



NO ARCHAEOLOGICAL SURVEY REQUIRED FORM

This form only pertains to ARCHAEOLOGICAL RESOURCES for this project. It is not valid for Historic Architecture and Landscapes. You must consult separately with the Historic Architecture and Landscapes Group.



PROJECT INFORMATION

Project No: **Bridge 156** County: **Wayne**
 WBS No: **DF15004.2096128** Document: **PCE**
 F.A. No: **DF15004.2096128** Funding: ☐ State ☒ Federal

Federal Permit Required? ☒ Yes ☐ No Permit Type: **NWP3**

Project Description: Replacement of Bridge No. 156 over Raynor Mill Branch on SR 1101 (Raynor Mill Road) in Wayne County, North Carolina. The archaeological Area of Potential Effects (APE) measures 600ft in length (300ft from each bridge end-point) and 150ft in width (75ft from each side of the SR1101 center-line).

SUMMARY OF CULTURAL RESOURCES REVIEW

Brief description of review activities, results of review, and conclusions:

Permitting and funding information was reviewed for determining the level of archaeological input required by state and federal laws. Based on the submitted "request for cultural resources review" form, the project is federally-funded with federal permit interaction. As such, Section 106 of the National Historic Preservation Act will apply. Next, construction design and other data was examined (when applicable) to define the character and extent of potential impacts to the ground surfaces embracing the project locale. The dimensions of the APE were formulated to capture any federal permit area. Once an APE was outlined, a map review and site file search was conducted at the Office of State Archaeology (OSA) on Thursday, December 8, 2016. No previously documented archaeological sites are located within the APE. Two previously recorded prehistoric archaeological sites (31WY24 & 31WY34) are located proximal to the project area, but will not be affected by the bridge replacement as proposed.

Historic structure locations often harbor archaeological deposits and features related to the former occupation of a property. An inspection of National Register of Historic Places (NRHP), State Study Listed (SL), Locally Designated (LD), Determined Eligible (DE), and Surveyed Site (SS) properties employing the NCSHPO website evidenced none of these historic resources within the immediate project area. In addition, historic maps of Wayne County were appraised to identify former structure locations, land use patterns, or other confirmation of historic occupation in the project vicinity. Archaeological/historical reference materials were inspected as well. In general, the cultural background review established that no NRHP listed properties, previously recorded archaeological sites or cemeteries are located within the APE. Based on cultural-historical factors, the APE is considered to have a moderate potential for the documentation of archaeological resources.

Further, topographic, geologic, flood boundary, lidar, and NRCS soil survey maps (Bb, WaC) were referenced to evaluate pedological, geomorphological, hydrological, and other environmental determinants that may have resulted in past occupation at this location. Aerial and on-ground photographs (NCDOT Spatial Data Viewer) and the Google Street View map application (when amenable) were also examined/utilized for additional assessment of disturbances, both natural and human induced, which compromise the integrity of archaeological sites. Environmental/impact factors do not suggest a heightened potential for archaeological resource recovery.

16-12-0001

Brief Explanation of why the available information provides a reliable basis for reasonably predicting that there are no unidentified historic properties in the APE:

No documented archaeological sites or cemeteries are contained within the current APE limits for the Bridge 156 bridge replacement project in Wayne County, North Carolina. Soil data and topographic maps confirm that the much of the APE is underlain by poorly drained or sloping ground surfaces. In such contexts, intact NRHP archaeological sites are unlikely to be present or preserved. Because of the immediate proximity of two previously recorded sites, any changes to the perspective designs which would require a larger archaeological APE will require a re-submittal. As currently proposed, no further consultation is advocated. A finding of "no archaeological survey required" is considered appropriate.

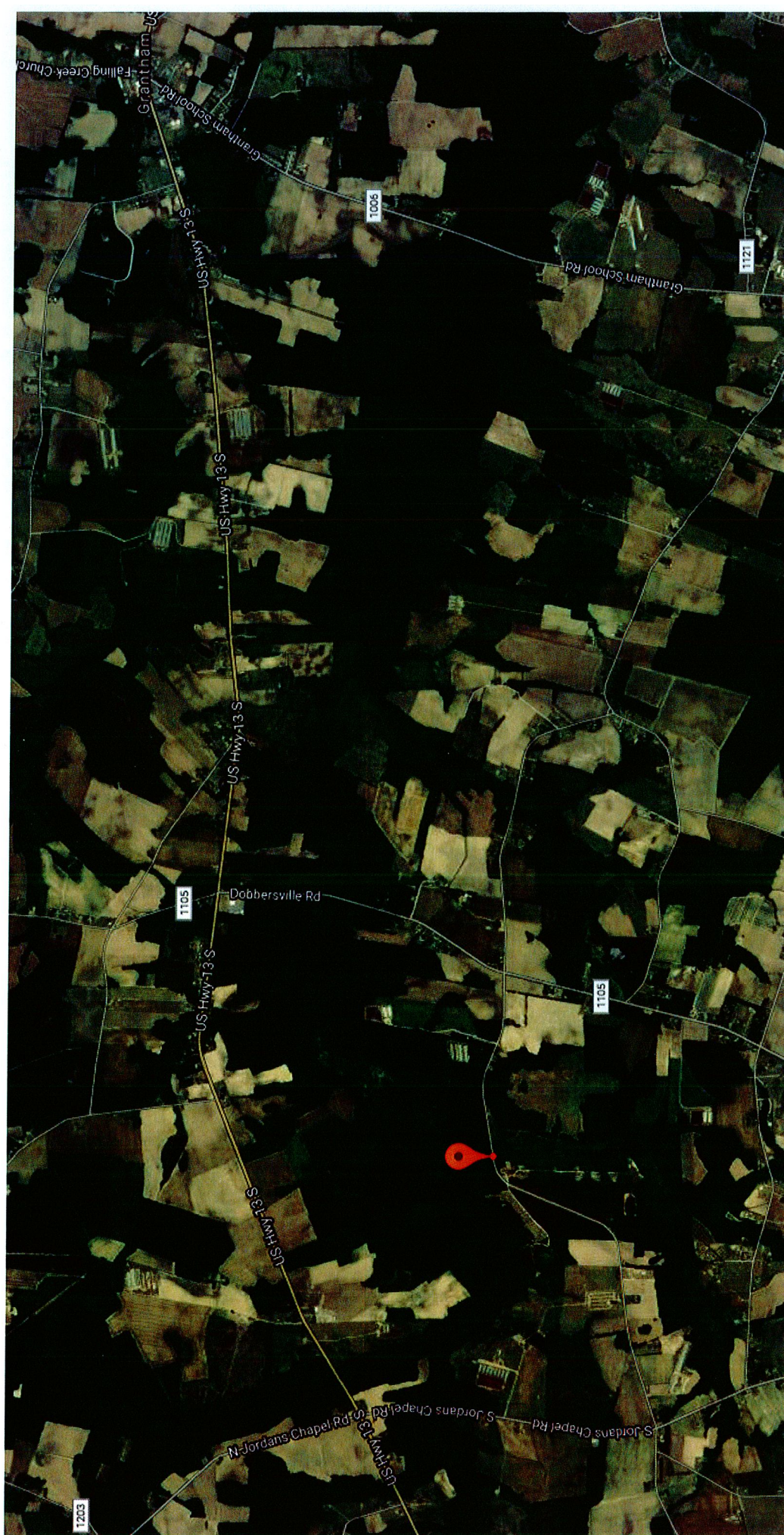
SUPPORT DOCUMENTATION

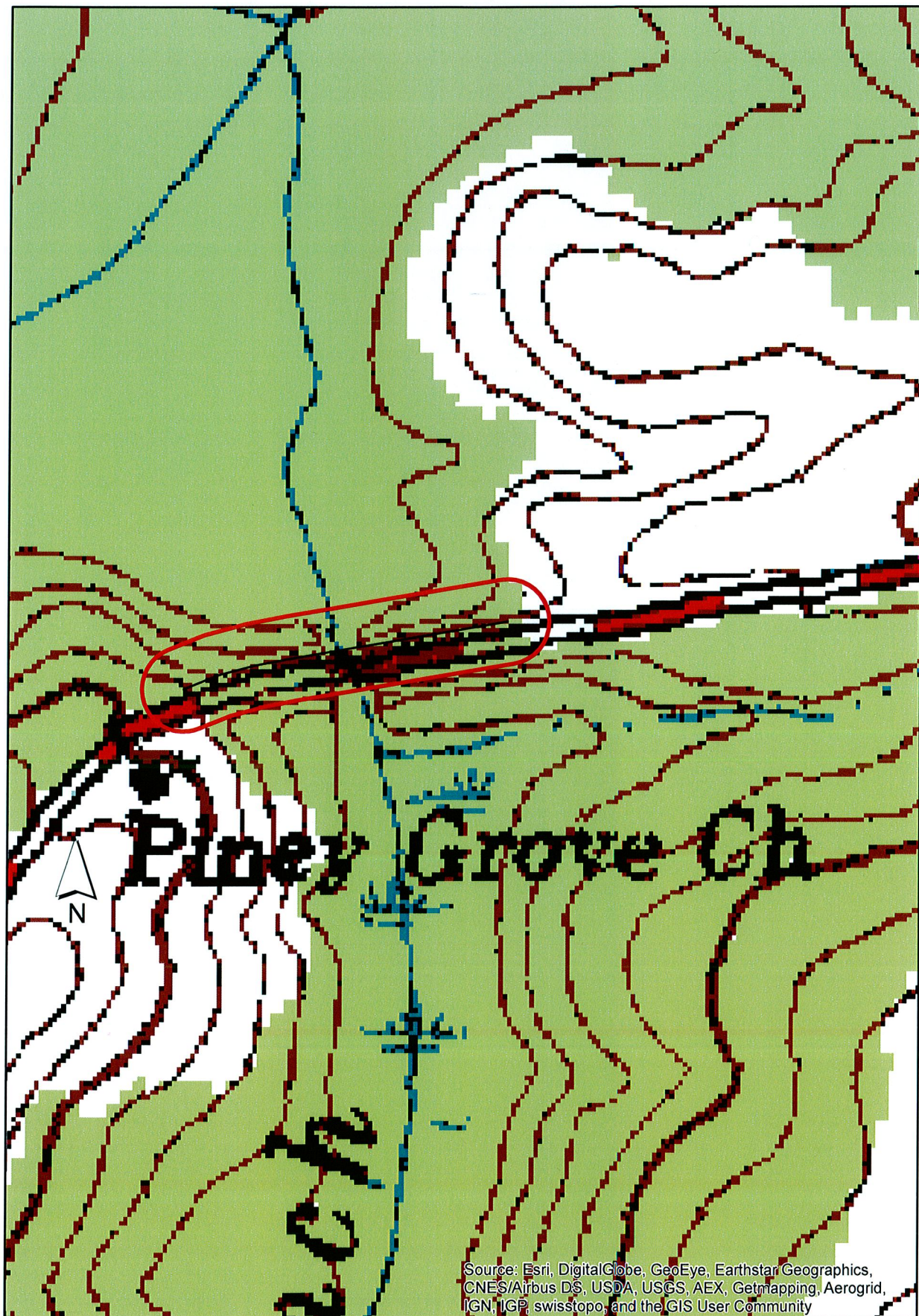
See attached: ☒ Map(s) ☒ Previous Survey Info ☐ Photos ☐ Correspondence
☐ Photocopy of County Survey Notes Other:

FINDING BY NCDOT ARCHAEOLOGIST**NO ARCHAEOLOGY SURVEY REQUIRED**

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NCDOT

12-9-2016



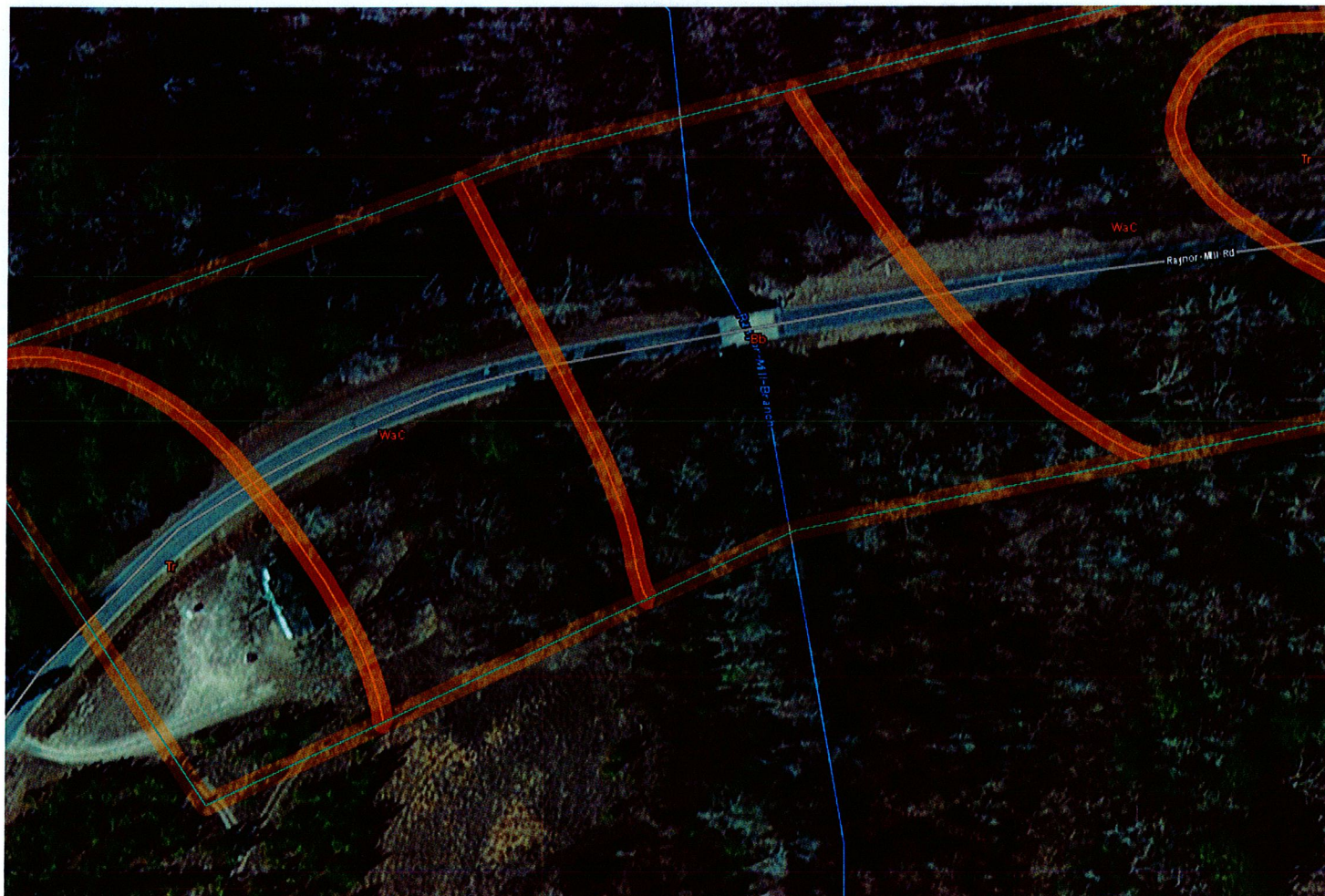


Grantham topographic map depicting the boundaries and location of the APE in Wayne County, North Carolina.



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics,
CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid,
IGN, IGP, swisstopo, and the GIS User Community

ARC-GIS image depicting the boundaries and location of the APE in Wayne County, North Carolina.



Bb—Bibb sandy loam

Map Unit Setting

- *National map unit symbol:* 3wyb
- *Elevation:* 80 to 330 feet
- *Mean annual precipitation:* 38 to 55 inches
- *Mean annual air temperature:* 59 to 70 degrees F
- *Frost-free period:* 210 to 265 days
- *Farmland classification:* Not prime farmland

Map Unit Composition

- *Bibb, undrained, and similar soils:* 80 percent
- *Johnston, undrained, and similar soils:* 10 percent
- *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Bibb, Undrained

Setting

- *Landform:* Flood plains
- *Landform position (two-dimensional):* Toeslope
- *Down-slope shape:* Concave
- *Across-slope shape:* Linear
- *Parent material:* Sandy and loamy alluvium

Typical profile

- *A - 0 to 6 inches:* sandy loam
- *Cg1 - 6 to 60 inches:* sandy loam
- *Cg2 - 60 to 80 inches:* loamy sand

Properties and qualities

- *Slope*: 0 to 2 percent
- *Depth to restrictive feature*: More than 80 inches
- *Natural drainage class*: Poorly drained
- *Runoff class*: Low
- *Capacity of the most limiting layer to transmit water (Ksat)*: High (1.98 to 5.95 in/hr)
- *Depth to water table*: About 0 to 12 inches
- *Frequency of flooding*: Frequent
- *Frequency of ponding*: None
- *Available water storage in profile*: Moderate (about 7.2 inches)

Interpretive groups

- *Land capability classification (irrigated)*: None specified
- *Land capability classification (nonirrigated)*: 5w
- *Hydrologic Soil Group*: A/D
- *Hydric soil rating*: Yes

Description of Johnston, Undrained

Setting

- *Landform*: Flood plains
- *Down-slope shape*: Concave
- *Across-slope shape*: Linear
- *Parent material*: Sandy and loamy alluvium

Typical profile

- *A - 0 to 30 inches*: mucky loam
- *Cg1 - 30 to 34 inches*: loamy fine sand
- *Cg2 - 34 to 80 inches*: fine sandy loam

Properties and qualities

- *Slope*: 0 to 2 percent
- *Depth to restrictive feature*: More than 80 inches
- *Natural drainage class*: Very poorly drained
- *Runoff class*: Ponded
- *Capacity of the most limiting layer to transmit water (Ksat)*: High (1.98 to 5.95 in/hr)
- *Depth to water table*: About 0 inches
- *Frequency of flooding*: Frequent
- *Frequency of ponding*: Frequent
- *Available water storage in profile*: High (about 9.4 inches)

Interpretive groups

- *Land capability classification (irrigated)*: None specified
- *Land capability classification (nonirrigated)*: 7w
- *Hydrologic Soil Group*: A/D
- *Hydric soil rating*: Yes

WaC—Wagram loamy sand, 6 to 10 percent slopes

Map Unit Setting

- *National map unit symbol*: 3wzm
- *Elevation*: 80 to 330 feet
- *Mean annual precipitation*: 38 to 55 inches
- *Mean annual air temperature*: 59 to 70 degrees F
- *Frost-free period*: 210 to 265 days
- *Farmland classification*: Farmland of statewide importance

Map Unit Composition

- *Wagram and similar soils*: 85 percent
- *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Wagram

Setting

- *Landform*: Ridges on marine terraces, broad interstream divides on marine terraces
- *Landform position (two-dimensional)*: Shoulder
- *Landform position (three-dimensional)*: Crest
- *Down-slope shape*: Convex
- *Across-slope shape*: Convex
- *Parent material*: Loamy marine deposits

Typical profile

- *Ap - 0 to 8 inches*: loamy sand
- *E - 8 to 24 inches*: loamy sand
- *Bt - 24 to 75 inches*: sandy clay loam
- *BC - 75 to 83 inches*: sandy loam

Properties and qualities

- *Slope*: 6 to 10 percent
- *Depth to restrictive feature*: More than 80 inches
- *Natural drainage class*: Well drained
- *Runoff class*: Medium
- *Capacity of the most limiting layer to transmit water (Ksat)*: Moderately high to high (0.57 to 1.98 in/hr)
- *Depth to water table*: About 60 to 80 inches
- *Frequency of flooding*: None
- *Frequency of ponding*: None
- *Available water storage in profile*: Moderate (about 6.7 inches)

Interpretive groups

- *Land capability classification (irrigated)*: None specified
 - *Land capability classification (nonirrigated)*: 3s
 - *Hydrologic Soil Group*: A
 - *Hydric soil rating*: No
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Tr—Troup sand

Map Unit Setting

- *National map unit symbol*: 3wzk
- *Elevation*: 300 to 450 feet
- *Mean annual precipitation*: 45 to 55 inches
- *Mean annual air temperature*: 59 to 64 degrees F
- *Frost-free period*: 190 to 270 days
- *Farmland classification*: Not prime farmland

Map Unit Composition

- *Troup and similar soils*: 90 percent
- *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Troup

Setting

- *Landform*: Ridges on marine terraces, broad interstream divides on marine terraces
- *Landform position (two-dimensional)*: Shoulder, summit
- *Landform position (three-dimensional)*: Crest
- *Down-slope shape*: Convex
- *Across-slope shape*: Convex
- *Parent material*: Sandy and loamy fluviomarine deposits and/or eolian sands

Typical profile

- *H1 - 0 to 53 inches*: sand
- *H2 - 53 to 80 inches*: sandy clay loam

Properties and qualities

- *Slope*: 0 to 2 percent
- *Depth to restrictive feature*: More than 80 inches

