



Base prepared by the Army Map Service (LKETT), Corps of Engineers, U.S. Army, Washington, D.C. Compiled in 1953 by photogrammetric methods. Horizontal and vertical control by USGS, USCGS, and USGS. Aerial photography 1953. Photography field annotated 1953.

100,000-FOOT PLANE COORDINATE GRID TICK SYMBOLS

MINNESOTA CENTRAL

INDEX TO COUNTY BOUNDARIES

PLANE COORDINATE ZONES

MINNESOTA CENTRAL

HORIZONTAL CONTROL

Coast & Geodetic 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
- Theodolite Traverse - Electronic Distance
- Transit Traverse - Tapped Distance Third Order
- Transit Traverse and Leveling Third Order

Geological 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
- Theodolite Traverse - Electronic Distance
- Transit Traverse - Tapped Distance Third Order
- Transit Traverse and Leveling Third Order

VERTICAL CONTROL

Coast & Geodetic Survey

- First Order
- Second Order
- Third Order

Geological Survey

- First Order
- Second Order
- Third Order

Scale 1:250,000

0 5 10 15 20 25 30 Statute Miles

0 5 10 15 20 25 30 Kilometers

0 25,000 50,000 75,000 100,000 Feet

SECTIONIZED TOWNSHIP

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

TOWNSHIP OR RANGE LINE
LAND GRANT BOUNDARY

TRANSVERSE MERCATOR PROJECTION

LOCATION DIAGRAM FOR NL 15-4

LEGEND

ROAD DATA 1953

3 LANE 1 & 2 LANES

Standard gauge

Narrow gauge

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

COAST AND GEODETIC SURVEY

THIRTY MINUTE QUADRANGLE DESIGNATION

INDEX TO COUNTY BOUNDARIES

46	095	4	46	095	1	46	094	4	46	094	1
46	095	3	46	095	2	46	094	3	46	094	2

GEOLOGICAL SURVEY

FIFTEEN MINUTE QUADRANGLE DESIGNATION

INDEX TO COUNTY BOUNDARIES

261	260	259	258	257	256	255	254
240	239	238	237	236	235	234	233
220	219	218	217	216	215	214	213
202	201	200	199	198	197	196	195

ORDER CONTROL DATA IN BLACK BY 30 MINUTE QUADRANGLE UNITS FROM DIRECTOR, COAST AND GEODETIC SURVEY, WASHINGTON 25, D.C.

ORDER CONTROL DATA IN RED BY 15 MINUTE QUADRANGLE UNITS FROM DIRECTOR, GEOLOGICAL SURVEY, WASHINGTON 25, D.C.

USCMC-GS-DC JULY 1963 A-4900

BRainerd, MINNESOTA (NL 15-4) APRIL 1963

U. S. DEPT. OF COMMERCE
 COAST AND GEODETIC SURVEY
 WASHINGTON, D. C.
 FORM - 6471 (1-63)
 DATE JUL 1963 REVISED SEP 1963

INDEX TO NUMBERED HORIZONTAL CONTROL STATIONS

by the
 Coast and Geodetic Survey

QUADS 460941-2-3-4 & 460951-2-3-4
 MINN
 LATITUDE 46°00' TO 47°00'
 LONGITUDE 94°00' TO 96°00'
 DIAGRAM NL 15-4 BRAINERD

KEY NO.	STATION NAME	QUAD. NO.	STATION NO.
1	PARK RAPIDS COURTHOUSE DOME FLAGPOLE	460951	1014
1	PARK RAPIDS ST PETERS CHURCH SPIRE	460951	1015
1	PARK RAPIDS TANK	460951	1013
2	DETROIT LAKES COURTHOUSE CUPOLA FLAGPOLE	460954	1008
2	DETROIT LAKES MUNICIPAL POWER PLANT STACK	460954	1009
2	DETROIT LAKES MUNICIPAL WATER TANK	460954	1010
3	BIRCH LAKE FIRE TOWER		
4	MANGANESE MUNICIPAL WATER TANK	460941	1005
5	TROMMALD MUNICIPAL WATER TANK	460941	1006
8	BRAINERD LUMBER CO STACK	460942	1029
11	BRAINERD OTHER CHURCH SPIRE	460942	1031
12	BRAINERD RAILROAD SHOPS TALLEST STACK	460942	1030
16	WADENA MUNICIPAL TANK	460952	1009
16	WADENA ST ANNA CATHOLIC CHURCH SPIRE	460952	1008
17	ALDRICH CHURCH SPIRE	460943	1010
18	STAPLES SACRED HEART CHURCH SPIRE	460943	1019
19	STAPLES MUNICIPAL TANK	460943	1016
19	STAPLES MUNICIPAL P AND L PLANT STACK	460943	1017
20	STAPLES TALL STACK	460943	1018
21	BRAINERD RADIO STATION KLIZ MAST	460942	1010
22	BRAINERD STATE HOSPITAL WATER TANK	460942	1011
23	BRAINERD RADIO STATION KAS 91 MAST	460942	1013
24	BRAINERD TV RELAY MAST	460942	1014
25	BRAINERD RADIO STATION KAB 799 TOWER	460942	1015
26	BRAINERD NORTHWEST PAPER CO WATER TANK	460942	1016
27	AHRENS HILL LOOKOUT TOWER	460942	1017
28	RIVERTON RADIO STATION KAB 401 MAST	460942	1018
29	BRAINERD RADIO STATION KAA 573 MAST	460942	1012
30	TVOR BRAINERD RADIO BRD	460942	1006

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