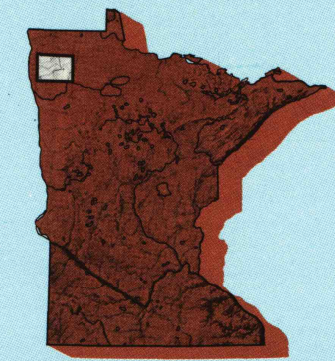


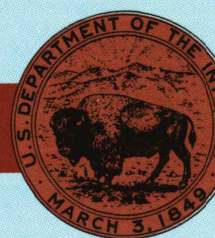
Thief River Falls MINNESOTA

1:100 000-scale
planimetric map



30 X 60 MINUTE QUADRANGLE
SHOWING

- Elevations in meters
- Highways, roads and other manmade structures
- Water features
- Woodland areas
- Geographic names



GEOLOGICAL SURVEY

1985

Produced by the United States Geological Survey
Compiled from USGS 1:24 000-scale topographic maps
dated 1959-1982. Planimetry revised from aerial photographs
taken 1982-83 and other source data. Revised information not
field checked. Map edited 1985

Projection and 10 000-meter grid, zone 14,
Universal Transverse Mercator
25 000-foot grid ticks based on Minnesota coordinate
system, north zone
1927 North American Datum
To place on the predicted North American Datum 1983, move
the projection lines 5 meters north and 23 meters east
There may be private landholdings within the boundaries of
the National or State reservations shown on this map

NATIONAL GEODETIC VERTICAL DATUM OF 1929
ELEVATIONS SHOWN TO THE NEAREST METER

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

CONVERSION TABLE		DECLINATION DIAGRAM	ADJOINING MAPS		
Meters	Feet		1	2	3
1	3.2808		1	2	3
2	6.5617		4	5	
3	9.8425		6	7	8
4	13.1234				
5	16.4042				
6	19.6850				
7	22.9658				
8	26.2467				
9	29.5275				
10	32.8084				

To convert meters to feet:
multiply by 3.2808
To convert feet to meters:
multiply by 0.3048

UTM grid convergence
(GM) and 1983 magnetic
declination (MD)
at center of map
Diagram is approximate

1	2	3
4	5	
6	7	8

1 Cavalier
2 Hallock
3 Roseau
4 Grafton
5 Geyla
6 Grand Forks
7 Crookston
8 Fosston

FOR SALE BY U.S. GEOLOGICAL SURVEY
RESTON, VIRGINIA 22092

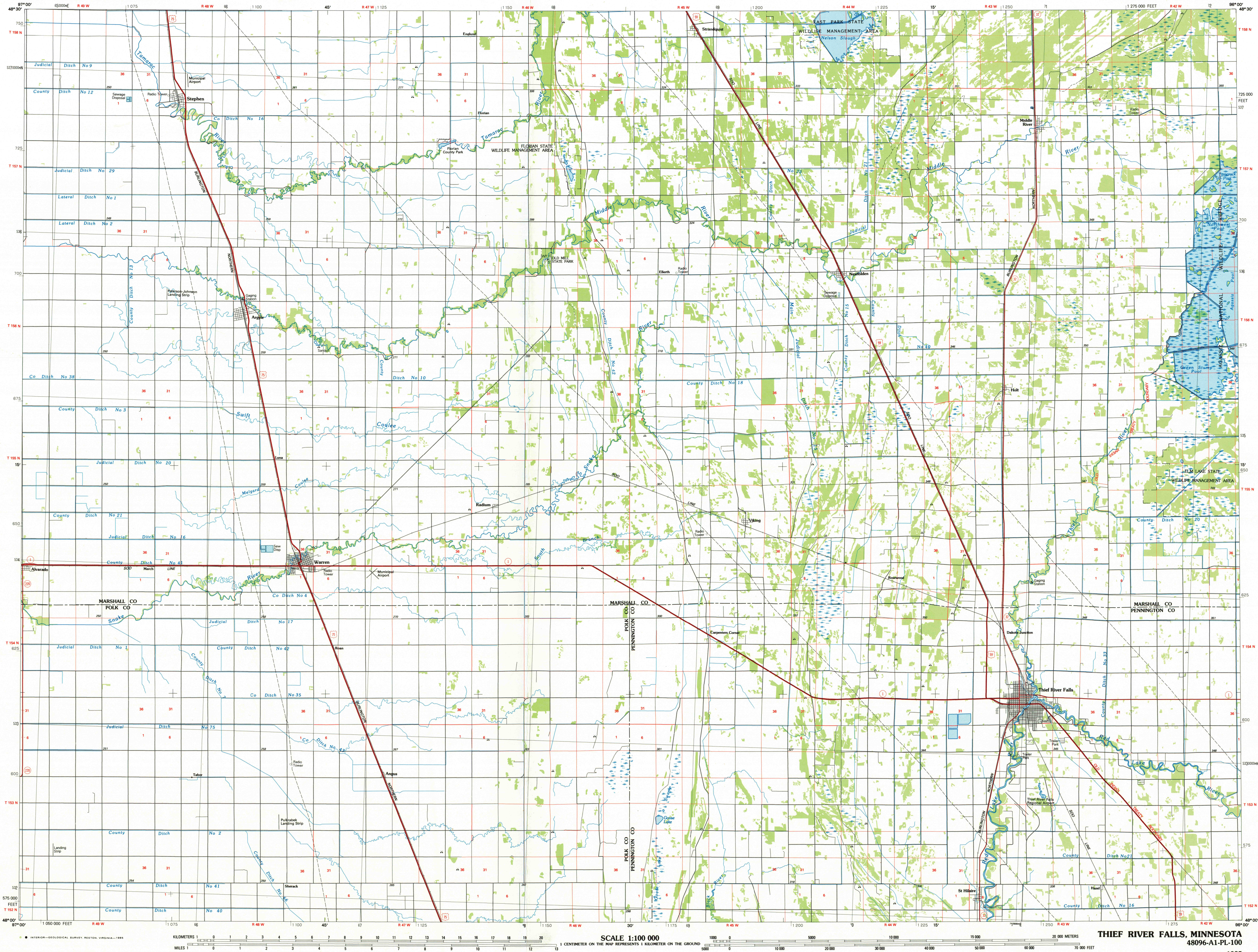
Topographic Map Symbols

Primary highway, hard surface	
Secondary highway, hard surface	
Light duty road, principal street, hard or improved surface	
Other road or street, trail	
Route marker: Interstate, U.S., State	
Railroad: standard gauge, narrow gauge	
Bridge: overpass, underpass	
Tunnel: road, railroad	
Built up area, locality, elevation	
Airport: landing field, landing strip	
National boundary	
State boundary	
County boundary	
National or State reservation boundary	
Land grant boundary	
U.S. public lands survey: range, township, section	
Range, township, section line: protracted	
Power transmission line: pipeline	
Dam; dam with lock	
Cemetery, building	
Windmill; water well; spring	
Mine shaft; adit or cave; mine, quarry; gravel pit	
Campground; picnic area; U.S. location monument	
Ruin; cliff dwelling	
Distorted surface: strip mine, lava, sand	
Contours: index; intermediate; supplementary	
Bathymetric contours: index; intermediate	
Stream, lake, perennial; intermittent	
Rapids, large and small; falls, large and small	
Area to be submerged; marsh, swamp	
Land subject to controlled inundation; woodland	
Scrub; mangrove	
Orchard; vineyard	

A pamphlet describing topographic maps is available on request

THIEF RIVER FALLS, MINNESOTA

30 X 60 MINUTE SERIES (PLANIMETRIC)



THIEF RIVER FALLS, MINNESOTA

48096-A1-PL-100

1985

• INTERIOR-GEOLOGICAL SURVEY, RESTON, VIRGINIA-1985

KILOMETERS 1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

MILES 1 0 1 2 3 4 5 6 7 8 9 10 11 12 13

SCALE 1:100 000

1 CENTIMETER ON THE MAP REPRESENTS 1 KILOMETER ON THE GROUND

1000 0 5000 10000 15000 20000 25000 30000 35000 40000 45000 50000 55000 60000 65000 70000 FEET