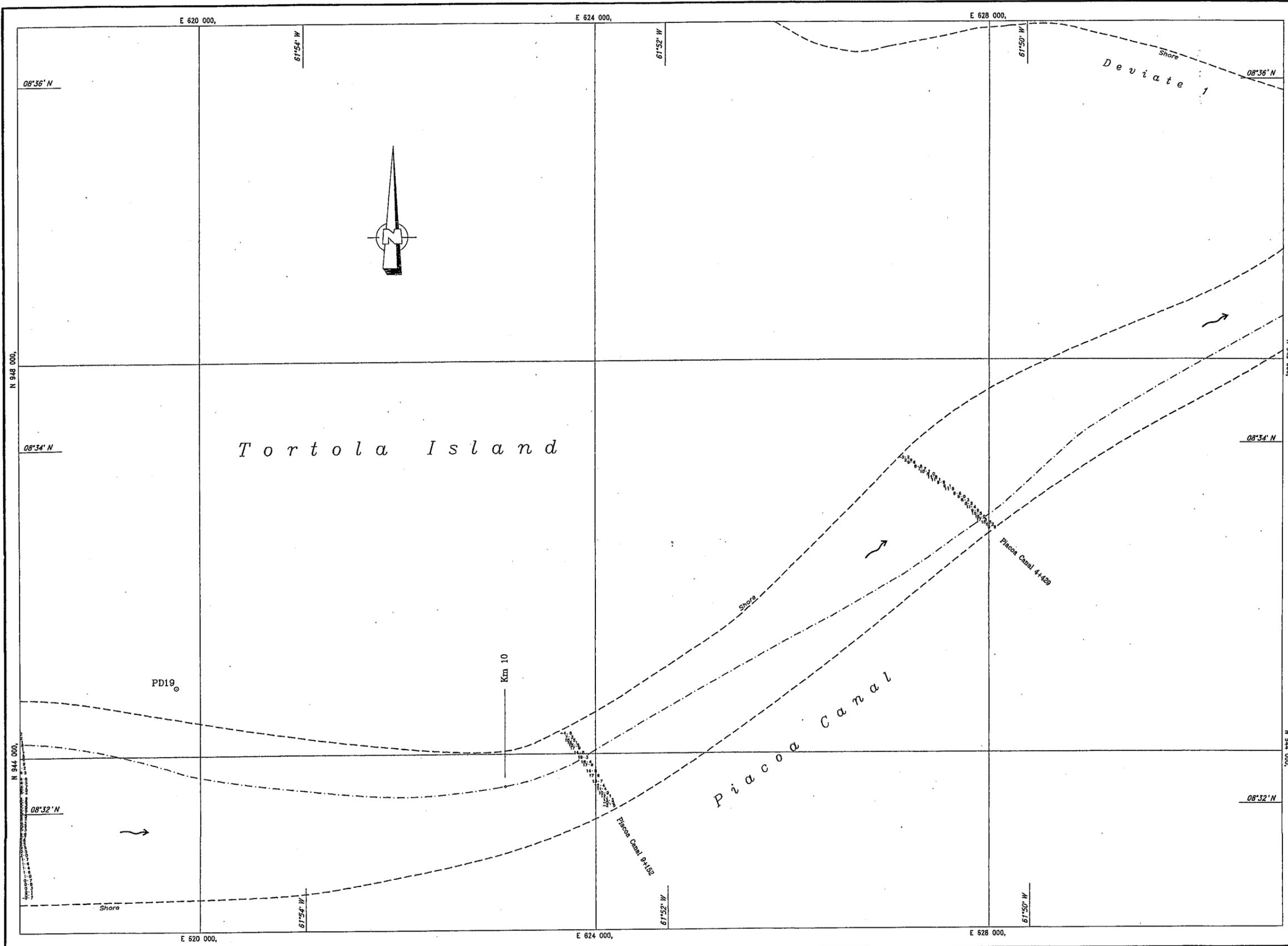
SCALE 1: 20,000

PROJECT:
**STUDY ON INTEGRATED RIVER
 IMPROVEMENT OF THE ORINOCO RIVER
 IN THE REPUBLIC OF VENEZUELA**

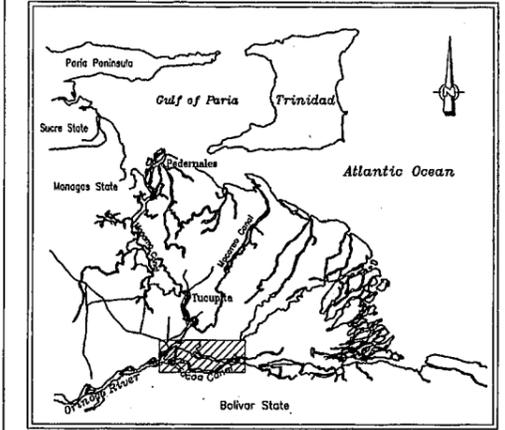
PACIFIC CONSULTANTS INTERNATIONAL
 PASCO INTERNATIONAL

JAPAN INTERNATIONAL
 COOPERATION AGENCY

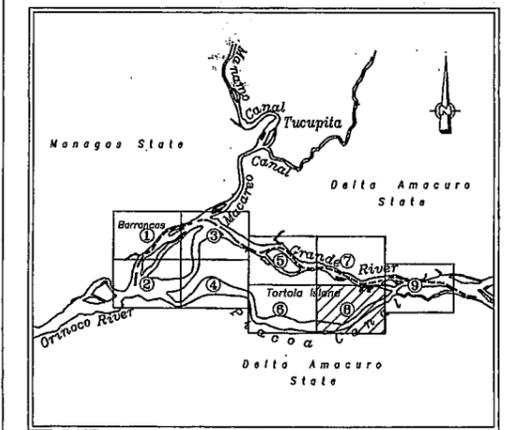
Sheet No.



Geographic Location



Study Area



Sheet Distribution Index

COORDINATE

POINT	NORTE	ESTE	ELEVATION
PD19	944 894,19	619 756,83	6,98

Sheet: 8 of 9

LEVANTADO Y DIBUJADO POR:
OCEANOGRÁFICA MERCATOR C.A.

NOTES:

- The Coordinate System is UTM, Zone 20, Datum La Canoa.
- Soundings in meters referenced to mean sea level (M.S.L.)
- Sounding survey was performed in September 1999
- Shore lines along the canals were obtained from 1:100.000 maps.

LEGEND

△	CARTOGRAFIA NACIONAL POINT
△	FLUVIOMETER
□	BENCH MARK
•	PROGRESSIVE
○	GPS SUPPORT POINT
2.0	DEPTH IN METER
---	LONGITUDINAL PROFILE
---	SHORE LINE

TITLE:
**SOUNDING SURVEY
TORTOLA CANAL-PIACOA CANAL
RIO GRANDE CANAL**

SCALE 1:20.000

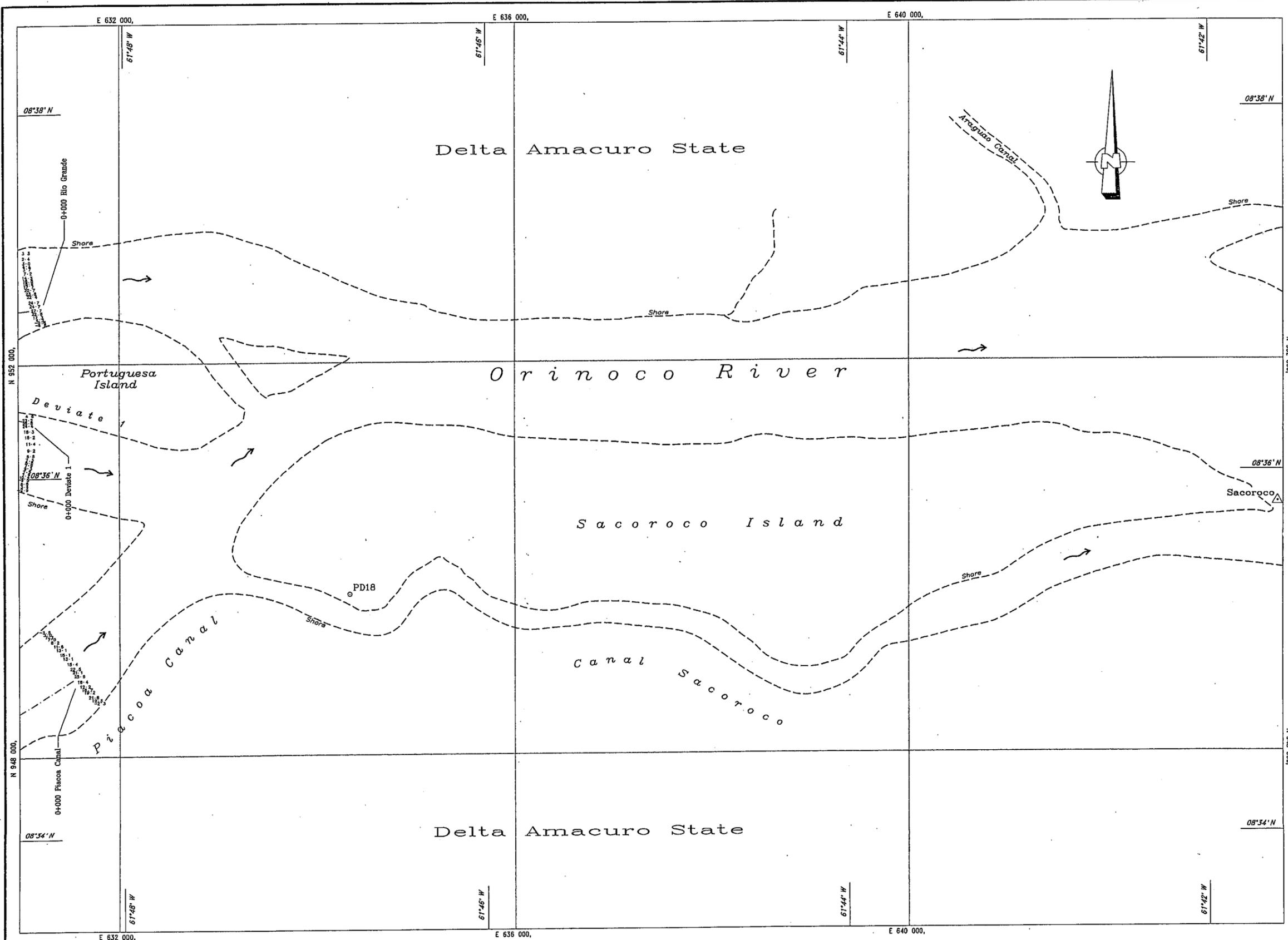
PROJECT:
**STUDY ON INTEGRATED RIVER
IMPROVEMENT OF THE ORINOCO RIVER
IN THE REPUBLIC OF VENEZUELA**

**PACIFIC CONSULTANTS INTERNATIONAL
PASCO INTERNATIONAL**

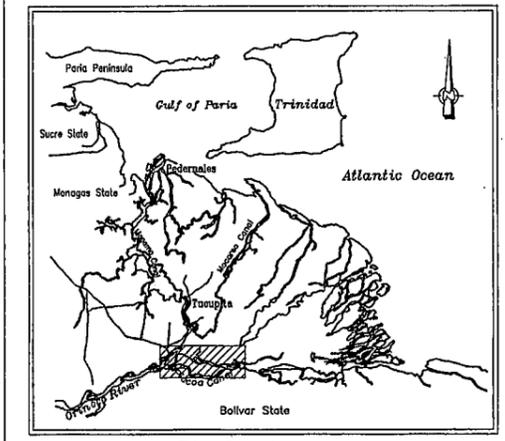
JAPAN INTERNATIONAL
COOPERATION AGENCY

JICA

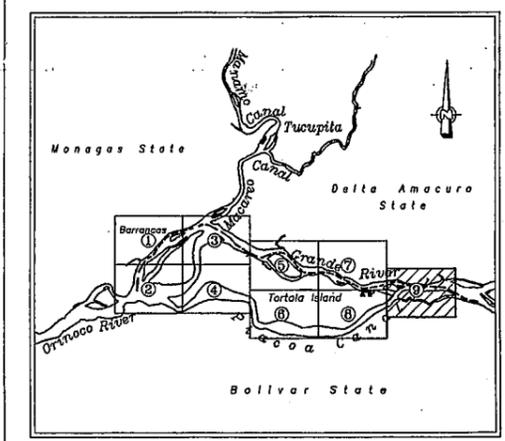
Sheet No.



Geographic Location



Study Area



Sheet Distribution Index

COORDINATE

POINT	NORTE	ESTE	ELEVATION
PD18	949 830,33	634 325,35	5,83
Sacoroco	950 948,97	643 747,57	8,22

Sheet: 9 of 9

LEVANTADO Y DIBUJADO POR:
OCEANOGRÁFICA MERCATOR C.A.

NOTES:

- The Coordinate System is UTM, Zone 20, Datum La Canoa.
- Soundings in meters referenced to mean sea level (M.S.L.)
- Sounding survey was performed in September 1999
- Shore lines along the canals were obtained from 1:100.000 maps.

LEGEND

▲	CARTOGRAFIA NACIONAL POINT
△	FLUVIOMETER
■	BENCH MARK
□	PROGRESSIVE
○	GPS SUPPORT POINT
⊙	DEPTH IN METER
---	LONGITUDINAL PROFILE
---	SHORE LINE

TITLE:
SOUNDING SURVEY
TORTOLA CANAL-PIACOA CANAL
RIO GRANDE CANAL

SCALE 1:20.000

PROJECT:
STUDY ON INTEGRATED RIVER
IMPROVEMENT OF THE ORINOCO RIVER
IN THE REPUBLIC OF VENEZUELA

PACIFIC CONSULTANTS INTERNATIONAL
PASCO INTERNATIONAL

JAPAN INTERNATIONAL
COOPERATION AGENCY

JICA

Sheet No.