

**LEGEND**  
SIGNOS CONVENCIONALES

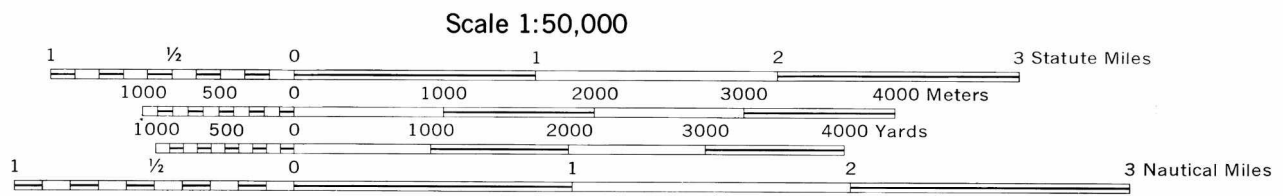
On this map a line is considered as being a minimum of 2.5 meters in width  
En este mapa se considera que una vía tenga un ancho mínimo de 2.5 metros

ROADS	CAMINOS
All weather	Transitable todo el tiempo
Hard surface	Afirmado sólido
Two or more lanes wide	dos o más vías
Loose or light surface	Revestimiento suelto o ligero
Two or more lanes wide	dos o más vías
Hard surface, one lane wide	Afirmado sólido, una vía
Loose or light surface	Revestimiento suelto o ligero
one lane wide	una vía
Fair or dry weather, loose surface	Transitable en tiempo bueno o seco, revestimiento suelto
Cart track	Veneda de rodada
Footpath, trail	Sendero o vereda
Bridge for vehicles	Puente para vehículos
Route markers	Señales de ruta
National or principal; Secondary	Nacional o principal; Secundaria
RAILROADS	FERROCARRILES
Normal gauge, single track	Vía normal (señal)
Narrow gauge, single track	Vía estrecha (señal)
Build-up area	Área urbanizada o construida
BOUNDARIES	LÍMITES
International	Internacional
Department	Departamental
Municipal	Municipal
Power transmission line; Fence	Línea transmisora de energía, Cerca
Building; Structure; Church; School; Mine	Casa; Choz; Iglesia; Escuela; Mina
Windmill, windpump; Water mill	Molino de viento, bomba de viento
Tank; Landmark object	Tanque; Punto consicuo
Horizontal control point	Punto de control horizontal (triangulación)
Bench mark	Punto de control vertical (cota fija)
Spot elevations in meters;	Elevaciones en metros;
Checked; Unchecked	Comprobadas; Fotogramétricas
Sand; Lava	Arena; Lava
Woods, brushwood; Scrub	Bosque, monte alto; Matorral, monte bajo
Orchard; Tropical grass	Huerto; Hierba tropical
Mangrove; Nipa	Manglar; Nipa
Rice; Salt evaporator	Arrozal; Salina
Land subject to inundation;	Terreno sujeto a inundación;
Dry stream or wash	Río seco o aluvión
Well; Spring; Intermittent stream	Pozo; Manantial; Río intermitente
Intermittent lake	Lago o charco intermitente
Marsh or swamp; Dam	Ciénaga o pantano; Represa
Large rapids; Large falls	Rápidos grandes; Saltos grandes
Rapids; Falls; Pier	Rápidos; Saltos; Muelle
Exposed wreck	Nafragio al descubierto
Sunken wreck; Anchorage	Nafragio sumergido; Anclaje
Sunken rock	Roca sumergida
Rock, uncoring or awash	Roca al descubierto o a flor de agua
Limit of danger	Peligro submarino de fondo general
Soundings in fathoms;	Sondeos en brazas (1.8m);
Foreshore flat	Bajo de antelaya
Reef; Light; lighthouse	Arrecife; Luz; Faro
Depth curves in fathoms	Curvas de profundidad en brazas (1.8m)

**GLOSSARY**  
GLOSARIO

Aeropuerto	airport
Alineación aproximada	approximate alignment
Bahía	bay
Cañada	stream
Caño	canal
Cem. Cementerio	cemetery
Ensenada	bay
Está.	lake
Línea teleférica	telegraph line
Punta	point

Prepared by the Army Map Service (PV), Corps of Engineers, U.S. Army, Washington, D.C. Copied in 1965 from Nicaragua, 1:50,000, Dirección General de Cartografía (DGC) of the Ministerio de Fomento, Sheet 3451 IV. Original map compiled by photogrammetric methods. Aerial photography 1960. Horizontal and vertical control established by the Dirección General de Cartografía Nicaragua and the Inter American Geodetic Survey. Marginal data revised and Universal Transverse Mercator Grid, Zone 17, added 1965. Map partially field checked.

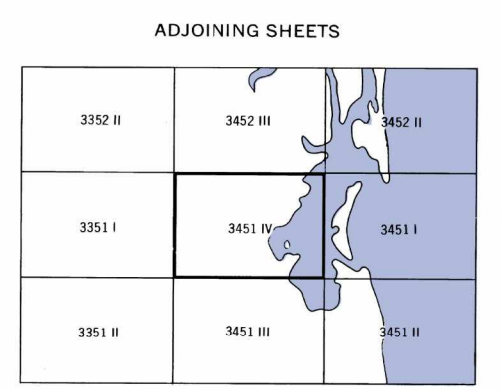
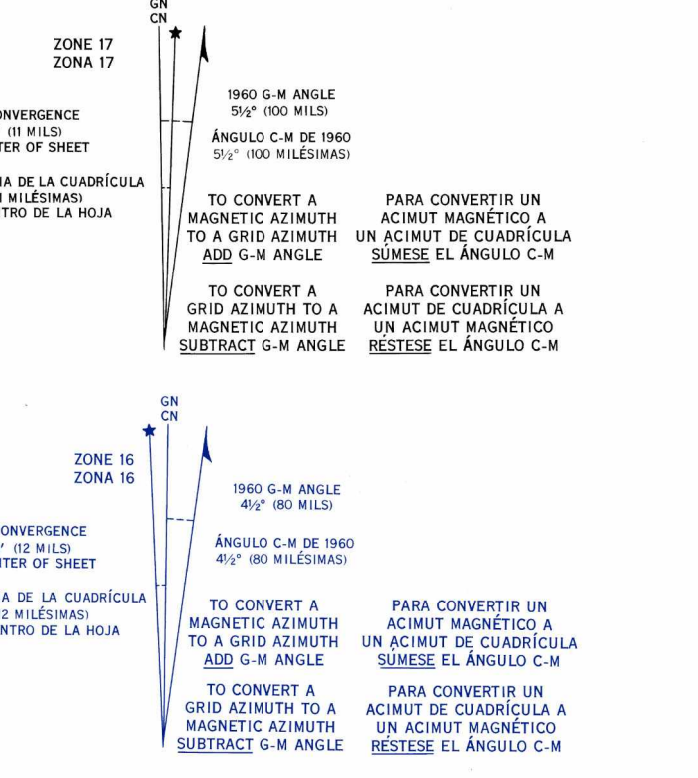


**CONTOUR INTERVAL 20 METERS WITH SUPPLEMENTARY CONTOURS AT 10 METER INTERVALS**  
INTERVALO DE CURVAS DE NIVEL DE 20 METROS CON CURVAS SUPLEMENTARIAS A 10 METROS  
VERTICAL DATUM: MEAN SEA LEVEL

**TRANSVERSE MERCATOR PROJECTION**  
HORIZONTAL DATUM: 1927 NORTH AMERICAN DATUM

BLACK NUMBERED LINES INDICATE THE 1000 METER UNIVERSAL TRANSVERSE MERCATOR GRID, ZONE 17, CLARKE 1866 SPHEROID  
LAS LINEAS NEGRAS NUMERADAS INDICAN EL CUADRICULADO DE MIL METROS DE LA PROYECCIÓN UNIVERSAL TRANSVERSAL DE MERCATOR, ESFEROIDE DE CLARKE DE 1866, ZONA 17  
BLUE NUMBERED TICKS OUTSIDE THE NETLINE INDICATE THE 1000 METER UNIVERSAL TRANSVERSE MERCATOR GRID, ZONE 16  
LOS TRAZOS DE LOS NÚMEROS EN AZUL FUERA DE LA LÍNEA MARGINAL INDICAN LA CUADRICULA DE UNIVERSAL TRANSVERSAL DE MERCATOR DE MIL METROS, ZONA 16  
BROWN NUMBERED TICKS INSIDE THE NETLINE INDICATE THE 1000 METER LAMBERT GRID, NICARAGUA SOUTH ZONE  
LOS TRAZOS DE LOS NÚMEROS EN DENTRO DEL CENTRO DE LA LÍNEA MARGINAL INDICAN LA CUADRICULA DE LAMBERT DE MIL METROS, ZONA DE NICARAGUA SUR

USERS SHOULD REFER CORRECTIONS, ADDITIONS, AND COMMENTS TO THE NIMA CUSTOMER HELP DESK: 1-800-455-0899; COMMERCIAL 314-260-5022; DSN 460-5022; OR WRITE TO: DIRECTOR, NATIONAL IMAGERY AND MAPPING AGENCY, ATTN: CDD, MAIL STOP P-3, 4801 SANGAMORE ROAD, BETHESDA, MD 20815-5002



**GRID ZONE DESIGNATION**  
DESIGNACIÓN DE ZONA DE CUADRICULA

17P

100000 M SOURCE IDENTIFICATION  
IDENTIFICACIÓN DEL CUADRADO DE 1000 METROS

JD KD

100

**TO GRID A STANDARD REFERENCE ON THIS SHEET TO METERS OR FEET**  
PARA DAR UNA REFERENCIA EN ESTA HOJA A LOS NÚM. METROS O PIES

**SAMPLE POINT: PUNTO UTILIZADO COMO EJEMPLO**

1. Read letters identifying 100,000-meter square in which the point is.  
2. Locate the vertical grid line to the LEFT of point and read LARGE figure showing the line center on the top or bottom margin of the line sheet.  
3. Locate the horizontal grid line BELOW point and read LARGE figure showing the line center on the left or right margin of the line sheet.  
4. Subtract the 100,000-meter square number from the large figure on the top or bottom margin to get the easting.  
5. Subtract the 100,000-meter square number from the large figure on the left or right margin to get the northing.

**ESTIMATE METERS FROM GRID LINE TO POINT**

1. Locate the letters that identify the quadrant of the 100,000-meter square in which the point is.  
2. Locate the vertical grid line to the LEFT of point and read the small number on the top or bottom margin of the line sheet.  
3. Subtract the small number from the large number on the top or bottom margin to get the easting.  
4. Locate the horizontal grid line BELOW point and read the small number on the left or right margin of the line sheet.  
5. Subtract the small number from the large number on the left or right margin to get the northing.

**ESTIMATE METERS FROM GRID LINE TO POINT**

1. Locate the letters that identify the quadrant of the 100,000-meter square in which the point is.  
2. Locate the vertical grid line to the LEFT of point and read the small number on the top or bottom margin of the line sheet.  
3. Subtract the small number from the large number on the top or bottom margin to get the easting.  
4. Locate the horizontal grid line BELOW point and read the small number on the left or right margin of the line sheet.  
5. Subtract the small number from the large number on the left or right margin to get the northing.

**EXAMPLE REFERENCE**  
ID: 885178  
JD: 88  
KD: 5  
Easting: 1310000  
Northing: 1770885278



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