North Dakota Geological Survey
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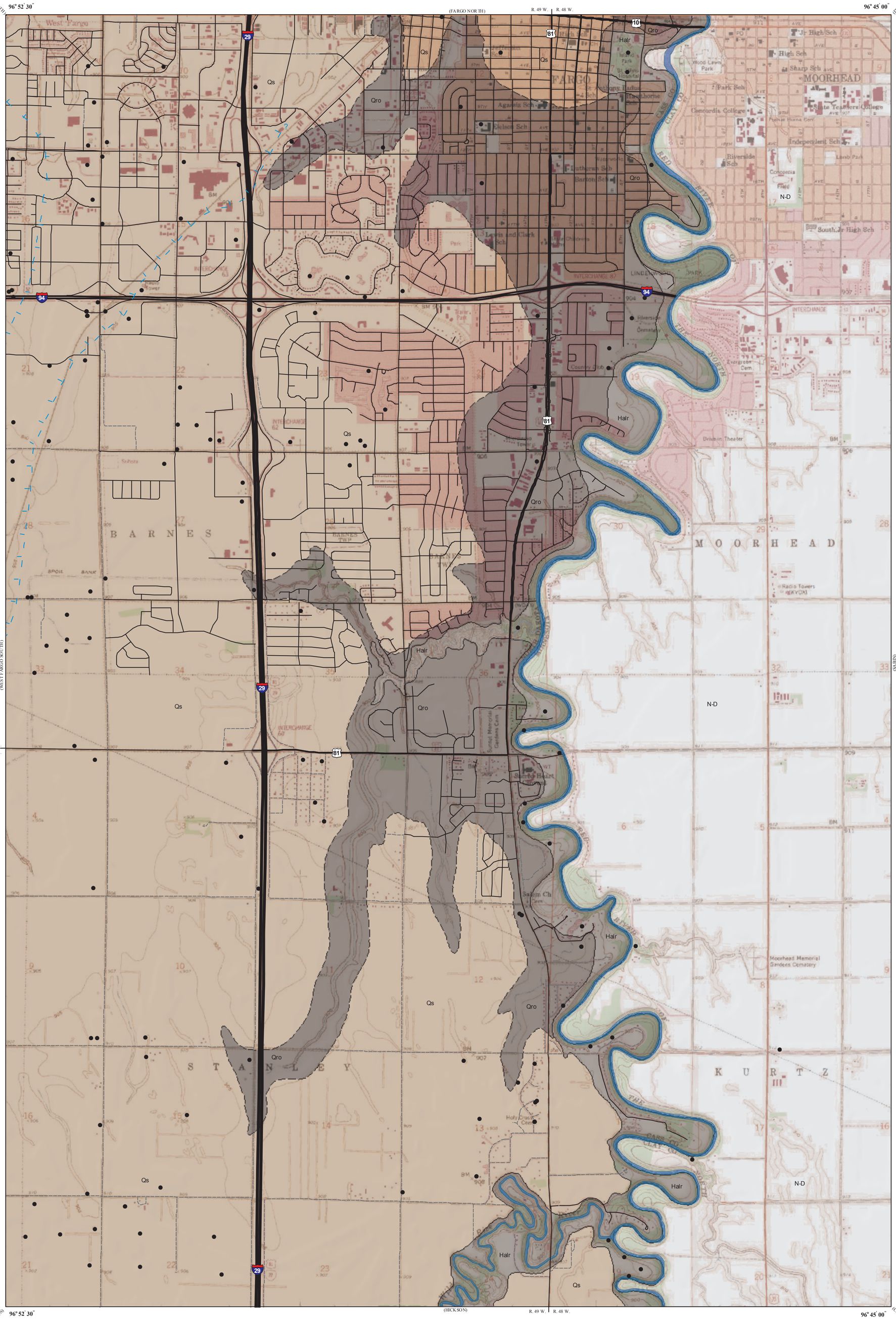
Surface Geology

Fargo South Quadrangle, North Dakota



Fred J. Anderson
2007

EXPLANATION

N-D No Data

QUATERNARY SYSTEM

HOLOCENE

OAHE FORMATION

Halr **Red River Alluvium**

Channel alluvium reworked and deposited by the Red River during recent flow and flooding events. Consists of brown to gray bedded sands, silts, gravels, and clays. Constrained to areas within the Red River floodplain and along adjacent tributary drainages. Prone to slope failure and cutbank erosion along the Red River.

PLEISTOCENE

Qro **River Sediment (Overbank)**

Clay, silt, sand, and disseminated organic debris, obscurely bedded; dark colored; in many places associated with sand and gravel of older river channel sediment; commonly more than a meter (3 feet) thick. Deposited as overbank and channel sediments from ancient and recent fluvial systems on the Lake Agassiz Plain.

COLEHARBOR GROUP

Qs **SHERACK FORMATION**

Glaciolacustrine, yellow gray, thinly laminated silt, clay, and silty clay. Generally the most ubiquitious surface lithostratigraphic unit within the quadrangle. Deposited as offshore sediments of Glacial Lake Agassiz. Commonly near 20 feet in thickness. Prone to slump failure and cut bank erosion along the Red River.

Geologic Symbols

Known contact between two geologic units

Approximate contact between two geologic units

Compaction Ridge

Approximate boundary of fluvial channel compaction ridge sediments found in the shallow subsurface. Commonly found at depths of 20 feet or less ranging in thickness from four to 32 feet. Occasional thin layers of peat can be found in borings near interpreted channel boundaries at depths of around eight feet. Sediments typically consist of water-bearing, gray-brown, clayey, silty-sands, that are capable of flow, which are problematic for the construction of shallow foundations and footings. Sediments within the compaction ridge are of the Holocene age West Fargo member of the Poplar River Formation.

Control Points

Test holes, observation wells, irrigation wells, private wells, industrial wells, municipal wells, rural water wells, soil probes, outcrops, and hand auger borings.

Other Features

Water

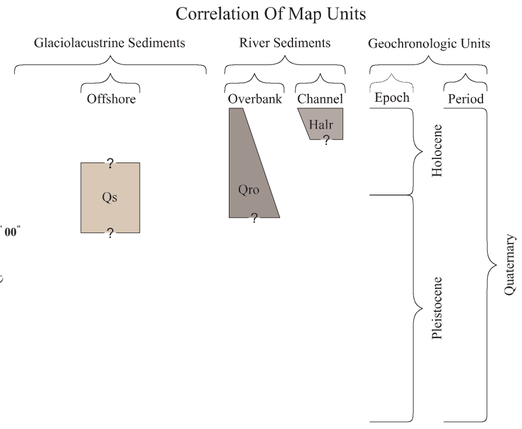
Interstate Highway

US Highway

Paved Road

Unpaved Road

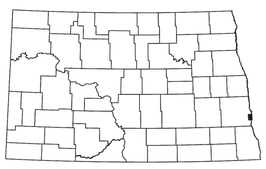
Correlation Of Map Units



This geologic map was funded in part by the USGS National Cooperative Geologic Mapping Program.

Cartographic Compilation: Elroy L. Kadrmas

NORTH DAKOTA GEOLOGICAL SURVEY 1895



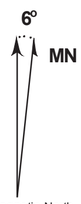
Fargo South Quadrangle, North Dakota

Scale 1:24,000

0 0.5 1

Miles

Lambert Conformal Conic Projection Standard Parallels 46°45'00" and 47°52'30"
1927 North American Datum NGVD 1929
USGS 7.5 Minute Topographic Map Contour Interval 5 Feet
Road Layer Rectified to 2003 NAIP Digital Orthophoto



1993 Magnetic North
Declination at Center of Sheet