UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PROFESSIONAL PAPER 472
PLATE 1

EXPLANATION

Recent

- Qal — Flood-plain alluvium
- Qaf — Alluvial-fan deposits
- Qsw — Slope wash
- Qa — Artificial fill
- Qt_2 — Terrace alluvium

Pleistocene

Wisconsin Glaciation

- Qbp — Bignell and Peorian Loesses
- Qt_1 — Terrace alluvium

Illinoian Glaciation

- Ql — Loveland Loess

Yarmouth Interglaciation

- Qs — Sappa Formation

Kansan Glaciation

- Qgi — Grand Island Formation
- Qk — Kansan till

Nebraskan Glaciation

- Qfi — Fullerton Formation
  Silt

QUATERNARY

Missouri

- IPl — Lansing Group
- IPkc — Kansas City Group

PENNSYLVANIAN — CARBONIFEROUS

Areas where sand is at or within 2 feet of surface

Areas where clay or silt is at or within 2 feet of surface

Contact
Dashed where approximately located; short dashed where inferred or indefinitely located

Scarp bordering old channels
Hachures point downslope

Borrow pit

Quarry

Measured section location and number

Abbreviated columnar section
Stratigraphic sequence and approximate thickness, in feet, of material; based on logs of auger holes and material return from hole

b	black
gb	greenish blue
cl	clay
ssi	sandy silt
si	silt
hsi	humic silt
sis	silty sand
s	sand
fs	fine sand
ms	medium sand
cs	coarse sand
g	gravel
fg	fine gravel
csg	coarse sand and gravel
sh	shale
ls	limestone
tan	tan
gray	gray

QUADRANGLE LOCATION

Base by U.S. Geological Survey, 1957

Geology mapped by R. D. Miller, 1951–53, 1956; R. D. Miller and E. K. Maughan, 1957

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GEOLOGIC MAP OF THE OMAHA-COUNCIL BLUFFS AREA, NEBRASKA-IOWA; LOVELAND QUADRANGLE

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL