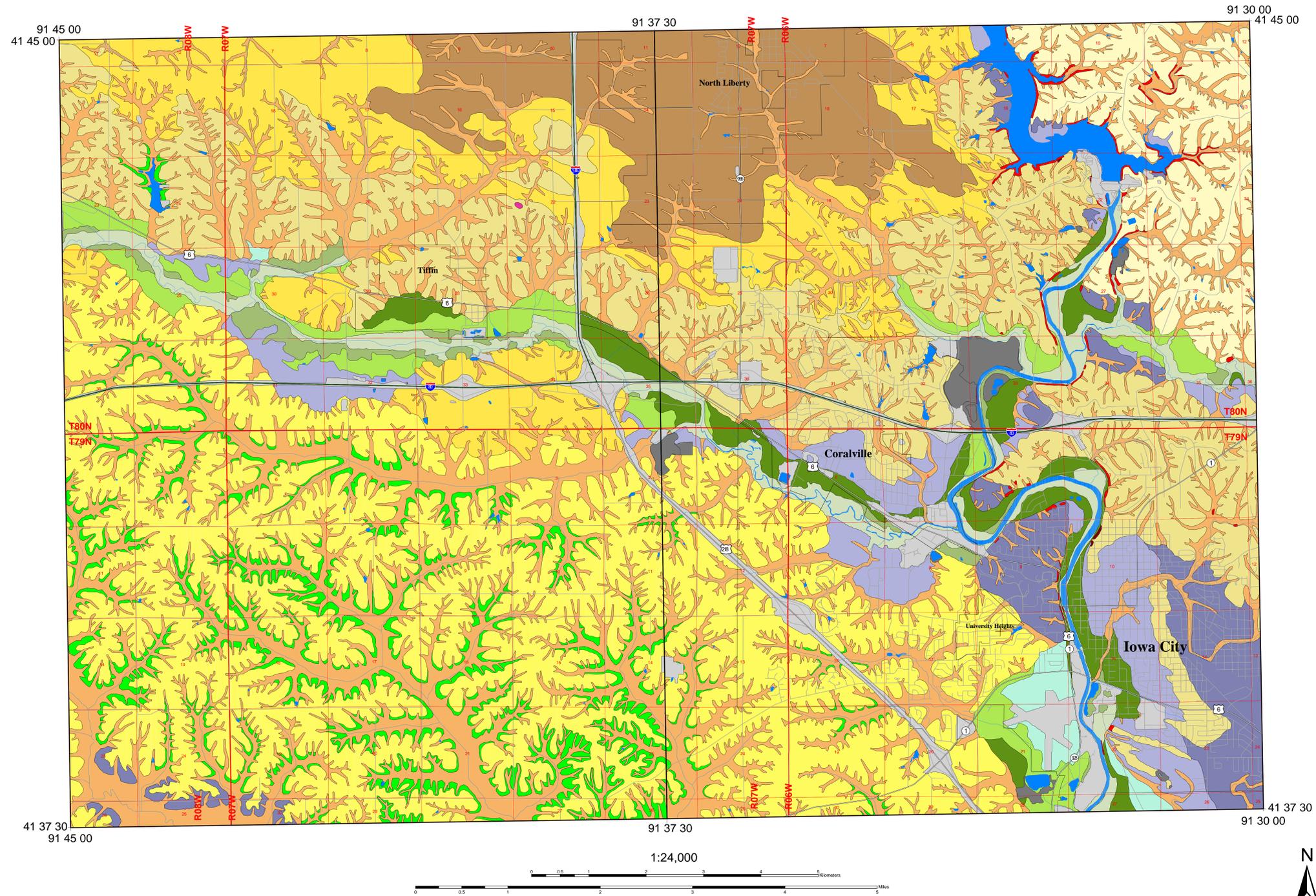


# Surficial Geologic Materials of the Tiffin and Iowa City West 7.5' Quadrangles



**SURFICIAL GEOLOGIC MAPS  
OF DEVELOPING AREAS IN IOWA**  
Phase 2: Iowa City West and Tiffin 7.5' Quadrangles

Iowa Geological Survey  
Open File Map 2003-4  
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**LEGEND**

**Description of Map Units**

- HUDSON EPISODE**
- Qd1 - Alluvium (Deer Creek Formation): One to four meters of mostly unsorted, gravelly loess to heavy sand and silt, overlain by 1 to 2 meters of poorly sorted, unconsolidated, silty sand to silty clay. Includes scattered pebbles and gravel and may have 1 meter of fine-grained Wisconsin Nook Creek Formation sand and gravel. This unit includes cultural deposits that are not shown on this map.
  - Qd2 - Iowa Blue Valley Low Terrace (Old Iowa Formation-Camp Creek Mbr. and Roberts Creek Mbr.): Variable thickness of fine sand to 1 to 2 meters of very dark gray to brown, unconsolidated, unsorted silty clay loam, silt, or clay loam, overlain by the lower terrace level of the Iowa Blue Valley. Overlies Nook Creek Formation. The lower terrace level and middle terrace are common features associated with the terrace level. Poorly sorted alluvium thickness varies from 2 meters to higher areas 2 meters along the terrace crest and lower along slope. Several high terraces are shown and mapped.
  - Qd3 - Iowa Blue Valley Intermediate Terrace (Old Iowa Formation-Camp Creek Mbr., Roberts Mbr. and Cedar Mbr.): Variable thickness of fine sand to 1 to 2 meters of very dark gray to brown, unconsolidated, unsorted silty clay loam, silt, or clay loam, overlain by the lower terrace level of the Iowa Blue Valley. Overlies Nook Creek Formation. This unit is common on the Iowa Blue Valley. Several high terraces are shown and mapped.
  - Qd4 - Iowa Blue Valley Intermediate-High Terrace (Old Iowa Formation-Cedar Mbr.): Variable thickness of fine sand to 1 to 2 meters of very dark gray to brown, unconsolidated, silty clay loam, silt, or clay loam, overlain by the lower terrace level of the Iowa Blue Valley. Overlies Nook Creek Formation. This unit is common on the Iowa Blue Valley. Several high terraces are shown and mapped.
  - Qd5 - Iowa Blue Valley High Terrace (Old Iowa Formation-Cedar Mbr.): Variable thickness of fine sand to 1 to 2 meters of very dark gray to brown, unconsolidated, silty clay loam, silt, or clay loam, overlain by the lower terrace level of the Iowa Blue Valley. Overlies Nook Creek Formation. This unit is common on the Iowa Blue Valley. Several high terraces are shown and mapped.
- WISCONSIN EPISODE**
- Qw1 - Sand and Gravel (Nook Creek Formation): Most of the surface of the Iowa Blue Valley is covered by well-sorted, unconsolidated, unsorted, silty sand, silt, or clay. This unit is common on the Iowa Blue Valley. Several high terraces are shown and mapped.
  - Qw2 - Fine Sand (Nook Creek Formation): This unit is common on the Iowa Blue Valley. Several high terraces are shown and mapped.
  - Qw3 - Fine Sand (Nook Creek Formation): This unit is common on the Iowa Blue Valley. Several high terraces are shown and mapped.
  - Qw4 - Fine Sand (Nook Creek Formation): This unit is common on the Iowa Blue Valley. Several high terraces are shown and mapped.
  - Qw5 - Fine Sand (Nook Creek Formation): This unit is common on the Iowa Blue Valley. Several high terraces are shown and mapped.
- PRE-ILLINOIS EPISODE**
- Qp1 - Alluvium (Nook Creek and Alluvium Formations): Alluvium deposited within the 24-ft-of-the surface or may be deposited in areas with steeper slopes. Alluvium is a yellowish-brown to grayish brown, unconsolidated, unsorted, silty sand to silty clay loam, silt, or clay loam, overlain by the lower terrace level of the Iowa Blue Valley. Overlies Nook Creek Formation. This unit is common on the Iowa Blue Valley. Several high terraces are shown and mapped.
- Paleozoic**
- St - Stratified Devonian Carbonate Bedrock: Primarily Cedar Valley Group Unconformity and lower part of Lime Creek Formation—green, gray, black. The Cedar Valley Group is locally developed as a blocky angle.
  - Pr - Unstratified Precambrian Bedrock: unconsolidated, chlorite and muscovite.
- Qp2 - Pits and Quarries:** Sand and gravel pits and rock quarries. Exact mapped as shown in county well surveys.
- Qp3 - Alluvium and fill:** Associated with major highways, airports and other and related developments. Deposits within this map unit are similar to those in adjacent map units but have been modified by construction activities. Low-relief areas appear as areas of rock and are developed as well-drained flat areas.
- Water Features:** Rivers, lakes and small ponds formed by blockage of drainage and their channels.
- DNR Well Locations:**

