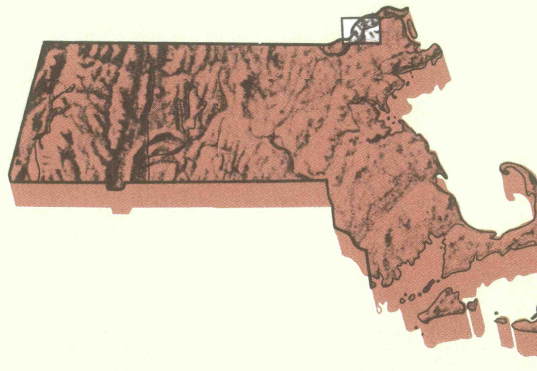




Lowell

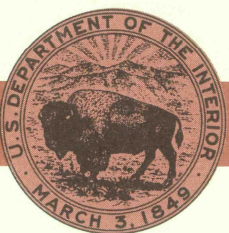
MASSACHUSETTS-NEW HAMPSHIRE

1:25 000-scale metric topographic map



7.5 X 15 MINUTE QUADRANGLE SHOWING

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



GEOLOGICAL SURVEY

1987

Produced by the United States Geological Survey in cooperation with Massachusetts Department of Public Works

Control by USGS, NOS/NOAA, and Commonwealth of Massachusetts agencies

Compiled by photogrammetric methods from aerial photographs taken 1981. Field checked 1983. Map edited 1987. This area also covered by 7.5-minute 1:24,000-scale maps: Nashua South 1965 and Lowell 1966

Projection and 1000-meter grid, zone 19 Universal Transverse Mercator

To place on the predicted North American Datum 1983, move the projection lines 6 meters south and 40 meters west as shown by dashed corner ticks. There may be private inholdings within the boundaries of the National or State reservations shown on this map

CONTOUR INTERVAL 3 METERS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
CONTROLE ELEVATIONS SHOWN TO THE NEAREST 0.1 METER
OTHER ELEVATIONS SHOWN TO THE NEAREST 0.5 METER

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

CONVERSION TABLE	
Meters	Feet
1	3.28084
2	6.56168
3	9.84252
4	13.1234
5	16.4042
6	19.6850
7	22.9659
8	26.2467
9	29.5276
10	32.8084

To convert meters to feet multiply by 3.28084
To convert feet to meters multiply by 0.3048

DECLINATION DIAGRAM	
UTM	GN
1737	1737

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

ADJOINING MAPS		
1	2	3
4	5	6
7	8	9

1 Millard
2 Nashua
3 Haverhill
4 Townsend
5 Lawrence
6 Ayer
7 Billerica
8 Reading

Topographic Map Symbols

Primary highway, hard surface	.....
Secondary highway, hard surface	.....
Light-duty road, hard or improved surface	.....
Unimproved road, trail	.....
Route marker: Interstate, U. S., State	.....
Railroad, standard gage; narrow gage	.....
Bridge, drawbridge	.....
Footbridge; overpass; underpass	.....
Bank-up area: only selected landmark buildings shown	.....
House, barn; church; school; large structure	.....
Boundary:	.....
National, with monument	.....
State	.....
County, parish	.....
Civil township, precinct, district	.....
Incorporated city, village, town	.....
National or State reservation; small park	.....
Land grant with monument; land section corner	.....
U. S. public lands survey; range, township; section	.....
Range, township; section line: location approximate	.....
Fence or field line	.....
Power transmission line, located tower	.....
Dam, dam with lock	.....
Cemetery; grave	.....
Campground; picnic area; U. S. location monument	.....
Windmill; water well; spring	.....
Mine shaft; prospect; shaft or ore	.....
Control: horizontal station; vertical station; spot elevation	.....
Contours: index; intermediate; supplementary; depression	.....
Diastrophic surface: strip mine, lava, sand	.....
Bathymetric contours: index; intermediate	.....
Perennial lake and stream; intermittent lake and stream	.....
Rapids, large and small; falls, large and small	.....
Swamp; marsh	.....
Submerged marsh; land subject to controlled inundation	.....
Woodland; scattered trees	.....
Scrub; mangrove	.....
Orchard; vineyard	.....

A pamphlet describing topographic maps is available on request