UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ALPENA QUADRANGLE
MICHIGAN—ALPENA CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

Mapped, edited, and published by the Geological Survey

Control by USGS, USC&GS, and U. S. Lake Survey

Topography by photogrammetric methods from aerial photographs taken 1971. Field checked 1971

Selected hydrographic data compiled from U. S. Lake Survey Chart 53 (1970). This information is not intended for navigational purposes

Projection and 10,000-foot grid ticks: Michigan coordinate system, central zone (Lambert conformal conic)
1000-meter Universal Transverse Mercator grid ticks, zone 17, shown in blue. 1927 North American datum

Red tint indicates areas in which only landmark buildings are shown

Fine red dashed lines indicate selected fence and field lines where generally visible on aerial photographs. This information is unchecked

UTM GRID AND 1971 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
DOTTED LINES REPRESENT 5-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS LOW WATER 576.8 FEET

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY
DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION
Primary highway, hard surface
Secondary highway, hard surface
Light-duty road, hard or improved surface
Unimproved road
Interstate Route
U. S. Route
State Route

QUADRANGLE LOCATION

To place on the predicted North American Datum 1983, move the projection lines 2 meters north and 5 meters west as shown by dashed corner ticks

ALPENA, MICH.
45083-A4-TF-024
1971
DMA 4374 III SW—SERIES V862

USGS NMD HISTORICAL MAP
FEB 03 1989
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