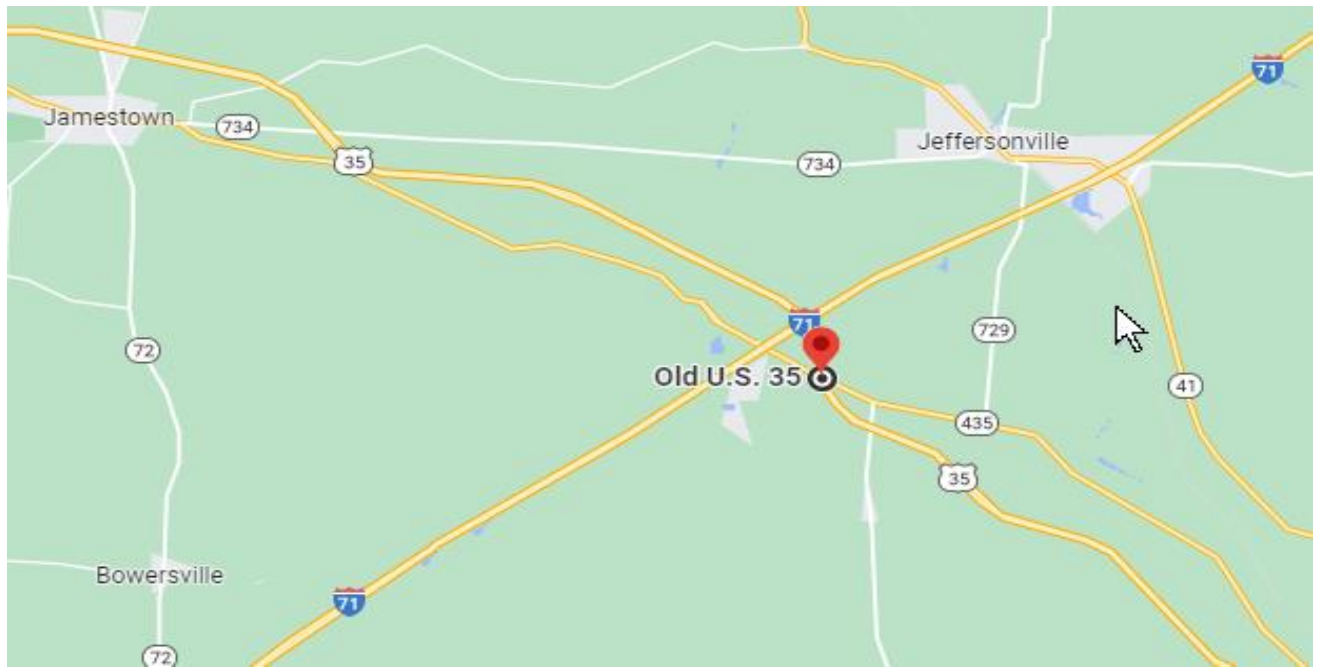
Design Exception Request

FAY-435/VAR-1.52/VAR

PID: 117955; Request 01

Letting Type: ODOT-Let

Design Designation			
FAY-435; 2.2-2.4			
Current ADT (2024)	15,780	Td	0
Design Year ADT (2044)	27,300	Design Speed	60
Design Hourly Volume (2044)	3,270	Legal Speed	55
Directional Distribution	67%	Design Functional Class	5 - Major Collector Roads
Trucks (24hr B&C)	17%	Functional Class Area Type	Rural
		NHS Project	No



Submitted By:

E-SIGNED by Jeff Hipp
on 2023-01-04 06:33:54 EST

Jeff Hipp
(Engineer of Record)

J.H.

Engineer of Record Seal

Approved by:

E-SIGNED by Tim Keller
on 2023-01-05 07:40:48 EST

Timothy Keller Approval Date: 12/22/2022

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Controlling Criteria Identification			
Section: FAY-435; 2.2-2.4			
Controlling Criteria	**Standard**	**Existing (a.)**	**Proposed**
Lane Width			
Shoulder Width			
Horizontal Curve Radius			
Maximum Grade			
SSD (Horizontal & Crest Vertical)			
Pavement Cross Slope			
Superelevation Rate			
Vertical Clearance			
Design Loading Structural Capacity	Inventory > 1.00 for HL-93 Design Loading	Existing Inventory 1.099	Existing bridge will have new overlay shifting the crown to center of the bridge to accomodate 4 lanes of traffic. New overlay thickness was modeled in BrR and updated BR100 is attached. New inventory rating for HL-93 is 0.969 and operating 2.309. All legal and permit vehicles Operating Factors exceed 1.00.
(a.) "Existing" may be N/A (i.e. New alignment or new ramp)			

Project Description

0

Section Description

See Project Description

Proposed Mitigation
None

Support for Deviation (Benefit-cost, R/W, Environmental, Constructability, Coordination with Other Projects, Relationship between any crash patterns and proposed design exception, etc.):
The district explored the option of maintaining the existing crown across the bridge; however, Green Book 4.2.2.1 states that trucks with high centers of gravity crossing over the crown line may sway from side to side when traveling high speed making it more difficult to maintain control. Additionally, L&D 301.1.5 states that undivided pavement sections are to be crowned at the middle when the number of lanes is even. Due to the relatively simple nature and cost to adjust the crown on the superstructure of a semi integral bridge, we feel this shift in crown is appropriate.

Does the requested Design Exception location fall within a Safety Integrated Project (SIP) Map Location?
No

Does the crash analysis (GCAT and CAM Tool) show any patterns that would be adversely impacted by the proposed Design Exception?
#N/A