Kentucky Transportation Cabinet
Expedited Bridge Replacement Study

PROJECT INFORMATION

County: Graves
Road Name: Lewis Road
Route Number: CR1381
Bridge ID: 042C00253N
Bridge MP: 0.651

Highway Plan Project Description:
REPLACE BRIDGE ON CR 1381 (Lewis Road) OVER IC RAILROAD, 0.7 MI SOUTHEAST OF JCT KY339; (SD, SR = 32.9) 042C00253N

Milepoint: 0.651

- ☑ Roadway classified as collector or local.
- ☑ ADT less than 1,500.
- ☑ Bridge replacement at current location or adjacent to existing bridge.
- ☑ Temporary Traffic Control maintained on existing structure: part-width construction or adjacent temporary traffic control. **Detour: 4.51 miles. **
- ☑ Existing structure's hydraulic performance is adequate.
- ☑ 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 ☐ None ☑ Low ☐ High

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

One residence is located near the bridge on the southeast side. Potential noise effects are considered low and can be addressed during design phase.
Potential historic impacts are considered low. SME has reviewed the area and any issues can be addressed using standard practices.
Threatened and Endangered species impacts are restricted to the Indiana bat and habitat loss concerning this specie can be mitigated using the PMOA with the USFWS.
Socioeconomic impacts are also considered to low. There is a very slight chance the closest home could be impacted enough to require relocation. The area is also considered low income in population. The detour is short enough that it should not seriously impacct the local population.
Futher archaeological investigations will be required during the design phase. Potential to impact archaeological sites is considered low.

☑ 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: Blake Beyer — District Environmental Coordinator — October 11, 2013 — Date

☑ Yes, this project meets the conditions for being an Expedited Bridge Replacement Project.

Recommended by: M. P. McCoy — 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 9-20

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I. PROJECT DATA

County: Graves
Road Name: Lewis Road
Route Number: CR1381

Bridge ID: 042C00253N
Bridge MP: 0.651

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

Route on ☐ NHS

Truck Class.: _____ **% Trucks:** _____ **Terrain:** Rolling

ADT (current): 25 2006

MPO Area: Not Applicable

Existing Bike Accommodations: Shared Lane **Ped:** ☐ Sidewalk

Roadway Data:	**Existing**
No. of Lanes	2
Lane Width	7'
Shoulder Width	-
Max. Superelevation	
Minimum Radius	
Maximum Grade	
Minimum Sight Dist.	
Sidewalk Width(urban)	N/A
Clear-zone	

Bridge Data:

Bridge Number	042C00253N	Existing Rdwy. Plans available?
Sufficiency Rating	32.9	☐ Yes ☑ No
Total Length	149.9	Year of Plans: _____
Width, curb to curb	16.1	
Span Lengths	2@15-2@19-4@20	
Year Built	1984	Existing Geotech data available?
Posted Weight Limit	10 TONS	☐ Yes ☑ No
Structurally Deficient?	Yes	
Functionally Obsolete?	No	

Notes:

II. PROJECT SUMMARY

A. Purpose, Need & Project Estimate

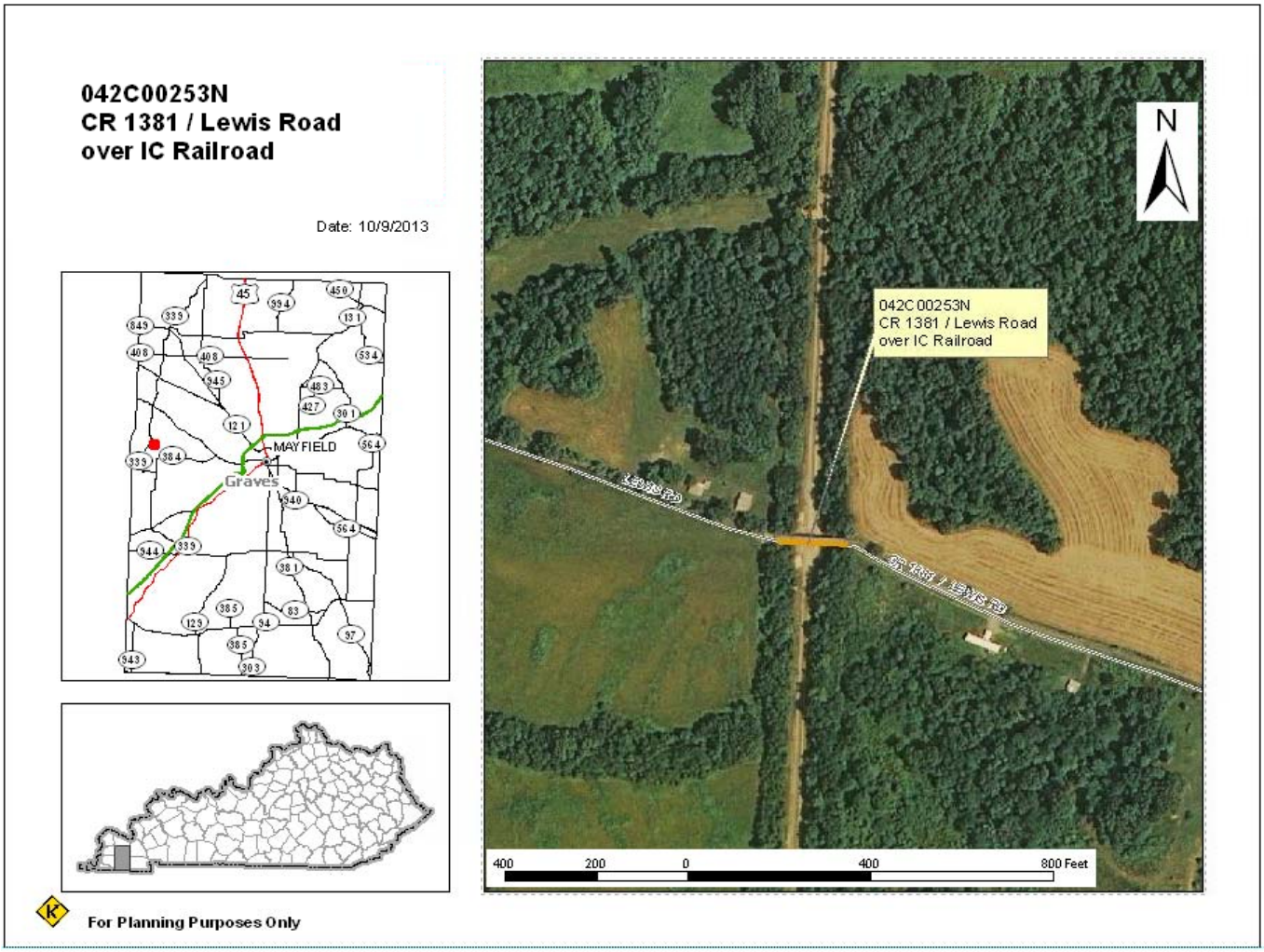
In order to maintain connectivity, the purpose of the project is to replace the deficient bridge.

Project Estimate

Phase	Estimate
Design	$250,000
R/W	$75,000
Utilites	$500,000
Const	$800,000
TOTAL	**$1,625,000**

B. Project Approach

Replace the two lane rural roadway approaches on CR 1381 / Lewis Road and bridge over IC Railroad in the same location as the existing. Since the existing bridge cannot remain open during construction, the road will be closed to through traffic during construction. Traffic will be detoured onto other roads. Please see Detour Map on Page 4. Detour length is approximately 4.51 miles.



III. Photos and/or Maps

Detour Map (this map can also be found in the ProjectWise folder) Detour Length: 4.51 miles

Bridge Photos (these and more can also be found in the ProjectWise folder)

Looking East

Looking West

Bridge Deck

Looking South

Looking North

IV. Categorical Exclusion Level 1
Summary

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

None	Potential to significantly affect Air Quality
Low	Potential to significantly affect any cultural or archaeological resources
Low	Potential to affect historic properties or other Section 4(f) resources ☑ can be addressed through standard practices (programmatic agreements, deminimis, etc.)
Low	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
Low	Potential to significantly affect traffic noise
Low	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)

Project is in attainment area. MSAT documentation will be completed prior to construction.

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.

Further archaeologiacl investigation is required during the design phase. Impacts to archaeological sites is considered low.

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

Cyprogenia stegaria (fanshell) FSM (403) (KDFWR)
Villosa lienosa (little spectaclecase) LSM (431) (KDFWR, KSNPC)
Etheostoma chienense (relict darter) RD (501) (USFWS, KDFWR, KSNPC)
Myotis sodalis (Indiana bat) IB (903) (USFWS)
A No Effect will be written for the listed mussels species and relict darter. The project will not impact any perennial streams. Habitat for the Indiana bat is present and will be impacted. Loss of this habitat will be mitigated by using the PMOA with the USFWS.

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.

No hazardous material sites were observed in the project area. Inspection of the bridge structure will be required to check for any material which may contain ACM's.

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).

Permits are not required for this bridge replacement. No streams were found in the vicinity of the project on the maps and none observed during inpection.

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.

One home is found on the southeast side of the bridge. Depending upon final plans, noise could become an issue, but is unlikely.

Kentucky Transportation Cabinet
Expedited Bridge Replacement Study
Categorical Exclusion Level 1

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)	☐	☑
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.

Project is located within a low income area. No relocations are expected with this project. Detour is not of sufficient distance to have an adverse effect upon the traveling public, but this area is populated by several Amish residents and the detour could impact their travel.

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

Project has an old equipment barn on the northwest corner. SME was consulted and any issues that should arise can be addressed through standard practices. Bridge is not 50 years old and is not considered eligible for the national register.

V. Additional Photos and/or Maps

Helpful Links:

Detour Map	Cr 1381.jpg
Bridge Photos:	Bridge Photos 042-C253.pdf
Bridge Report:	042C00253N Bridge Report.pdf
Environmental Photos:	042C00253N Environmental Photos.pdf
Habitat Assessment:	HA-NFX EBRP 042C00253N.PDF
Location Map:	042C00253N Location Map.jpg

(A printed version of these documents can be made available to those without Projectwise access.)

Kentucky Transportation Cabinet
Federal Highway Administration

NO EFFECT FINDING

U.S. Department of Transportation
Federal Highway Administration

KYTC Item No:	EBRP - 042C00253N	**Route:**	CR1381 Lewis Rd
Quadrangle(s):	Fancy Farm	**County(ies):**	Graves

Project Description: (Type of improvement, areas to be impacted, crossroad improvements, easements, etc.)

REPLACE BRIDGE ON CR 1381 (Lewis Road) OVER IC RAILROAD, 0.7 MI SOUTHEAST OF JCT KY339; (SD, SR = 32.9) 042C00253N

Listed Species: (Attach copy of USFWS county list, KSNPC web site and KDFWR web site)
***Cyprogenia stegaria* (fanshell)** FSM (403) (KDFWR)
***Villosa lienosa* (little spectaclecase)** LSM (431) (KDFWR, KSNPC)
***Etheostoma chienense* (relict darter)** RD (501) (USFWS, KDFWR, KSNPC)
***Myotis sodalis* (Indiana bat)** IB (903) (USFWS)

Methodologies: (Methods of assessment, who, what, when, resources, etc.)ARCMap, species range documentation

A habitat assessment was performed on site by D1 Environmental Scientist Blake Beyer on September 23, 2013. USGS topographic and geologic maps were reviewed for cave bearing strata and proximity to the project area. During the onsite investigation impacted areas were compared to needed habitat for the listed species.

Results: (Compare habitat used by listed species with available habitat)

No streams will be impacted by this project. A No Effect for mussel species and relict darter is determined.

Summer roosting and foraging habitat is available for the Indiana bat. Habitat requiring removal will be mitigated using the PMOA with the USFWS.

Determinations: No Habitat, No Effect for fanshell, little spectaclecase, and relict darter.

The project has been assessed in accordance with the provisions of Section 7 of the Endangered Species Act. As a designated representative of the FHWA, the KYTC has determined that the project will have No Effect on any listed species or their critical habitat, and further Section 7(a)(2) consultation with the Service is not required.

Blake Beyer
KYTC Signature

October 10, 2013
Date

Blake Beyer
Print Name