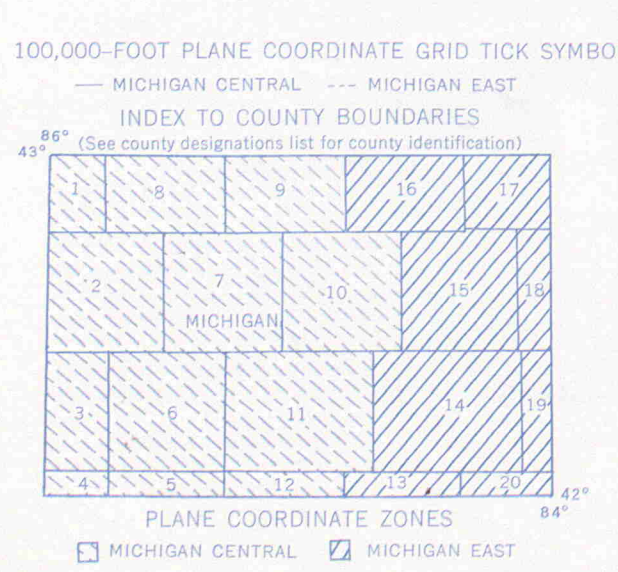


Base prepared by the Army Map Service (KCSK), Corps of Engineers, U.S. Army, Washington, D.C. Compiled in 1957 by photogrammetric methods and from United States Quadrangles, 1:50,000 and 1:62,500. AMS and U. S. Geological Survey, edition 1921-1954. Planimetric detail revised by photogrammetric methods. Horizontal and vertical control by USCGS and USGS. Map field checked, 1958.



HORIZONTAL CONTROL

NATIONAL OCEAN SURVEY

- Monumented Point - First Order
- Monumented Point - Second Order
- Monumented Point - Third Order
- Located Object - Third Order
- See separate index for names of numbered stations.
- Station reported not recovered
- Measured Base - Electronic or Taped
- Line of triangulation observed
- Line of triangulation observed from one end only
- Measured Length - Electronic or Taped
- Tie-theodolite Traverse - Electronic Distance
- Transit Traverse - Taped Distance Third Order
- Transit Traverse and Leveling Third Order

GEOLOGICAL SURVEY

STATE SURVEY CONTROL

- Horizontal or Vertical

VERTICAL CONTROL

NATIONAL OCEAN SURVEY

- First Order
- Second Order
- Third Order

GEOLOGICAL SURVEY

TRANSVERSE MERCATOR PROJECTION

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

TOWNSHIP OR RANGE LINE

LAND GRANT BOUNDARY

LEGEND

ROADS

- Hard surface, heavy duty
- More than two lanes wide
- Two lanes wide; Federal route marker
- Two lanes wide; medium duty
- Two lanes wide; State route marker
- Improved light duty
- Unimproved Dirt
- Trail

RAILROADS

- Standard gauge
- Single track Double or Multiple
- Narrow gauge
- Intermittent
- County
- Park or reservation

BOUNDARIES

- International
- State
- County
- Park or reservation

LANDMARKS: School; Church; Other

- Horizontal control point
- Spot elevation in feet
- Marsh or swamp
- Intermittent or dry stream
- Power line

LOCATION DIAGRAM FOR NK 16-6

NATIONAL OCEAN SURVEY

THIRTY MINUTE QUADRANGLE DESIGNATION

INDEX TO COUNTY BOUNDARIES

1	8	9	16	17
42 085 4	42 085 1	42 084 4	42 084 1	
2	7		15	18
42 085 3	42 085 2	42 084 3	42 084 2	
3	6	12	13	20
4	5			

ORDER CONTROL DATA, SHOWN IN BLACK, BY 30 MINUTE QUADRANGLE UNITS FROM NATIONAL OCEAN SURVEY.
NOAA, ROCKVILLE, MARYLAND 20852

GEOLOGICAL SURVEY

FIFTEEN MINUTE QUADRANGLE DESIGNATION

INDEX TO COUNTY BOUNDARIES

3	8	9	16	17
43 085 4	43 085 1	43 084 4	43 084 1	
66	65	64	63	62
43 085 3	43 085 2	43 084 3	43 084 2	
3	6	12	13	20
4	5			

ORDER CONTROL DATA, SHOWN IN RED, BY 15 MINUTE QUADRANGLE UNITS FROM U.S. GEOLOGICAL SURVEY.
NOIC, RESTON, VIRGINIA 22092

GRAND RAPIDS, MICHIGAN
(NK 16-6)
NOVEMBER 1984
REPRINT
NOVEMBER 1981

U. S. DEPT. OF COMMERCE
 COAST AND GEODETIC SURVEY
 WASHINGTON, D. C.
 FORM - 6471 (1-63)
 DATE REVISED MAY 1970

INDEX TO NUMBERED HORIZONTAL CONTROL STATIONS

by the
 Coast and Geodetic Survey

PAGE 1
 QUADS 420841-2-3-4 & 420851-2-3-4
 MICH
 LATITUDE 42°00' TO 43°00'
 LONGITUDE 84°00' TO 86°00'
 DIAGRAM NK 16-6 GRAND RAPIDS

KEY NO.	STATION NAME	QUAD. NO.	STATION NO.
1	EAST LANSING MICH STATE UNIV MEMORIAL TOWER	420841	1023
1	EAST LANSING MICH STATE UNIV P P STACK	420841	1024
2	TEICHMAN ASTRONOMICAL STATION	420841	1013
3	CORUNNA WEATHERPROOF BODY CORP TANK	420841	1018
4	EAST LANSING INCIAN SCHOOL TANK	420841	1021
5	EAST LANSING MUNICIPAL TANK	420841	1022
6	OWOSSO AMERICAN MALLEABLE CO WATER TANK	420841	1029
6	OWOSSO WEATHERPROOF BODY CORP TANK	420841	1033
7	OWOSSO ST PAULS CATHOLIC CHURCH SPIRE	420841	1030
8	OWOSSO MANUFACTURING CO STACK	420841	1031
8	OWOSSO MANUFACTURING CO WATER TANK	420841	1032
9	JACKSON FIRST M E CHURCH USLS	420842	1027
10	AIRWAY BEACON NO 20	420842	1012
11	CHELSEA MUNICIPAL WATER TANK	420842	1013
11	CHELSEA TOWER BUILDING FINIAL	420842	1014
12	JACKSON AUTOMOTIVE FAN AND BEARING CO TANK	420842	1016
13	JACKSON HAYES WHEEL CO STACK	420842	1017
14	JACKSON LEFERE CO TALL CONCRETE STACK	420842	1019
15	JACKSON MACKLING GRINDING WHEEL CO TANK	420842	1020
16	JACKSON OLD STATE PRISON FLAGPOLE	420842	1022
17	JACKSON REYNOLDS FIELD AIRPORT BEACON	420842	1023
18	NEAR NYC RR BRICK STACK	420842	1024
19	JACKSON CHIMNEY USLS	420842	1026
20	JACKSON MICHIGAN STATE PRISON USLS	420842	1028
21	LANSING CAPITAL MATIONAL BANK BLDG MAST	420844	1004
21	LANSING STATE CAPITUL TIP OF DOME	420844	1011
22	LANSING CITY POWER PLANT NORTHWEST STACK	420844	1005
22	LANSING CITY POWER PLANT SOUTHEAST STACK	420844	1006
23	LANSING MUNICIPAL STANDPIPE	420844	1007
24	LANSING OLDS MOTOR CO STACK	420844	1008
25	LANSING RED MOTOR CO TANK	420844	1009
26	OLD DUPLEX PLANT NOW RED MOTOR CO TANK	420844	1010
27	GRAND RAPIDS SILVER WATER TANK	420854	1008

KEY NO.	STATION NAME	QUAD. NO.	STATION NO.
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