Kentucky Transportation Cabinet
Expedited Bridge Replacement Study

PROJECT INFORMATION

County: Estill
Bridge ID: 033B00031N
Road Name:
Bridge MP: 7.53
Route Number: KY 594

Highway Plan Project Description:
REPLACE BRIDGE ON KY-594 OVER HENDERSON BRANCH, 4.400 MI SOUTHWEST OF JCT KY 1139; (STRUCTURALLY DEFICIENT, SR = 2.0) 033B00031N

Milepoint: 7.53

- [x] Roadway classified as collector or local.
- [x] ADT less than 1,500.
- [x] Bridge replacement at current location or adjacent to existing bridge.
- [x] Temporary Traffic Control maintained on existing structure: part-width construction or adjacent temporary traffic control.
- [x] Existing structure's hydraulic performance is adequate.
- [x] Proposed project is not in a FEMA Zone AE regulatory area. Although the project is in a FEMA Zone AE, Central Office Drainage Branch has reviewed the site and approved its inclusion.

Categorical Exclusion Level 1

Potential for Effects Resulting from Project [x] None [ ] Low [ ] High

(If effects potential is low or high, describe how project meets CE criteria and means to address outstanding issues)

[ ] Reevaluation required prior to construction

The project described above has been determined to meet the Categorical Exclusion criteria established in 23 CFR 771.17 and the FHWA/KYTC Categorical Exclusion Agreement.

Approved by: Tony Vinegar for — District Environmental Coordinator — 10/15/13 — Date

[x] Yes, this project meets the conditions for being an Expedited Bridge Replacement Project.

Recommended by: [signature] — District TEBM for Project Development

Approved by: — Director, Division of Planning

Programming Information

Item No:
Federal Project No.:
Program No.:
UPN: (Function) (County #) (Route) (MP to & from)

Version Oct 1st

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I. PROJECT DATA

County: Estill

Bridge ID: 033B00031N

Road Name:

Bridge MP: 7.53

Route Number: KY 594

Functional Class.: ☐ Local ☑ Collector ☐ Urban ☐ Rural

Route on ☐ NHS

Truck Class.: A

% Trucks:

Terrain: Level

ADT (current): 509 (2011)

MPO Area: Not Applicable

Existing Bike Accommodations: Shared Lane

Ped: ☐ Sidewalk

Roadway Data:	**Existing**
No. of Lanes	2
Lane Width	9.0 ft
Shoulder Width	3.0 ft
Max. Superelevation	NA
Minimum Radius	NA
Maximum Grade	4%
Minimum Sight Dist.	180 FT
Sidewalk Width(urban)	NA
Clear-zone	10

Bridge Data:

Bridge Number	033B00031N
Sufficiency Rating	2
Total Length	30.8 FT
Width, curb to curb	19.0 FT
Span Lengths	30.8 FT
Year Built	1936
Posted Weight Limit	11 TONS
Structurally Deficient?	YES
Functionally Obsolete?	YES

Existing Rdwy. Plans available?

☐ Yes ☑ No

Year of Plans:

Existing Geotech data available?

☐ Yes ☑ No

Notes:

II. PROJECT SUMMARY

A. Purpose, Need & Project Estimate

In order to maintain connectivity, the purpose of the project is to replace the deficient bridge.

Project Estimate

Phase	Estimate
Design	$250,000.00
R/W	$50,000.00
Utilities	$50,000.00
Const	$500,000.00
TOTAL	**$850,000.00**

B. Project Approach

This project has been selected as one of District 10's Expedited Bridge Replacement Projects. After an extensive review, the team is confident that this bridge replacement can be completed within the two year timeframe. As part of the teams review we looked at four alternatives: 1. Do nothing. 2. Part-Width Construction. 3. Replace in same location with diversion to the North. 4. Replace in same location with diversion to the South. Each of these options has both advantages and disadvantages but the project team has decided on the following recommendations.

For this project, the District 10 EBRP group recommends the following:

1. The bridge should be replaced in the same location that it is currently at.
2. The team recommends installing a temporary diversion for traffic along the Southern Side.
3. The team recommends replacing the current bridge with one 24' wide.
4. The team recommends using a single span arrangement.

III. Photos and/or Maps

IV. Categorical Exclusion Level 1
Summary

Effects Potential (scale of effects and potential to influence project schedule)

None	Potential to significantly affect Air Quality
None	Potential to significantly affect any cultural or archaeological resources
None	Potential to affect historic properties or other Section 4(f) resources
	☐ can be addressed through standard practices (programmatic agreements, deminimis, etc.)
None	Potential to significantly impact any federally listed, threatened or endangered species
None	Potential to significantly effect properties with hazardous materials concerns
None	Potential to significantly impact Waters of the U.S. or Commonwealth
None	Potential to significantly affect traffic noise
None	Potential to require relocations or other significant socioeconomic impacts (travel patterns, land use, or planned growth)

A. Air Quality

Project is in: ☑ Attainment area ☐ Nonattainment or Maintenance Area ☐ PM 2.5 County

☑ No potential to significantly affect Air Quality (attach PM 2.5 and MSAT documentation, as appropriate or note below intent to complete prior to construction)

NA

B. Archaeology

	Yes	No
1) Is all area to be affected by the project previously disturbed or within existing ROW? (If YES, STOP- Bridge is unlikely to adversely affect archaeological resources)	☐	☑
2) Are known archaeological sites present (project may potentially affect archaeological resources; Discuss with SME and provide comment below)	☑	☐

☐ No effect to archaeological resources

☑ Archaeological resources may be present; investigation to be completed during detailed design. Impacts to archaeological resources are not expected and should not impede project development.

☐ Archaeological impacts are of such potential complexity project schedule is likely to be adversely affected.

PER SUSAN NEUMEYER

C. Threatened and Endangered Species

	Yes	No
1) Is the bridge over a KY DOW Special Use Water or within designated critical habitat? (If YES, STOP- Not eligible for EBRP; If NO, continue)	☐	☑
2) Does the county have federally listed fish and mussel species? (If NO, STOP; If YES, continue)	☑	☐
3) Does the bridge cross a stream with perennial flow? (If NO, STOP - No effect for mussels/fish species; If YES, continue)	☑	☐
4) Are any of the mussel/fish species typically found in smaller rivers and streams? (If NO, STOP; if YES, requires SME review to conduct Habitat Assessment)		
Additional Information required for possible effects assessment:	☑	☐

1) Will the bridge be replaced in the same location as existing?
2) Will the new bridge clear-span the stream?

☑ Biological concerns unlikely to impede project development (For all appropriate species, conduct Habitat Assessment/Biological Assessment prior to construction)

☐ Biological concerns are of such complexity that project schedule is likely to be adversely impacted

PER ELLEN BOERGER

D. Hazardous Materials

	Yes	No
1) Are potentially contaminated sites present?	☐	☑
2) Does bridge require inspection for asbestos containing materials?	☐	☑

☑ Hazardous materials concerns are non-existent or routine in nature, will be addressed during detailed design and should not impede project development.

☐ Hazardous materials concerns are of such complexity that the project schedule is likely to be adversely affected.

E. Permitting

Check all that may apply: ☑ Waters of the US ☐ MS4 area ☐ Floodplain Impacts ☐ Navigable Waters Impacted

Are 401/404 Permits likely to be required? ☐ Yes ☑ No Impacts to: ☐ Wetlands ☑ Stream/Lake/Pond

☐ ACE LON ☑ ACE NW ☐ General WQC ☐ TVA

	Yes	No
1) Will the project affect more than 300 lf of stream? (If YES, STOP- Not eligible for EBRP; If NO, continue)	☐	☑
2) Will the project effect more than ½ acre of potential wetland? (If YES, STOP- Not eligible for EBRP; If NO, water related impacts not likely to impede project development)	☐	☑

☑ Will not significantly impact Waters of the U.S. or Commonwealth. Stream and wetland impacts, if any, are routine in nature and will not require individual permits; Any required permits will be acquired during detailed design. Project development should not be impeded.

☐ Stream and/or wetland impacts exceed nationwide and general WQC thresholds. Project schedule is likely to be adversely impacted (Not eligible for EBRP).

F. Noise

	Yes	No
1) Are existing or planned noise sensitive receptors adjacent to the proposed project? (If NO, STOP- No effect for Noise Impacts; If YES continue)	☐	☑
2) Is this considered a "Type I Project" according to the KYTC Noise Analysis and Abatement Policy?	☑	☐

☑ No noise related impacts predicted for the project

☐ Noise related impacts are unlikely but will be further assessed during detailed design prior to construction. Further assessment should not impede project development.

☐ Noise related impacts are of such complexity that project schedule is likely to be adversely affected.

G. Socioeconomic

	Yes	No
1) Are there any relocations required for construction of the project? (If YES, STOP- Does not meet criteria for EBRP; If NO Continue)	☐	☑
2) Will project require more than approximately one acre of fee simple R/W? (If YES, STOP- Project Does not meet criteria for EBRP; If NO, continue)	☐	☑

	Yes	No
3) Is ROW required from any federal agency?	☐	☑
4) Will project cause disproportionately high and adverse effects on any minority or low-income population in accordance with the provision of E.O. 12898 and FHWA Order 6640.23	☐	☑
5) Will project significantly affect land use, travel patterns or planned growth?	☐	☑

☑ Will have no significant Socioeconomic impacts

☐ Socioeconomic impacts are unlikely but will be further assessed during detailed design prior to construction. Further assessment should not impede project development.

☐ Socioeconomic impacts are of such complexity that project schedule may be adversely affected.

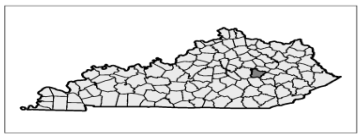
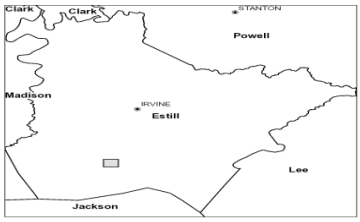
H. Section 106, 4(f) or 6(f) Resources

The following are present on the project:

	Yes	No
1) Does the project affect a park, wildlife refuge or recreation area (If YES, STOP- Not eligible for EBRP; If NO continue)	☐	☑
2) Is the bridge a truss (If YES, STOP- Not eligible for EBRP; if NO continue)	☐	☑
3) Is the bridge or do any of the surrounding properties appear to be greater than 50 years old? (If YES continue; If NO, STOP: No Effect to Historic Properties)	☐	☑
4) Was the bridge constructed after 1945? (If YES continue; If No, STOP- project will require SME review; If YES, continue)	☐	☑
5) Is the bridge of a common type covered by the FHWA Program Comment? (If YES continue; If NO, STOP-project will require SME review)	☑	☐
6) Are there any buildings or potentially important features (wells, barns, cemeteries, etc.) of the surrounding property that are more than 50 years old that will be impacted by the project (If YES, STOP - project will require SME review; If NO, STOP: No Effect/No Adverse Effect to historic properties)	☐	☑

☑ No potential to affect cultural historic resources, Section 4(f) or Section 6(f) resources

☐ No Potential to affect Section 4(f) or Section 6(f) resources other than cultural historic resources, which can be addressed through standard practices (Programmatic 4(f), deminimis, etc.) and should not impede project development

☐ Affects to cultural historic resources are of such complexity that the project schedule may be adversely affected

V. Additional Photos and/or Maps