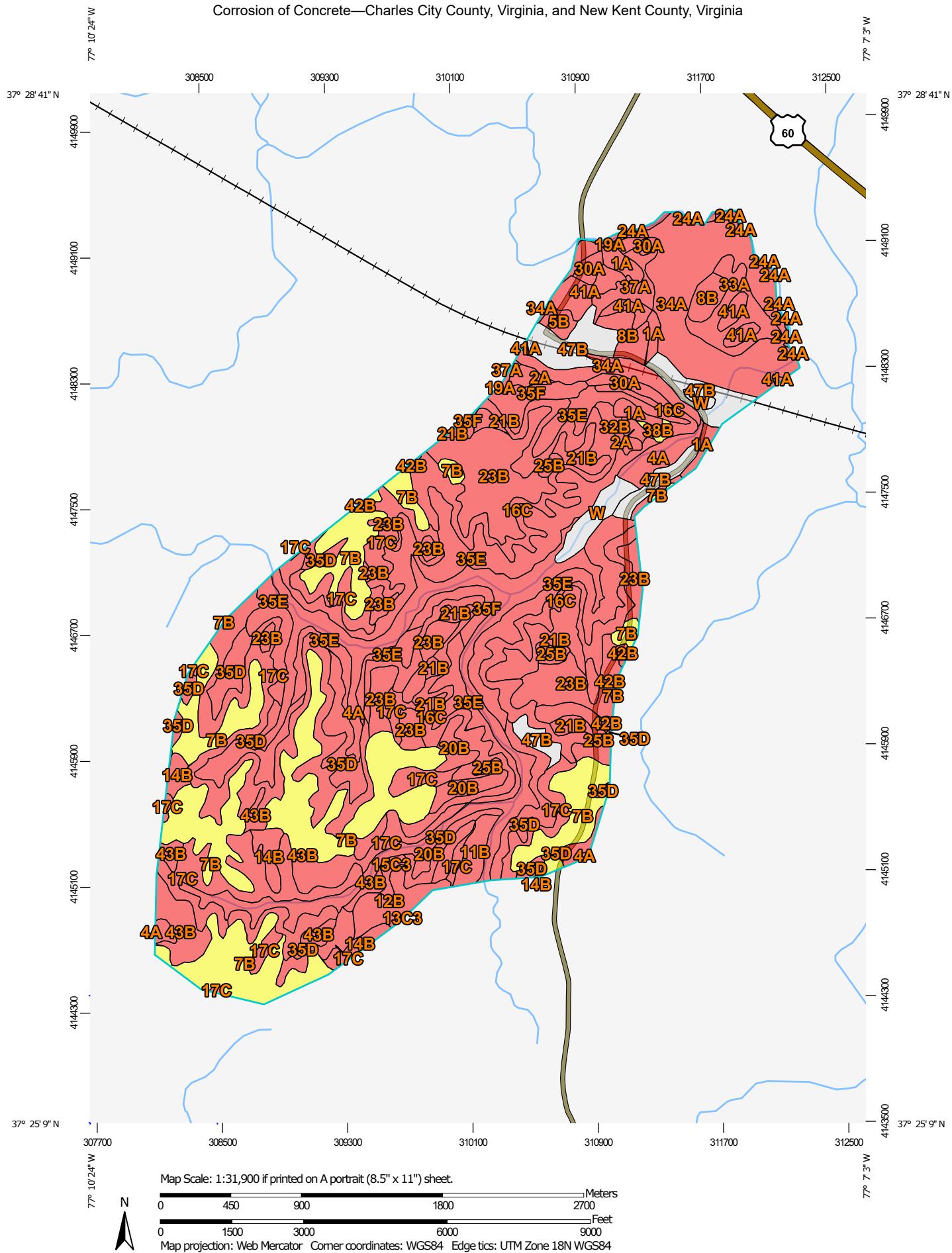


Corrosion of Concrete—Charles City County, Virginia, and New Kent County, Virginia



Map Scale: 1:31,900 if printed on A portrait (8.5" x 11") sheet.

Meters

0 450 900 1800 2700

0 450 900 1800 2700 Feet



Natural Resources Conservation Service

Web Soil Survey
National Cooperative Soil Survey

8/21/2025
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MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  High
-  Moderate
-  Low
-  Not rated or not available

Soil Rating Lines

-  High
-  Moderate
-  Low
-  Not rated or not available

Soil Rating Points

-  High
-  Moderate
-  Low
-  Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at scales ranging from 1:15,800 to 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Charles City County, Virginia

Survey Area Data: Version 19, Aug 28, 2024

Soil Survey Area: New Kent County, Virginia

Survey Area Data: Version 17, Aug 30, 2024

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.



Corrosion of Concrete

| Map unit symbol | Map unit name | Rating | Acres in AOI | Percent of AOI |
|-----------------|--|----------|--------------|----------------|
| 1A | Altavista fine sandy loam, 0 to 3 percent slopes | High | 24.8 | 1.0% |
| 2A | Augusta sandy loam, 0 to 2 percent slopes | High | 10.6 | 0.4% |
| 4A | Bibb fine sandy loam, 0 to 2 percent slopes, frequently flooded | High | 199.1 | 8.0% |
| 5B | Bojac loamy fine sand, 2 to 6 percent slopes | High | 7.9 | 0.3% |
| 7B | Caroline-Emporia complex, 2 to 6 percent slopes | Moderate | 375.9 | 15.1% |
| 8B | Catpoint loamy sand, 0 to 4 percent slopes | High | 27.7 | 1.1% |
| 11B | Conetoe loamy sand, 0 to 4 percent slopes | High | 15.3 | 0.6% |
| 12B | Craven loam, 2 to 6 percent slopes | High | 26.5 | 1.1% |
| 13C3 | Craven clay loam, 6 to 10 percent slopes, severely eroded | High | 0.3 | 0.0% |
| 14B | Craven-Caroline complex, 2 to 6 percent slopes | High | 27.2 | 1.1% |
| 15C3 | Craven-Caroline complex, 6 to 10 percent slopes, severely eroded | High | 4.9 | 0.2% |
| 16C | Craven-Remlik complex, 6 to 10 percent slopes | High | 215.6 | 8.7% |
| 17C | Craven-Uchee complex, 6 to 10 percent slopes | High | 303.2 | 12.2% |
| 19A | Dragston fine sandy loam, 0 to 2 percent slopes | High | 3.3 | 0.1% |
| 20B | Emporia fine sandy loam, 2 to 6 percent slopes | High | 31.4 | 1.3% |
| 21B | Emporia gravelly fine sandy loam, 2 to 6 percent slopes | High | 65.1 | 2.6% |
| 23B | Emporia-Kempsville complex, 2 to 6 percent slopes | High | 179.6 | 7.2% |

| Map unit symbol | Map unit name | Rating | Acres in AOI | Percent of AOI |
|---------------------------------------|---|----------|----------------|----------------|
| 25B | Kempsville loamy sand, 2 to 6 percent slopes | High | 30.1 | 1.2% |
| 30A | Munden loamy sand, 0 to 2 percent slopes | High | 17.8 | 0.7% |
| 32B | Nansemond loamy sand, 0 to 4 percent slopes | High | 8.0 | 0.3% |
| 33A | Nawney silt loam, 0 to 2 percent slopes, frequently flooded | High | 32.1 | 1.3% |
| 34A | Nawney silt loam, 0 to 2 percent slopes, ponded | High | 176.6 | 7.1% |
| 35D | Nevarc-Remlik complex, 10 to 15 percent slopes | High | 149.3 | 6.0% |
| 35E | Nevarc-Remlik complex, 15 to 25 percent slopes | High | 266.2 | 10.7% |
| 35F | Nevarc-Remlik complex, 25 to 60 percent slopes | High | 35.3 | 1.4% |
| 37A | Nimmo sandy loam, 0 to 2 percent slopes | High | 17.9 | 0.7% |
| 38B | Pamunkey loam, 2 to 6 percent slopes | Moderate | 4.1 | 0.2% |
| 41A | Seabrook loamy sand, 0 to 2 percent slopes | High | 36.9 | 1.5% |
| 42B | Slagle fine sandy loam, 0 to 4 percent slopes | High | 9.2 | 0.4% |
| 43B | Slagle-Emporia complex, 2 to 6 percent slopes | High | 78.5 | 3.1% |
| 47B | Udorthents, loamy, gently sloping | | 82.6 | 3.3% |
| W | Water | | 22.9 | 0.9% |
| Subtotals for Soil Survey Area | | | 2,485.6 | 99.8% |
| Totals for Area of Interest | | | 2,491.2 | 100.0% |

| Map unit symbol | Map unit name | Rating | Acres in AOI | Percent of AOI |
|---------------------------------------|---|--------|----------------|----------------|
| 24A | Nawney silt loam, 0 to 2 percent slopes, frequently flooded | High | 5.6 | 0.2% |
| Subtotals for Soil Survey Area | | | 5.6 | 0.2% |
| Totals for Area of Interest | | | 2,491.2 | 100.0% |

Description

ENG

Engineering

AGR

Agronomy

"Risk of corrosion" pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens concrete. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the concrete in installations that are entirely within one kind of soil or within one soil layer.

The risk of corrosion is expressed as "low," "moderate," or "high."

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher