

Prepared and published by the National Imagery and Mapping Agency

MAP INFORMATION AS OF 1999

LEGEND

POPULATED PLACES
 Density built-up areas
 Sparsely to moderately built-up areas

ROADS
 All weather, hard surface:
 Divided
 Two or more lanes wide
 One lane wide
 All weather, loose surface:
 Four or more lanes wide
 One lane wide

ROAD MARKERS
 Interstate
 Federal
 State
 Normal gauge 1.44m
 4' 9"

RAILROADS
 Single track
 Double track
 Normal gauge 1.44m
 4' 9"

BOUNDARIES
 First-order administrative division
 Second-order administrative division
 Military reservation
 Reservation
 National, state

MISCELLANEOUS CULTURAL FEATURES
 Building
 Church
 Cemetery
 Located object: Well, Tank
 Hospital
 Helipad
 Quarry
 Active
 Abandoned
 Bridge
 Culvert
 Landmark area

OBSTRUCTIONS
 Elevation of obstruction top above sea level (± 46m)
 Elevation of obstruction top above ground level (± 46m)

High tension powerlines
 Catenary powerlines
 Telephone or telegraph line

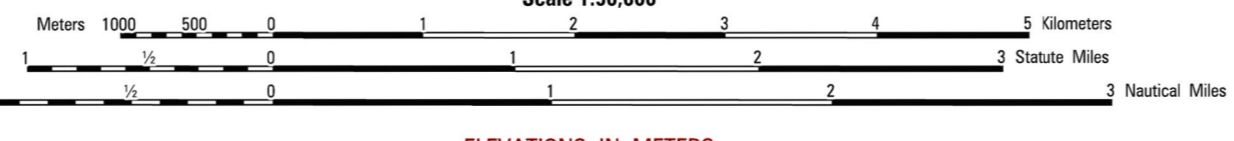
DIAGRAMS
 Streams:
 Less than 25m wide
 25m wide or more
 Spring
 Well
 Lake
 Reservoir
 Intermittent
 Dry
 Swamp
 Marsh
 Canal
 Disappearing stream

VEGETATION
 Grassland
 Scrub
 Scattered trees
 Woodlands:
 Emergent
 Deciduous
 Mixed

MISCELLANEOUS RELIEF
 Spot elevation: Highest, Normal
 Depression, Embankment
 Contour interval:
 2m
 5m
 10m
 20m
 40m
 100m
 200m
 400m
 800m
 1600m

NOTES

A LANE ON THIS MAP IS CONSIDERED TO BE AT LEAST 2.3 METERS (7.5 FEET) WIDE.
 IN DEVELOPED AREAS, ONLY THROUGH ROADS ARE CLASSIFIED.
 ROAD CLASSIFICATION SHOULD BE REFERRED TO WITH CAUTION.
 CAUTION: NOT ALL TELEPHONE AND ELECTRIC SERVICE LINES ARE SHOWN.



ELEVATIONS IN METERS
CONTOUR INTERVAL 10 METERS

GRID 1,000 METER UTM ZONE 15 GEODETIC REFERENCE SYSTEM 1983 ELLIPSOID PROJECTION
 PROJECTION TRANSVERSE MERCATOR
 VERTICAL DATUM MEAN SEA LEVEL
 HORIZONTAL DATUM NORTH AMERICAN DATUM 1983 / WORLD GEODETIC SYSTEM 1984
 PRINTED BY NIMA 01-02

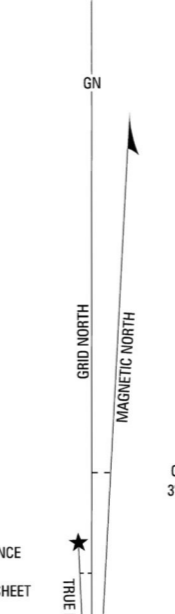
COORDINATE CONVERSION NOTE
 To refer this sheet to NAD 27 from WGS 84:
 UTM Grid: Subtract 200 meters from the UTM Grid Northing value and add 10 meters to the UTM Grid Easting value.
 Geographic: Subtract 0.7 seconds from the Latitude value and subtract 0.6 seconds from the Absolute Longitude value.

SAMPLE 1,000 METER GRID SQUARE

100 METER REFERENCE
 1. Read large numbers labeling the VERTICAL grid line left of point and estimate tenths (100 meters) from grid line to point: 43.3
 2. Read large numbers labeling the HORIZONTAL grid line below point and estimate tenths (100 meters) from grid line to point: 45.6
 Example: 123456

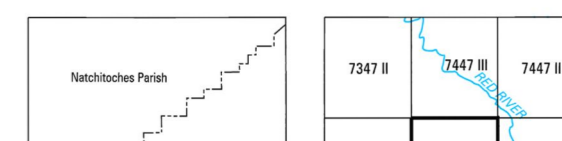
10,000 M. SQUARE IDENTIFICATION
 VD
 Example: 15R

GRID ZONE DESIGNATION
 15R



TO CONVERT A MAGNETIC AZIMUTH TO A GRID AZIMUTH ADD G-M ANGLE
 TO CONVERT A GRID AZIMUTH TO A MAGNETIC AZIMUTH SUBTRACT G-M ANGLE

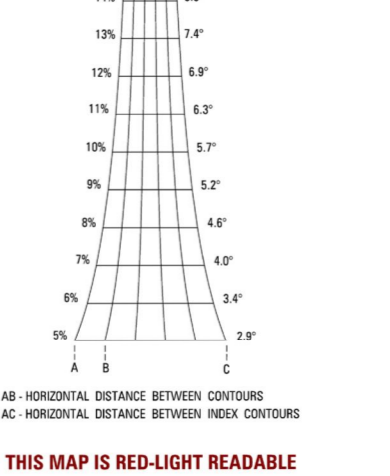
BOUNDARIES



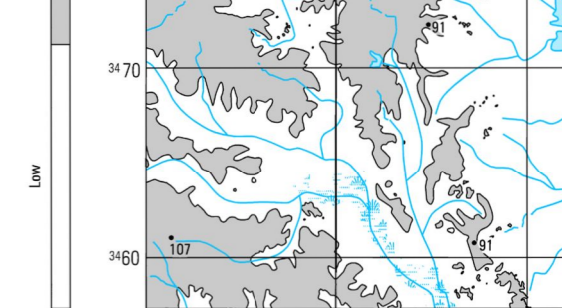
ADJOINING SHEETS



SLOPE GUIDE



ELEVATION GUIDE



USERS SHOULD REFER TO CORRECTIONS, ADDITIONS, AND COMMENTS TO THE NGA OPERATIONAL HELP DESK: 1-800-455-0086, COMMERCIAL 314-263-4886, DSN 933-4884, OR WRITE TO: DIRECTOR, NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY, ATTN: ES, MAIL STOP L-88, 4800 SANGAMORE ROAD, BETHESDA, MD 20818-5003.

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