



Base prepared by the Army Survey Establishment, R. C. E., Canada, 1959. United States area from maps of the U. S. Army Topographic Command. Published for civil use by the U. S. Geological Survey. Limited revision of the U. S. area by the U. S. Geological Survey 1966.

100,000-FOOT PLANE COORDINATE GRID TICK SYMBOLS

— MICH. NORTH — MINN. NORTH  
INDEX TO COUNTY BOUNDARIES  
(See county designations list for county identification)

PLANE COORDINATE ZONES  
MICH. NORTH MINN. NORTH

**HORIZONTAL CONTROL**

Coast & Geodetic Survey	Geological Survey	Other Agencies
▲ (black)	▲ (red)	▲ (black)
▲ (black)	▲ (red)	▲ (black)
○ (black)	○ (red)	○ (black)
○ (black)	○ (red)	○ (black)

See separate index for names of numbered stations  
Station reported not recovered  
Measured Base - Electro Optical or Taped  
Line of triangulation observed  
Line of triangulation observed from one end only  
Measured Length - Electronic or Taped  
Theodolite Traverse - Electronic Distance  
Transit Traverse - Taped Distance Third Order  
Transit Traverse and Leveling Third Order

**VERTICAL CONTROL**

Coast & Geodetic Survey	Geological Survey	Other Agencies
— (solid)	— (solid)	— (solid)
— (dashed)	— (dashed)	— (dashed)
— (dotted)	— (dotted)	— (dotted)

**STATE SURVEY CONTROL**

Horizontal or Vertical

**CODE OF OTHER AGENCIES**

ROADS	RAILROADS	LANDMARKS
Hard surface, heavy duty	Single track Double or Multiple	School; Church; Other
More than two lanes wide	Standard gauge	Horizontal control point
Two lanes wide; Federal route marker	Narrow gauge	Spot elevation in feet
Hard surface, medium duty	—	Marsh or swamp
More than two lanes wide	—	Intermittent or dry stream
Two lanes wide; State route marker	—	Power line
Improved light duty	—	—
Unimproved dirt	—	—
Trail	—	—

**SECTIONIZED TOWNSHIP**

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

**TRANSVERSE MERCATOR PROJECTION**

TOWNSHIP OR RANGE LINE  
LAND GRANT BOUNDARY

**LEGEND**

ROAD DATA 1959

**COAST AND GEODETIC SURVEY**  
THIRTY MINUTE QUADRANGLE DESIGNATION

INDEX TO COUNTY BOUNDARIES

**COUNTY DESIGNATIONS**

**GEOLOGICAL SURVEY**  
FIFTEEN MINUTE QUADRANGLE DESIGNATION

INDEX TO COUNTY BOUNDARIES

ORDER CONTROL DATA, SHOWN IN BLACK, BY 30 MINUTE QUADRANGLE UNITS FROM GEODESY DIVISION, NOAA, ROCKVILLE, MARYLAND 20852.

ORDER CONTROL DATA, SHOWN IN RED, BY 15 MINUTE QUADRANGLE UNITS FROM DIRECTOR, GEOLOGICAL SURVEY, WASHINGTON, D. C. 20242.

MICHIGAN  
364 Passage Island  
365 Mackinac Cove  
366 Torch Harbor  
MINNESOTA  
371 Pigeon Bay  
372 South Fork Lake

FORT WILLIAM, ONT., CAN.; MICH., U. S.  
APRIL 1971