Archeological Mitigation at the Berryhill Creek Site (34TU220), Tulsa County, Oklahoma

Stantec

GARVER

Haley Rush and Kirsten McCullough

SAME Tulsa Post --August 20, 2024

Presentation Goals

We will cover the following items:

1. Overview of the Gilcrease Expressway Project

2. Identification of Site 34TU220

3. Environmental and Cultural Setting for Tulsa County

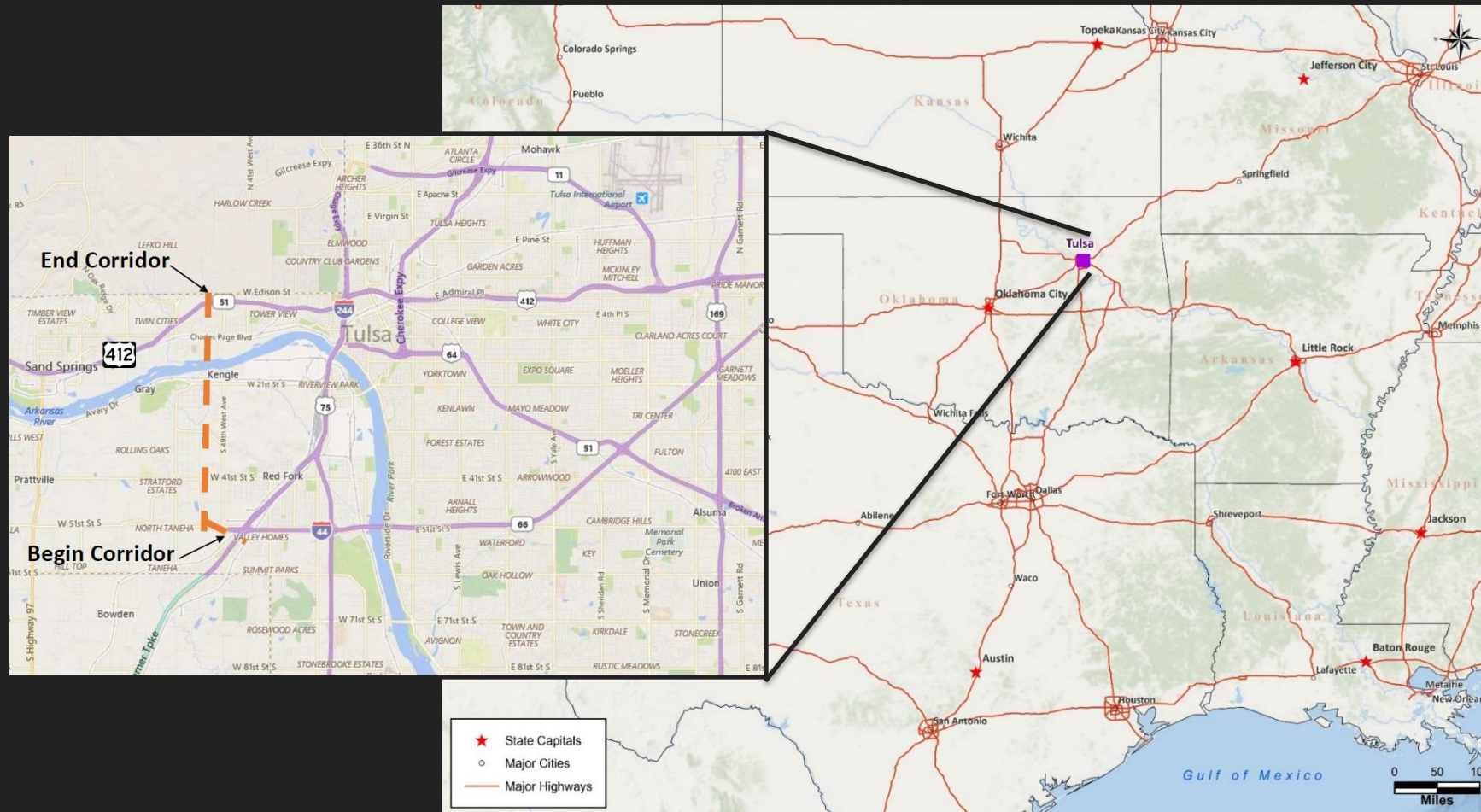4. Archeological Findings

5. Summary, Thank yous!, and Q & A

GILCREASE EXPRESSWAY PROJECT
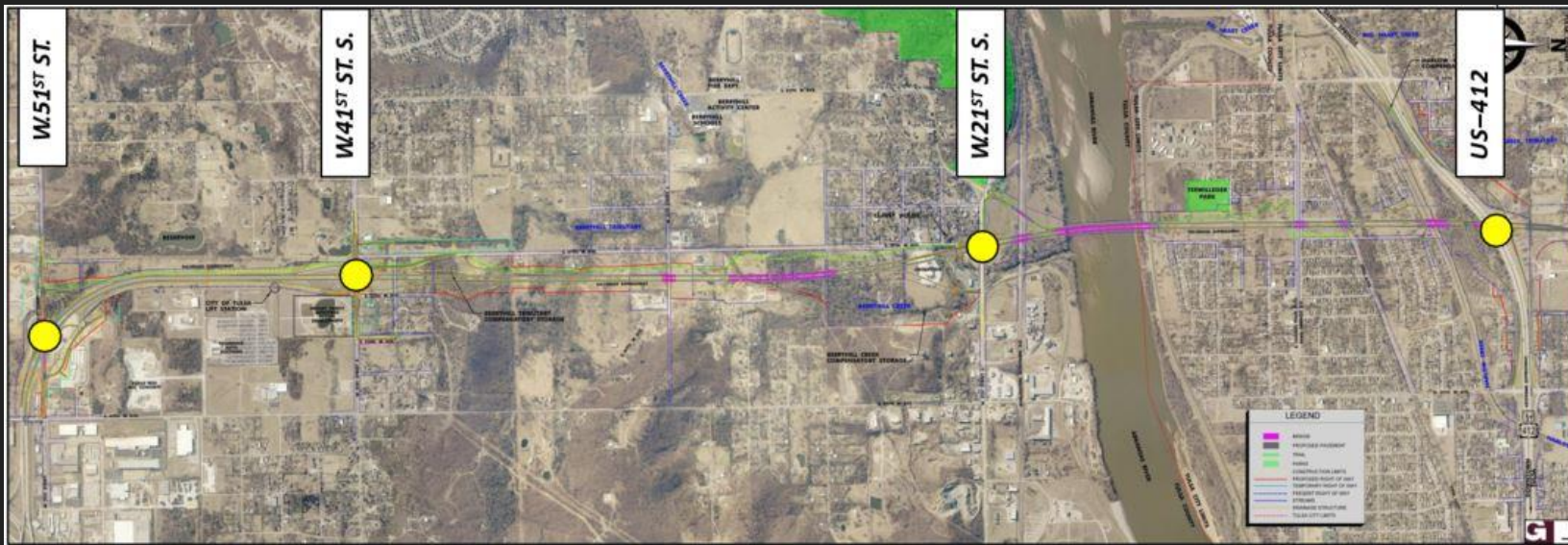
Project Location and Purpose

- The Project was a planned extension of the existing expressway and transportation system in the Tulsa region and completed a segment of the loop between I-44 and US-412

- The purpose of the Project was to complete a portion of the planned loop around Tulsa, provide additional mobility across the Arkansas River, relieve congestion on other urban highways, and enhance access to West Tulsa.
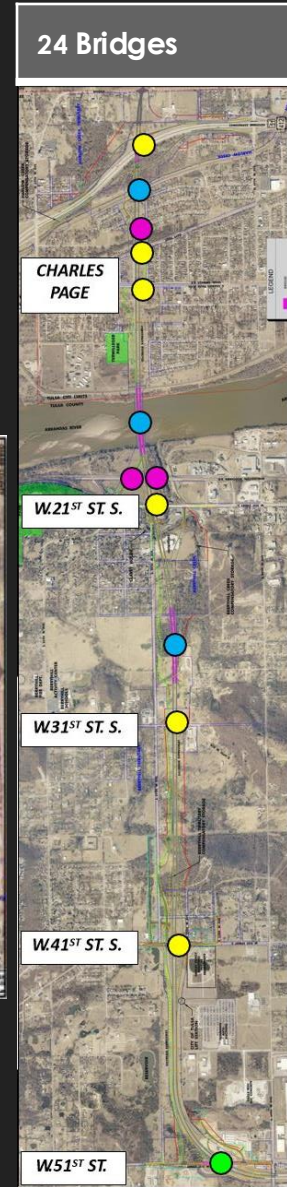
Project Description

▪The Project is an approximately 5 mile, fully functional four lane divided tolled highway connecting I-44 to US-412

▪Design features include:

- 24 bridges

- Four interchanges on the tolled highway located at
  W 51st St S, W 41st St S, W 21st St S, & US-412

24 Bridges

CHARLES PAGE

W.21ST ST. S.

W.31ST ST. S.

W.41ST ST. S.

W51ST ST.

- 12 – Street Overpass
- 1 – Street Underpass
- 5 – Railroad Overpass
- 6 – Waterway Overpass

W.51ST ST.

W.41ST ST. S.
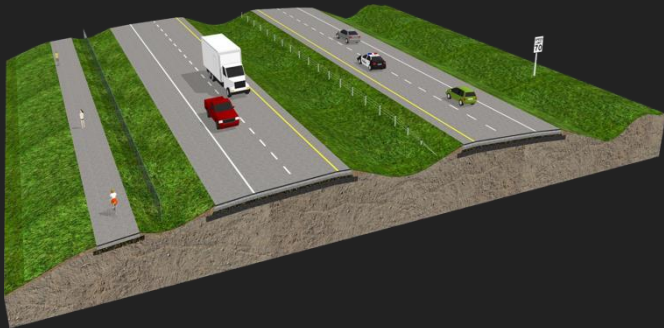
W.21ST ST. S.

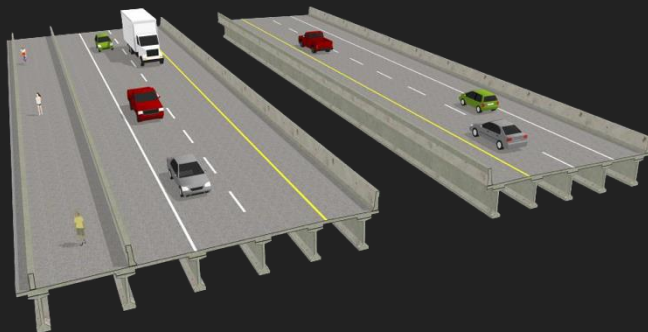US–412

LEGEND

Four interchanges

Design Features

- Four lane divided toll road, design speed 70 mph
- 22 bridges including two bridges (one in each direction) over the Arkansas River
- Parallel 10ft wide multi-use trail

Typical Section, Gilcrease Expressway West

Typical Section, Arkansas River Bridge

Environmental Process

- Project was subject to NEPA authorization by FHWA

- ODOT contracted Garver to complete updated environmental studies and Reevaluation of 2000 EA.

- Updated archaeological studies were completed and consultation with the State Archaeologist, State Historic Preservation Office, and Native American tribes was completed.

- No significant archaeological resources were identified.

- As part of NEPA process, Osage Nation requested monitoring of construction in specific locations, including near Arkansas River crossing

Identification of 34TU220

- July 17th, 2020, ODOT notified by OTA of a find by an Osage Nation archeological monitor
- ODOT archeologists conducted initial investigation
  (eligible for NRHP)
- Scope was produced by Stantec (formerly Cox|McLain),
  reviewed by ODOT (FHWA liaison in Oklahoma), and
  reviewed by Consulting Parties (SHPO, OAS, Tribes)
- Scope was finalized on August 14, 2020
- Contract was executed on August 21, 2020
- Fieldwork between August 24 and October 5th, 2020
- Draft Report to ODOT March 2023

34TU220 Environmental Setting

- **Osage Plains**
- **Cross Timbers**

Environmental Setting

- **Confluence of Arkansas River and Berryhill Creek**
- **Raw Materials**

Cultural Setting

- **Woodland (Ceramic Period) BCE 1000 to AD 1000**
  - **Increase in population, sedentism rises, plant cultivation, expanded use of ceramics, and increase used of bow and arrow**
- **Limited information for similar sites within Tulsa County, look to other parts of Oklahoma and other states (e.g., Kansas)**
  - **Northeastern OK (Verdigris and Neosho River Valleys)**
  - **North-Central OK (Kaw Lake)**
  - **Southeastern Kansas**

Findings and Methods

- Three distinct areas of the site (A, B, C-D)

- Primarily hand excavated units, supported by mechanical clearing and trenches

  - Mechanical clearing helps us get to the cultural deposits in deep settings
  - Trenches help us see a larger snapshot of the site to help plan hand excavations

34TU220 Findings

- Thermal Features
  - Evidence of cooking, heating, light
  - Varied preservation

Findings - Continued
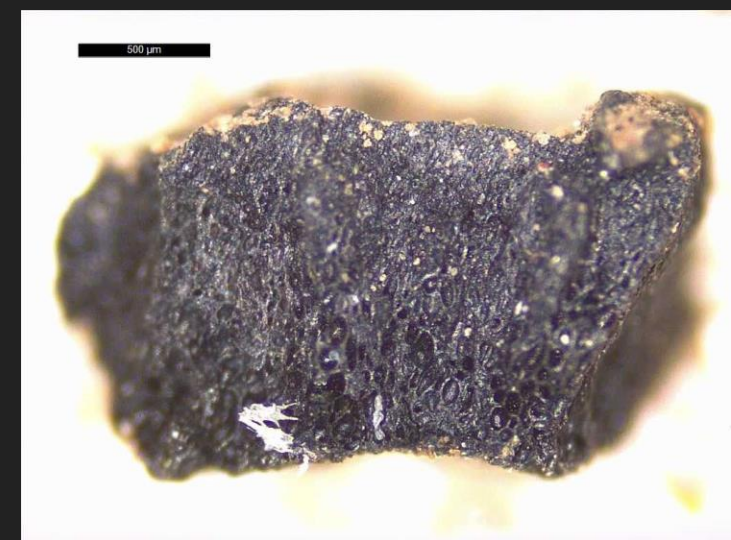
- Ceramics

34TU220 Findings - Continued

- Plants

Knotweed

Little barley

Corn cupule

Squash or gourd

*images not scaled to each other

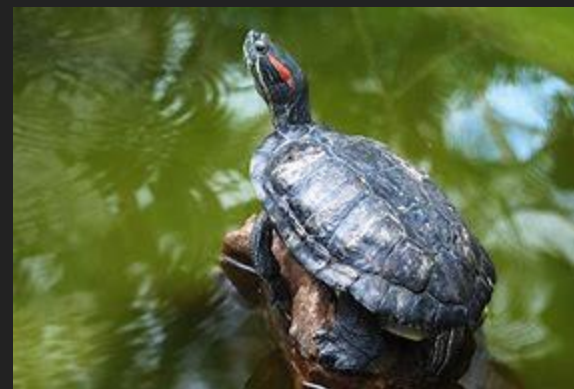# 34TU220 Findings - Continued

- Animals

Bison

Jack rabbit

Deer

Turtle (slider)

- Lithics

Summary

- Resource Procurement Site
- Functioned as part of larger network of sites
- Connections to well-defined Woodland occupations north of Tulsa County

Thank you!

- Field Team

- Report authors and specialists

- ODOT (Greg, Scott, Rhonda)

- OTA (Joe)

- Poe (Gene)

- Garver (Kirsten)

Questions?