UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF MINNESOTA
DEPARTMENT OF ADMINISTRATION

ASH LAKE QUADRANGLE
MINNESOTA—ST. LOUIS CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

7380 I SE (RAY SE) | 7480 IV SE (ASH RIVER SE)

93°00′ | 48°15′ | 92°52′30″ | 48°07′30″

R. 21 W. | R. 20 W. | 57′30″ | 55′

2 050 000 FEET | 2 030 000 FEET

630 000 FEET | 600 000 FEET

7480 IV SW (ASH RIVER SW) — INTERNATIONAL FALLS 38 MI. RAY (MINN. 217) 21 MI.

28 MI. TO MINN. 217

7380 II NE (NETT LAKE NE) | 7480 III NE (ORR NE)

ORR 9 MI. VIRGINIA 53 MI.

T. 67 N. | T. 66 N. | T. 65 N.

ASH LAKE

KABETOGAMA STATE FOREST

LEIDING

Lost River

Ash River

Winter Trail

Duluth, Winnipeg and Pacific

Gravel Pit

BM 1404 | BM 1311 | BM 1301 | BM 1360

1387 | 1409 | 1444 | 1520 | 1348 | 1363

Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial photographs taken 1966 and 1968. Field checked 1968

Depth curves and soundings compiled from chart furnished by Minnesota Department of Conservation

Polyconic projection. 1927 North American Datum
10,000-foot grid based on Minnesota coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks, zone 15, shown in blue

To place on the predicted North American Datum 1983 move the projection lines 5 meters north and 14 meters east as shown by dashed corner ticks

There may be private inholdings within the boundaries of the National or State reservations shown on this map

MN | GN | 0°03′ 1 MIL | 2° 36 MILS

UTM GRID AND 1986 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

1 MILE | 7000 FEET | 1 KILOMETER

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

MINN. — QUADRANGLE LOCATION

ROAD CLASSIFICATION

Primary highway, all weather, hard surface

Light-duty road, all weather, improved surface

Unimproved road, fair or dry weather

U. S. Route

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

Revisions shown in purple and woodland compiled from aerial photographs taken 1981 and other source data. Partial field check by U. S. Forest Service. Map edited 1986

ASH LAKE, MINN.
48092–B8–TF–024

1968
PHOTOREVISED 1986
DMA 7480 III NW—SERIES V872

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(NETT LAKE) 7380 II SE | (ORR) 7480 III SE

INTERIOR-GEOLOGICAL SURVEY, RESTON, VIRGINIA 1987