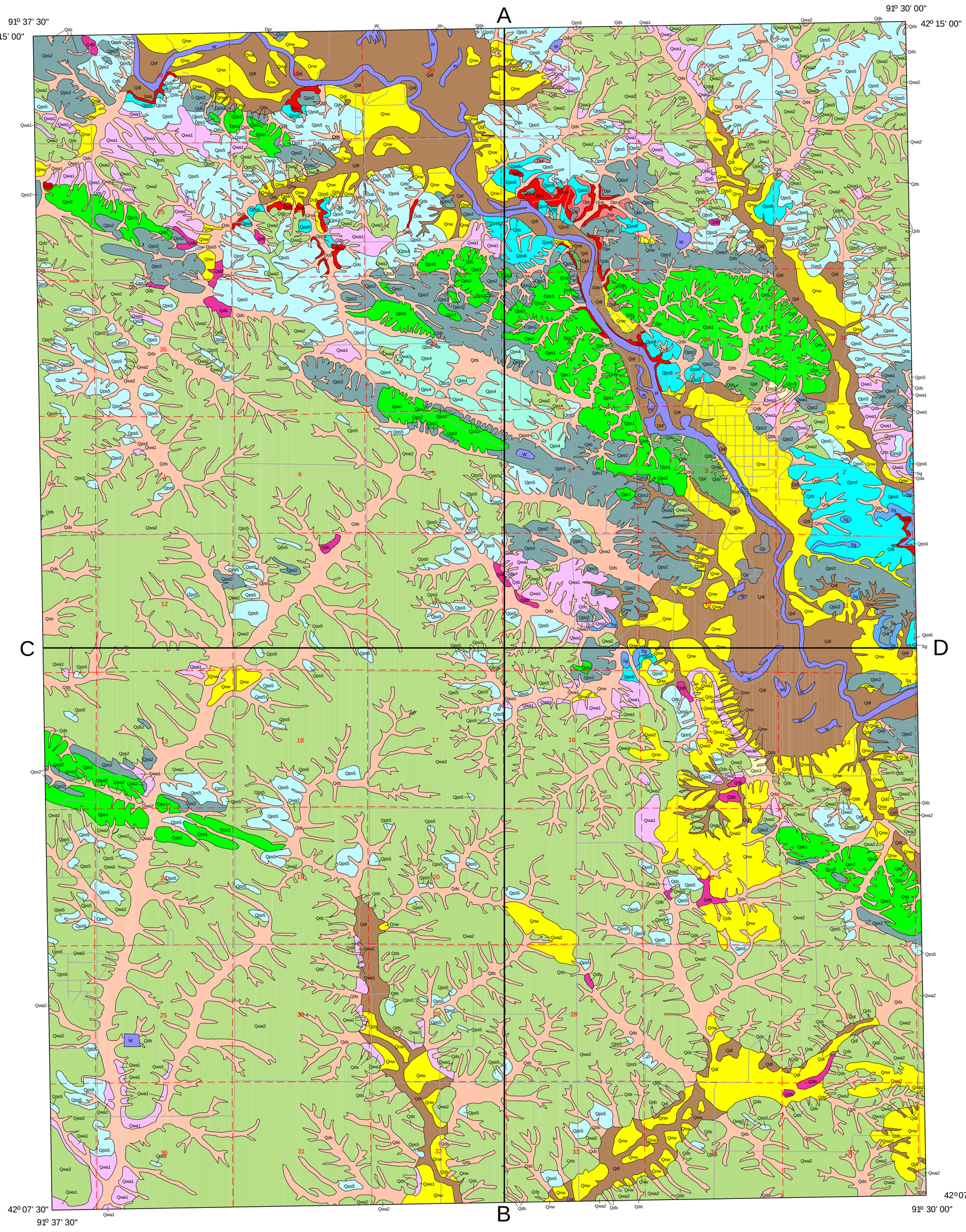
SURFICIAL GEOLOGIC MATERIALS OF THE CENTRAL CITY QUADRANGLE



Geological Survey Bureau
Open File Map Series 96-2

Prepared by
E. Arthur Bettis III
Greg A. Ludvigson
Maureen K. Slaughter
James D. Giglierano
Mary R. Howes
Bill J. Bunker
T. Michael Whitsett
Eric Roberts
Kurt Haiar

Energy and Geological Survey Division
Geological Survey Bureau

September 1996

Supported by the U.S. Geological Survey, Department of Interior, under assistance Award No. 1434-95-A-01362, and Bluestem Solid Waste Agency, City of Cedar Rapids City Engineer, Linn County Regional Planning, Linn County Engineering, Wendling Quarries Inc., Shive-Hattery Engineers and Architects Inc., and Howard R. Green Company.

Iowa Department of Natural Resources
Larry J. Wilson, Director

ACKNOWLEDGMENTS

Recognized for direct contributions to the map's production: D.L. Koch, R.R. Anderson, B.J. Witzke, D.J. Quade, R.R. Rowden of the IDNR Geological Survey Bureau, R.D. Mandel of Topeka, Kansas, Iowa City office of the U.S. Geological Survey - Water Resources Division, Department of Geology at Cornell College, Iowa Department of Transportation, U.S. Department of Agriculture - Natural Resources Conservation Service, Linn County Engineering, Bluestem Solid Waste Agency, Linn County Planning and Zoning, and landowners who granted access for field studies. Special thanks is extended to Rebecca Palmer, Director of Linn County Planning and Zoning, for coordination with government agencies and private businesses in Linn County.

LEGEND

Description of Map Units

Unit	Description
	Holocene
Qds	ALLUVIUM (DeForest Formation) -- One to three meters of massive to weakly stratified, grayish brown to brown loam, silt loam, clay loam, or loamy sand overlying less than three meters of poorly to moderately well sorted, massive to moderately well stratified, coarse to fine feldspathic quartz sand, pebbly sand, and gravel. Unit also includes colluvial deposits derived from adjacent map units. Seasonally high water tables occur in this map unit.
Qdl	ALLUVIUM (DeForest Formation) -- Two to four meters of massive to moderately well stratified loam, silt loam, clay loam, or loamy sand overlying more than three meters of poorly to moderately well sorted, massive to well stratified, coarse to fine feldspathic pebbly sand and gravel of the Noah Creek Formation. Seasonally high water tables occur in this map unit.
Qdb	MUCK AND PEAT (DeForest Formation, Woden Member) -- One to six meters of black to brown muck, peat, and other organic-rich deposits in fens. Massive to well stratified at depth. Overlies sand and gravel and/or massive, fractured, loamy glacial till of the Wolf Creek or Alburnett formations. High water tables occur in this map unit.
	Late Wisconsinan
Qpt	LOESS AND INTERCALATED EOLIAN SAND (Peoria Formation) -Two to seven meters of yellowish brown to gray, massive, jointed, calcareous or noncalcareous, silt loam and intercalated fine to medium, well sorted, feldspathic quartz sand. Grades downward to poorly to moderately well sorted, moderately to well stratified, coarse to fine feldspathic quartz sand, pebbly sand, loam, or silt loam alluvium, or in some places the eolian sediments bury a clayey Farmdale/Sangamon Soil developed in Pre-Wisconsinan alluvium.
Qps1	LOESS AND INTERCALATED EOLIAN SAND (Peoria Formation) - Five to ten meters of yellowish brown to gray, massive, jointed, noncalcareous grading downward to calcareous silt loam and intercalated fine to medium, well sorted, feldspathic quartz sand. Sand is most abundant in the lower part of the eolian package. Overlies massive, jointed, loamy glacial till of the Wolf Creek or Alburnett formations with or without intervening clayey Farmdale/Sangamon Paleosol.
Qps2	EOLIAN SAND (Peoria Formation - sand facies) -- Five to fifteen meters of yellowish brown to gray, moderately to well stratified noncalcareous or calcareous, fine to medium, well sorted, feldspathic quartz sand. May contain interbeds of yellowish brown to gray, massive, silt loam loess. Overlies eroded, massive, jointed, loamy glacial till or fractured Devonian-age carbonate bedrock.
Qps3	LOESS SHALLOW TO GLACIAL TILL (Peoria Formation) -- Two to three meters of yellowish brown, massive, noncalcareous silt loam and intercalated fine to medium, well sorted, feldspathic quartz sand. Sand, if present, occurs in lower part of unit. Overlies 0.5 to 1.5 meters of pebbly loam erosion surface sediment which, in turn, overlies eroded, massive, jointed, firm, loamy glacial till of the Wolf Creek or Alburnett formations. Seasonally high water tables may occur in this map unit.
Qps4	LOESS SHALLOW TO SAND AND GRAVEL (Peoria Formation) -- One to two meters of yellowish brown, massive, noncalcareous silt loam. Overlies pebbly sand and gravel erosion surface sediment that is one to four meters thick, which, in turn, overlies eroded, massive, jointed, firm, loamy glacial till of the Wolf Creek or Alburnett formations, or fractured Devonian-age carbonate bedrock. Seasonally high water tables may occur in this map unit.
Qps5	EOLIAN SAND SHALLOW TO GLACIAL TILL (Peoria Formation - sand facies) -- Two to four meters of yellowish brown, massive to well stratified, noncalcareous, fine to medium, well sorted feldspathic quartz sand. Overlies pebbly loam erosion surface sediment which, in turn, overlies eroded, massive, jointed, firm, loamy glacial till of the Wolf Creek or Alburnett formations.
Qps6	EOLIAN SAND SHALLOW TO ROCK (Peoria Formation - sand facies) -- One to four meters of yellowish brown, massive to well stratified, noncalcareous, fine to medium, well sorted feldspathic quartz sand. May overlie one to two meters of loamy erosion surface sediment and/or less than two meters of eroded, massive, jointed, firm loamy glacial till of the Wolf Creek or Alburnett formations. Fractured Devonian-age carbonate bedrock is less than five meters below the land surface.
Qwa1	SAND AND GRAVEL SHALLOW TO TILL (Unnamed erosion surface sediment) -- One to three meters of yellowish brown to gray, massive to weakly stratified, noncalcareous, medium to coarse, poorly sorted feldspathic pebbly quartz sand with intercalated gravel and loam. Overlies eroded, massive, jointed, firm, loamy glacial till of the Wolf Creek or Alburnett formations. Deposits in this mapping unit are derived primarily from erosion of glacial till in the adjacent drainage basin. Seasonally high water tables may occur in this map unit.
Qwa2	LOAMY AND SANDY SEDIMENT SHALLOW TO GLACIAL TILL (Unnamed erosion surface sediment) -- One to three meters of yellowish brown to gray, massive to weakly stratified, well to poorly sorted loamy, sandy and silty erosion surface sediment. Map unit includes some areas mantled with less than two meters of Peoria Formation (loess and eolian sand). Overlies eroded, massive, jointed, firm glacial till of the Wolf Creek and Alburnett formations. Seasonally high water tables may occur in this map unit.
	Complexes
Qnw	SAND AND GRAVEL (Noah Creek and Wolf Creek formations) -- More than three meters of yellowish brown to gray, poorly to well sorted, massive to well stratified, coarse to fine feldspathic quartz sand, pebbly sand and gravel. In places mantled with one to three meters of fine to medium, well sorted feldspathic quartz sand derived from wind reworking of the alluvium. The unit encompasses deposits that accumulated in river and stream valleys during the late Wisconsinan as well as exhumed Pre-Illinoian deposits of the Wolf Creek and Alburnett formations in upland positions.
	Devonian System
Dcv	FRACTURED CARBONATE BEDROCK (Cedar Valley Group) -- Zero to forty meters of fossiliferous limestone and dolostone used as a shallow bedrock aquifer.
Dpr	FRACTURED CARBONATE BEDROCK (Pinicon Ridge Formation) -- Zero to twenty meters of unfossiliferous limestone, dolostone, and shale. The basal shaley five meters are a confining unit that retards groundwater infiltration. The upper part of the unit is prone to karst development.
Ddt	FRACTURED CARBONATE BEDROCK (Otis and Bertram Formations, undifferentiated) -- Zero to forty meters of unfossiliferous to poorly fossiliferous dolostone and limestone.
	Silurian System
Sg	FRACTURED CARBONATE BEDROCK (Gower Formation) -- Zero to thirty meters of laminated, unfossiliferous dolostone.
Ssg	FRACTURED CARBONATE BEDROCK (Scotch Grove Formation) -- Zero to fifty meters of fossiliferous, variably porous and cherty dolostone used as a bedrock aquifer.
	Anthropogenic Units
Qp	QUARRIES AND PITS -- Limestone quarries and sand and gravel pits. Extent as of 1990 shown.
W	WATER

Scale
1:24000

0 1 2 Miles

0 1 2 Kilometers

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