

Prepared by the U.S. Geological Survey for Publication by the National Imagery and Mapping Agency

MAP INFORMATION AS OF 1998

- POPULATED PLACES**
- Densely built-up areas
  - Sparsely to moderately built-up areas
- ROADS**
- Divided highway
  - All weather, hard surface
  - Two or more lanes wide
  - One lane wide
  - All weather, loose or light surface
  - Two or more lanes wide
  - One lane wide
- RAILROADS**
- Normal gauge 1.4m (4'9")
  - Narrow gauge 0.91m (3')
  - Electrified
- BRIDGES**
- Pedestrian
  - Standard
  - Culvert
- MISCELLANEOUS CULTURAL FEATURES**
- Church
  - Cemetery
  - Building: School, Hospital
  - Located object: Tank, Well
  - Mine: Active, Abandoned
  - Area name: Vernon

- OBSTRUCTIONS**
- Elevation of obstruction top above sea level
  - Elevation of obstruction top above ground level
  - High tension power line: communication tower
- BOUNDARIES**
- International
  - First order administrative division
- RELIEF**
- Bluff, cliff, escarpment
  - Depression
  - Level: Sand
  - Level: Limestone
  - Spot elevations: Highest, Normal, BM 251
- DRAINAGE**
- Streams: Less than 25m wide, Over 25m wide
  - Lake/pond
  - Spring
  - Well
  - Ditches: Less than 25m wide, Over 25m wide
  - Tank
  - Disappearing stream
  - Land subject to inundation
- VEGETATION**
- Woodland
  - Scrub, Scattered trees
  - Orchard, Vineyard

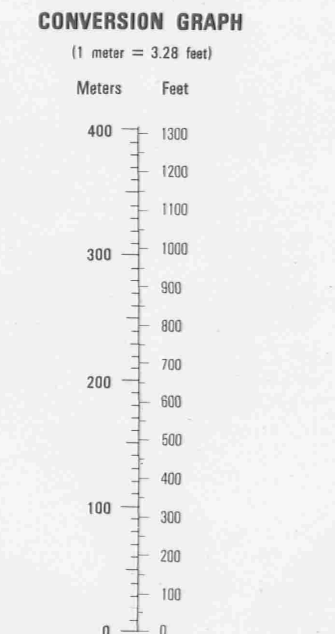
**NOTES**

A LANE ON THIS MAP IS CONSIDERED TO BE AT LEAST 2.5 METERS (8 FEET) WIDE. ROAD CLASSIFICATION SHOULD BE REFERRED TO WITH CAUTION.

IN DEVELOPED AREAS ONLY THROUGH ROADS ARE CLASSIFIED.

CAUTION: NOT ALL TELEPHONE AND ELECTRIC SERVICE LINES ARE SHOWN.

NORTH AMERICAN DATUM 1983 (NAD 83) AND WORLD GEODETIC SYSTEM 1984 (WGS 84) ARE EQUIVALENT FOR MAPPING, CHARTING AND NAVIGATION AT THIS SCALE.



**ELEVATIONS IN METERS**

**CONTOUR INTERVAL 10 METERS**

ELLIPSOID: WORLD GEODETIC SYSTEM 1984  
 GRID: 1,000-METER UTM ZONE 18 (BLACK NUMBERED LINES)  
 5,000-METER STATE GRID TICKS (INDIANA (EAST ZONE))  
 PROJECTION: TRANSVERSE MERCATOR  
 VERTICAL DATUM: NATIONAL GEODETIC VERTICAL DATUM OF 1929  
 HORIZONTAL DATUM: NORTH AMERICAN DATUM 1983  
 PREPARED BY: U.S. GEOLOGICAL SURVEY  
 PRINTED BY: NIMA 4-01

**SAMPLE 1,000 METER GRID SQUARE**

**100 METER REFERENCE**

- Read large numbers labeling the VERTICAL grid line left of point and estimate tenths (100 meters) from grid line to point. 12.3
- Read large numbers labeling the HORIZONTAL grid line below point and estimate tenths (100 meters) from grid line to point. 45.6

Example: 123456

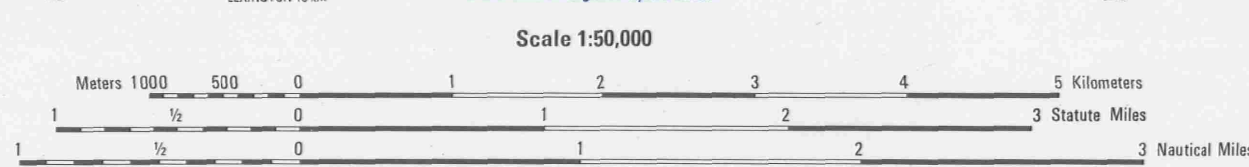
**WHEN REPORTING ACROSS A 100,000 METER LINE, PREFIX THE 100,000 METER SQUARE IDENTIFICATION BY WHICH THE POINT LIES.**

Example: 123456

**WHEN REPORTING OUTSIDE THE GRID ZONE DESIGNATION AREA, PREFIX THE GRID ZONE DESIGNATION.**

Example: 18SUT123456

USERS SHOULD REFER TO CORRECTIONS, ADDITIONS, AND COMMENTS TO THE NIMA OPERATIONAL HELP DESK: 1-800-455-3895; COMMERCIAL: 314-263-4804; OR WRITE TO: DIRECTOR, NATIONAL IMAGERY AND MAPPING AGENCY, ATTN: 55, MASS ST. SW., 4601 SARGANDER ROAD, BETHESDA, MD 20819-5003.



**GRID CONVERGENCE**  
 0°2' (15 1/2 MILS)  
 FOR CENTER OF SHEET

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

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

THIS MAP IS RED AND BLUE/GREEN LIGHT READABLE

