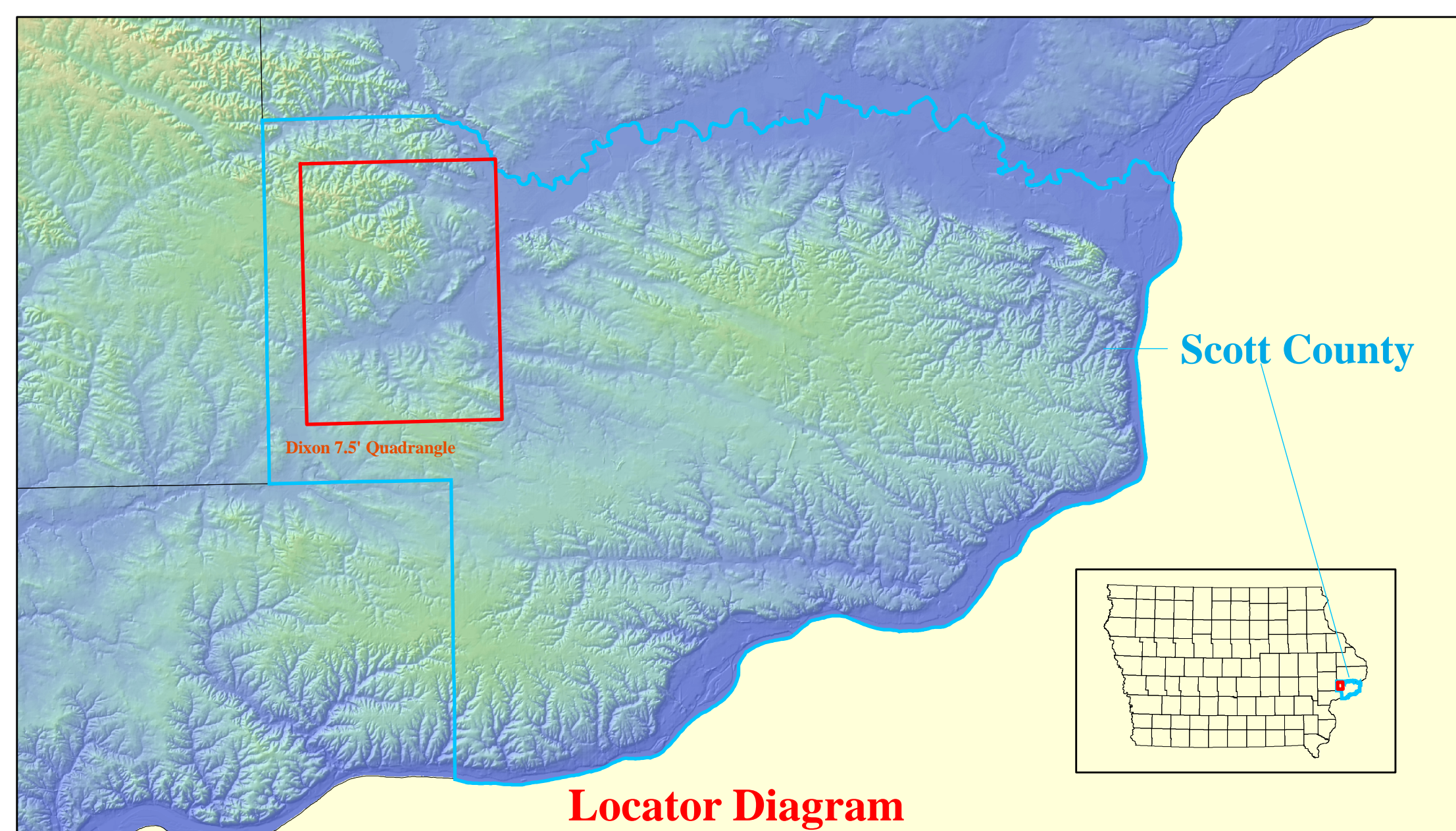
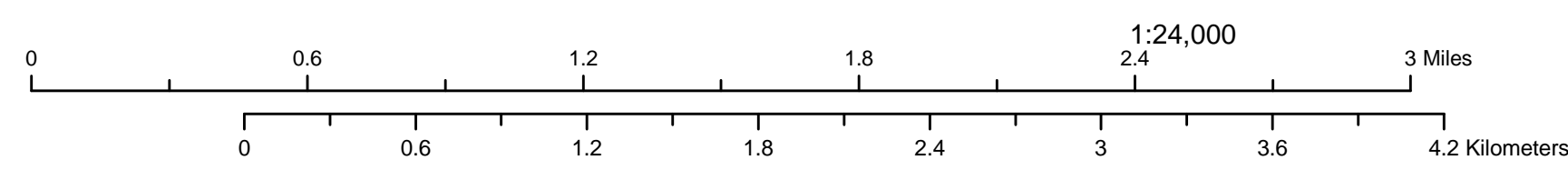
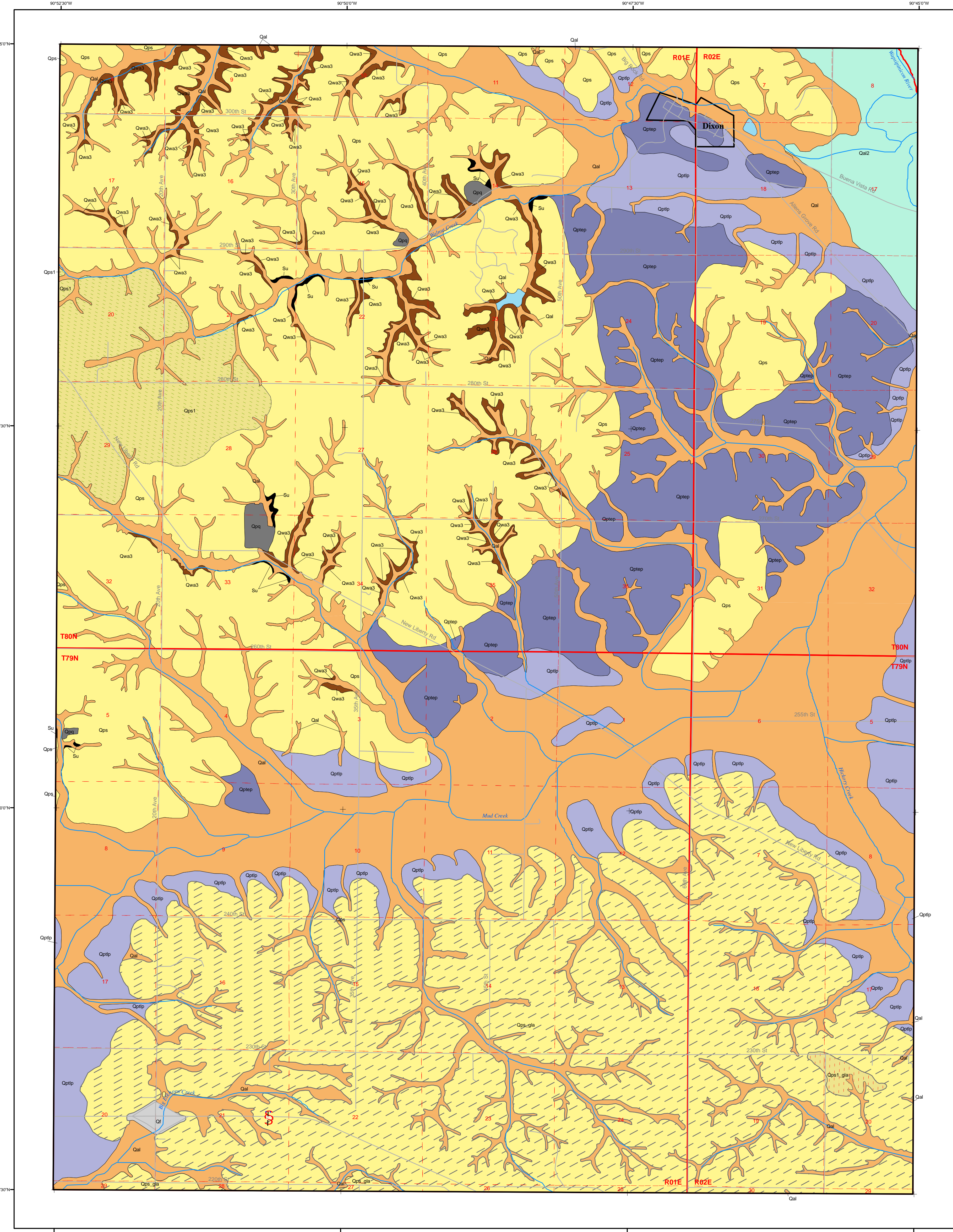


# Surficial Geologic Materials of the Dixon 7.5' Quadrangle Scott County, Iowa



## SURFICIAL GEOLOGIC MATERIALS OF THE DIXON 7.5' QUADRANGLE, SCOTT COUNTY, IOWA

Iowa Geological Survey Open File Map 05-04, July 2005

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## LEGEND

### Description of Map Units

- Hudson Episode**
- Qal - Alluvium** (DeForest Formation-Undifferentiated) Variable thickness (<1 to 5 meters) of very dark gray to brown, noncalcareous to calcareous, stratified silt clay loam, clay loam, loam to sandy loam alluvium and coluvium in stream valleys, on hill slopes and in closed depressions. May overlie Glasford Formation glacial till or Noah Creek Formation. Associated with low-relief modern floodplain, closed depressions, modern drainageways or toeslope positions on the landscape. Seasonally high water table and potential for frequent flooding.
  - Qal2 - Thick Alluvium** (DeForest Formation-Undifferentiated) Two to five meters of massive to moderately well stratified loam, silt loam, clay loam, or loamy sand overlying five to thirty meters of poorly to moderately well sorted, massive to well stratified, coarse to fine feldspathic pebbly sand and gravel of the Noah Creek Formation. This unit locally serves as an aquifer. Seasonally high water tables occur in this map unit.
- Wisconsin Episode**
- Qltp - Late Phase High Terrace (LPHIT)** (Peoria Formation-silt and/or sand facies) Two to seven meters of yellowish brown to gray, massive, jointed, calcareous or noncalcareous, silt loam and intercalated fine to medium, well sorted, sand. Grades downward to poorly to moderately well sorted, moderately to well stratified, coarse to fine feldspathic quartz sand, loam, or silt loam alluvium.
  - Qltp - Early Phase High Terrace (EPHIT)** (Peoria Formation-silt and/or sand facies) Two to seven meters of yellowish brown to gray, massive, jointed, calcareous or noncalcareous, silt loam and intercalated fine to medium, well sorted, sand. The Peoria deposits overlie a Farmdale Geosol developed in the Pisgah Formation which in turn overlies a well-expressed Sangamon Geosol developed in poorly to moderately well sorted, moderately to well stratified, coarse to fine sand, loam, or silt loam alluvium.
  - Qps\_gla - Loess** (Peoria Formation-silt facies) Generally 2 to 5 m of yellowish to grayish brown, massive, jointed calcareous or noncalcareous silt loam to silt clay loam. Overlies a grayish brown to olive gray silt clay loam to silt clay (Pisgah Formation—eroded Farmdale Geosol) which is less than 1.5 m thick. The Farmdale Geosol appears to be disturbed by periglacial action and is welded to an older Sangamon Geosol developed in loamy glacial till of the Glasford Formation. This mapping unit encompasses upland divides, ridgetops and convex sideslopes. Well to somewhat poorly drained landscape.
  - Qps1\_gla - Loess and Intercalated Eolian Sand** (Peoria Formation-silt facies) Two to ten meters of yellowish brown to gray, massive, fractured, noncalcareous grading downward to calcareous silt loam and intercalated fine to medium, well sorted, sand. Sand is most abundant in lower part of the eolian package; eolian dunes 0.5 - 2.5 m thick may be present at the base of this unit. Overlies massive, fractured, loamy glacial till of the Illinoisian Glasford Formation till with or without intervening clayey Farmdale /Sangamon Geosol.
  - Qps - Loess** (Peoria Formation-silt facies) Generally 2 to 8 m of yellowish to grayish brown, massive, jointed calcareous or noncalcareous silt loam to silt clay loam. Overlies a grayish brown to olive gray silt clay loam to silt clay (Pisgah Formation—eroded Farmdale Geosol) which is less than 1.5 m thick. The Farmdale Geosol appears to be disturbed by periglacial action and is welded to an older Sangamon Geosol developed in loamy glacial till of the Wolf Creek or Alburnett formations. This mapping unit encompasses upland divides, ridgetops and convex sideslopes. Well to somewhat poorly drained landscape.
  - Qps1 - Loess and Intercalated Eolian Sand** (Peoria Formation-silt facies) Two to ten meters of yellowish brown to gray, massive, fractured, noncalcareous grading downward to calcareous silt loam and intercalated fine to medium, well sorted, sand. Sand is most abundant in lower part of the eolian package; eolian dunes 0.5 - 2.5 m thick may be present at the base of this unit. Overlies massive, fractured, loamy glacial till of the Wolf Creek or Alburnett formations with or without intervening clayey Farmdale /Sangamon Geosol.
- Pre-Illinois Episode**
- Qwa3 - Till** (Wolf Creek or Alburnett Formations) Generally 10 to 35 m of very dense, massive, fractured, loamy glacial till of the Wolf Creek or Alburnett Formations with or without a thin loess mantle (Peoria Formation—less than 2 meters) and intervening clayey Farmdale /Sangamon Geosol. This mapping unit encompasses narrowly dissected interfluvies and side slopes, and side valley slopes. Drainage is variable from well drained to poorly drained.
  - Su - Bedrock Exposures** (Silurian undifferentiated)
  - Qf - Fill** Areas of major land filling. Fill associated with railroad grades, highway grades and land leveling. Variable in texture ranging from loamy to sandy to concrete rubble. Extent mapped as shown in county soil surveys.
  - Qpq - Pits and Quarries** Sand and gravel pits and rock quarries. Extent mapped as shown in county soil surveys.
  - Water Features**