Summary:
Inspection Date: 3/11/2011
Inspector: JREDICK (165)
Primary Type: Substandard (12 Months)

Types of Inspections Performed:

National Bridge Inventory:	Y
Element:	Y
Fracture Critical:	N
Underwater:	N
Other Special:	N

Inspector Signature:

District Review Date: 3/14/2011
District Reviewer: HGIBSON (11)

IDENTIFICATION

Bridge ID (8):	018B00080N MAP BRIDGE	**District Number:**	1
Route Carried (7):	KY-893	**County (3):**	35 Calloway
Mile Point:	22.92	**Feature Intersected (6):**	MCCULLOUGH FORK
Location (9):	4.0 MI EAST OF JCT US 641	**Road Name:**	STATE LINE RD E
Structure Description:	21.98 Foot - Single Span Prestressed concrete Box Beam or Girders - Multiple		

NBI CONDITION

Deck (58):	5
Superstructure (59):	5
Substructure (60):	3
Culverts (62):	N
Channel/Protection (61):	7

SCHEDULE TAB

Schedule:	Required (Y/N)		Last Date		Frequency	Next Date
NBI (90):			3/11/2011	**(91):**	12 mos	3/11/2012
Fracture Critical (92A):	N	**(93A):**	1/1/1901	**(92A):**	mos	1/1/1901
Underwater (92B):	N	**(93B):**	1/1/1901	**(92B):**	mos	1/1/1901
Other Special (92C):	N	**(93C):**	1/1/1901	**(92C):**	mos	1/1/1901
Elemental:	NA				12 mos	3/11/2012

Load Rating and Posting

Truck Type	Typ I	Typ II	Typ III	Typ IV	Gross
Recomm. Posting:	15	15	15	15	15
Field Posting:	15	15	15	15	15

Posting Status (41): P Posted for load
Signs Posted: **Cardinal:** Y **Non-Cardinal:** Y

WATERWAY

Scour Critical (113):	7
Observed 113 Rating:	8
Waterway Adeq. (71):	9

DECK/WEARING SURFACE

Deck Type (107):	1 Concrete-Cast-In-Place						
Wearing Surface/Protective System (108):	**Type:** 6	**Membrane:** 0	**Protection:** 0				
Traffic Safety Features (36):	**Bridge Rail:** 0	**Transition:** 1	**Appr. Rail:** 1	**Rail Ends:** 0			
Overlay:	N						
Overlay Type:	None						
Overlay Thickness:	0.00						

Vertical Clearances

Minimum Vertical Overclearance (53):	99.99
Minimum Vertical Underclearance (54):	0.00
Maximum Vertical Clearance (10):	99.99
Minimum Vertical Clearance:	99.99

Sufficiency Ratings

SR: 11.30 **SD/FO:** 1 Structurally Deficient

Element Condition State Data

Elm/Env	Description	Units	Total Qty.	Qty. CS1	Qty. CS2	Qty. CS3	Qty. CS4	Qty. CS5
104/1	P/S Conc Box Girder	LF	176.00	0.00	154.00	22.00	0.00	0.00
12/1	Bare Concrete Deck	SF	526.50	0.00	526.50	0.00	0.00	0.00
206/1	Timber Column	EA	12.00	0.00	0.00	6.00	6.00	0.00

KYTC Bridge Inspection Report

Summary:

Inspection Date: 3/11/2011
Inspector: JREDICK (165)
Primary Type: Substandard (12 Months)

Types of Inspections Performed:

National Bridge Inventory:	Y
Element:	Y
Fracture Critical:	N
Underwater:	N
Other Special:	N

Element Condition State Data

Elm/Env	Description	Units	Total Qty.	Qty. CS1	Qty. CS2	Qty. CS3	Qty. CS4	Qty. CS5
234/1	R/Conc Cap	LF	60.00	0.00	60.00	0.00	0.00	0.00
334/1	Metal Rail Coated	LF	44.00	44.00	0.00	0.00	0.00	0.00
361/1	Scour Smart Flag	EA	1.00	0.00	1.00	0.00	0.00	0.00
503/1	RC Curb	LF	44.00	0.00	0.00	44.00	0.00	0.00
601/1	MisAlign/ot of plane	EA	1.00	0.00	0.00	1.00	0.00	0.00
605/1	Transitions	EA	1.00	1.00	0.00	0.00	0.00	0.00
606/1	Drains	EA	1.00	1.00	0.00	0.00	0.00	0.00
608/1	Long. Shear Keys	EA	1.00	0.00	0.00	1.00	0.00	0.00
610/1	Chan Drift	EA	1.00	1.00	0.00	0.00	0.00	0.00
611/1	Embankment Erosion	EA	1.00	1.00	0.00	0.00	0.00	0.00
612/1	Chan Algn	EA	1.00	1.00	0.00	0.00	0.00	0.00
613/1	Vegetation	EA	1.00	1.00	0.00	0.00	0.00	0.00
614/1	Eros Contr	EA	1.00	1.00	0.00	0.00	0.00	0.00

Element Condition State Data

Str Unit	Elm/Env	Description	Description
1	104/1	P/S Conc Box Girder	< none >
1	12/1	Bare Concrete Deck	Top of box beams serve as wearing surface, Random longitudinal cracking with minor spalls at longitudinal joint areas. At one time had asphalt overlay and has either worn off or has been milled.
1	206/1	Timber Column	All timber pile in Bent 2 leaning severly to the West and out of plane, Steel cables in place to stop further movement, false bent also in place at bent 2. Piles in bent 1 moderate decay and splitting, water soaked.
1	234/1	R/Conc Cap	< none >
1	334/1	Metal Rail Coated	< none >
1	361/1	Scour Smart Flag	Moderate amount of stream degradation at bent 2 around pile, stream has migrated East.Local scour forming around H-piles of false bent...approx.1.5'.
1	503/1	RC Curb	< none >
1	601/1	MisAlign/ot of plane	ALL PILES IN BENT 2 ARE CONSIDERABLY OUT OF ALIGNMENT. HEAVY ROTATION OF BENT 2, FLASE BENT HAS BEEN PLACE AT BENT 2. Minor rotation noted in Bent 1.
1	605/1	Transitions	< none >
1	606/1	Drains	< none >
1	608/1	Long. Shear Keys	JOINTS ARE LEAKING
1	610/1	Chan Drift	Minor around piles at bent 2.
1	611/1	Embankment Erosion	Mionor on banks up and downstream.
1	612/1	Chan Algn	Minor turns, has migrated East under structure, needs channel work under structure.

018B00080N

KYTC Bridge Inspection Report

Summary:

Inspection Date: 3/11/2011
Inspector: JREDICK (165)
Primary Type: Substandard (12 Months)

Types of Inspections Performed:

National Bridge Inventory:	Y
Element:	Y
Fracture Critical:	N
Underwater:	N
Other Special:	N

Element Condition State Data

Str Unit	Elm/Env	Description	Description
1	613/1	Vegetation	< none >
1	614/1	Eros Contr	Sheet pile in place behind both end bents.

BRIDGE.Notes

False bent in place at bent 2 due to heavy rotation of bent, piles are severly out of line.

Work Candidates

Inspector Candidates:

Candidate ID:	Status	Priority	Assigned	Action	Elem	Date Recommended
A-KYTC-11919EBC-00000057	Approved	High	Unassigned	31	608	4/28/2009
A-KYTC-11919EBC-00000059	Approved	High	Unassigned	33	612	4/28/2009
A-KYTC-1192DACA-00000000	Approved	High	Unassigned	11	0	4/28/2009

Structure Inventory and Appraisal Sheet (English Units)

Bridge Key: 1816 Agency ID: 018B00080N SR: 11.9 SD/FO: SD

IDENTIFICATION

State 1: 21 Kentucky Struc Num 8: 018B00080N
Facility Carried 7: KY-893 Location 9: 4.0 MI EAST OF JCT US 641
Rte.(On/Under)5A: Route On Structure Rte. Signing Prefix 5B: 3 State Hwy
Level of Service 5C: 1 Mainline Rte. Number 5D: 00893
Directional Suffix 5E: 0 N/A (NBI) % Responsibility: Unknown
SHD District 2: District 1 County Code 3: Calloway (018)
Place Code 4: FIPS 0000 Mile Post 11: 22.915 mi
Feature Intersected 6 MCCULLOUGH FORK
Latitude 16: 36d 30' 10" Longitude 17: 088d 15' 17"
Border Bridge Code 98: Unknown (P)
Border Bridge Number 99

STRUCTURE TYPE AND MATERIALS

Number of Approach Spans 40 Number of Spans Main Unit 45: 1
Main Span Material/Design 43A/B:
5 Prestressed Concrete 05 Multiple Box Beam
Deck Type 107: 1 Concrete-Cast-in-Place
Wearing Surface 108A: 6 Bituminous
Membrane 108B: 0 None
Deck Protection 108C: None

AGE AND SERVICE

Year Built 27: 1969 Year Reconstructed 106: 0
Type of Service on 42A: 1 Highway
Type of Service under 42B: 5 Waterway
Lanes on 28A: 2 Lanes Under 28B: 0 Detour Length 19: 18.0 mi
ADT 29: 613 Truck ADT 109: % Year of ADT 30: 2009

GEOMETRIC DATA

Length Max Span 48: 22.0 ft Structure Length 49: 22.0 ft
Curb/Sdwlk Width L 50A: 0.3 ft Curb/Sidewalk Width R 50B: 0.3 ft
Width Curb to Curb 51: 22.6 ft Width Out to Out 52: 24.0 ft
Approach Roadway Width 32: 18.0 ft (w/ shoulders) Median 33: 0 No median
Deck Area: 526.5 sq. ft
Skew 34: 30.00 ° Structure Flared 35: 0 No flare
Vertical Clearance 10: 99.99 ft Horiz. Clearance 47: 22.64 ft
Minimum Vertical Clearance Over Bridge 53: 328.1 ft
Minimum Vertical Underclearance Reference 54A: N Feature not hwy or RR
Minimum Vertical Underclearance 54B: 0.0 ft
Minimum Lateral Underclearance Reference R 55A: N Feature not hwy or RR
Minimum Lateral Underclearance R 55: 0.0 ft
Minimum Lateral Underclearance L 56: 0.0 ft

INSPECTION

Frequency 91: 12 months Inspection Date 90: 3/30/2010 Next Inspection: 03/30/2011
FC Frequency 92A: NA FC Inspection Date 93A: NA Next FC Inspection: NA
UW Frequency 92B: NA UW Inspection Date 93B: NA Next UW Inspection: NA
SI Frequency 92C: NA SI Date 93C: NA Next SI: NA
Element Frequency 12 months Element Inspection Date 03/30/2010 Next Elem. Insp. Due: 03/30/2011

CLASSIFICATION

Defense Highway 100: 0 Not a STRAHNET hwy Parallel Structure 101: No || bridge exists
Direction of Traffic 102: 2 2-way traffic Temporary Structure 103: Not Applicable (P)
Highway System 104: 0 Not on NHS NBIS Length 112: Long Enough
Toll Facility 20: 3 On free road Functional Class 26: 08 Rural min Collector
Defense Hwy 110: 0 Historical Significance 37: 5 Not eligible for NRHP
Owner 22: 01 State Highway Agency
Custodian 21: 01 State Highway Agency

CONDITION

Deck 58: 5 Fair Super 59: 5 Fair Sub 60: 3 Serious
Culvert 62: N N/A (NBI) Channel/Channel Protection 61: 7 Minor Damage

LOAD RATING AND POSTING

Inventory Rating Method 63: 1 LF Load Factor Operating Rating Method 63: 1 LF Load Factor
Inventory Rating 66: HS8.3 Operating Rating 64: HS8.3
Design Load 31: 4 M 18 (H 20) Posting 70: 1 30.0-39.9% below
Posting status 41: P Posted for load

APPRAISAL

Bridge Rail 36A: 0 Substandard Approach Rail 36C: 1 Meets Standards
Transition 36B: 1 Meets Standards Approach Rail Ends 36D: 0 Substandard
Str. Evaluation 67: 3 Deck Geometry 68: 4 Tolerable
Underclearance, Vertical and Horizontal 69: N Not applicable (NBI)
Waterway Adequacy 71: 9 Above Desirable Approach Alignment 72: 3 Intolerable - Correc
Scour Critical 113: 7 Countermeasures

PROPOSED IMPROVEMENTS

Bridge Cost 94: $ 0 Type of Work 75: Unknown (P)
Roadway Cost 95: $ 0 Length of Improvement 76: 0.0 ft
Total Cost 96: $ 0 Future ADT 114: 747
Year of Cost Estimate 97 Unknown Year of Future ADT 115: 2029

NAVIGATION DATA

Navigation Control 38: 0 0
Vertical Clearance 39: 0.0 ft Horizontal Clearance 40: 0.0 ft
Pier Protection 111: 1 Not Required Lift Bridge Vertical Clearance 116:

ELEMENT CONDITION STATE DATA

Str Unit	Elm/Env	Description	Units	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4	% in 5	Qty. St. 5
1	12/1	Bare Concrete Deck	(SF)	526	0 %	0	100 %	526	0 %	0	0 %	0	0 %	0
1	104/1	P/S Conc Box Girder	(LF)	176	0 %	0	88 %	154	13 %	22	0 %	0	0 %	0
1	206/1	Timber Column	(EA)	12	0 %	0	0 %	0	50 %	6	50 %	6	0 %	0
1	234/1	R/Conc Cap	(LF)	60	0 %	0	100 %	60	0 %	0	0 %	0	0 %	0
1	334/1	Metal Rail Coated	(LF)	44	100 %	44	0 %	0	0 %	0	0 %	0	0 %	0
1	361/1	Scour Smart Flag	(EA)	1	0 %	0	100 %	1	0 %	0	0 %	0	0 %	0

Structure Inventory and Appraisal Sheet (English Units)

Str Unit	Elm/Env	Description	Units	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4	% in 5	Qty. St. 5
1	503/1	RC Curb	(LF)	44	0 %	0	0 %	0	100 %	44	0 %	0	0 %	0
1	601/1	Out-of-Plane	(EA)	1	0 %	0	0 %	0	100 %	1	0 %	0	0 %	0
1	605/1	Transitions	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
1	606/1	Drains	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
1	608/1	Long. Joints	(EA)	1	0 %	0	0 %	0	100 %	1	0 %	0	0 %	0
1	610/1	Chan Drift	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
1	611/1	Erosion	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
1	612/1	Chan Algn	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
1	613/1	Vegetation	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
1	614/1	Eros Contr	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0

Str Unit	Elm/Env	Description	Element Notes
1	12/1	Concrete Deck - Bare	Top of box beams serve as wearing surface, Random longitudinal cracking with minor spalls. At one time had asphalt overlay and has either worn off or has been milled.
1	104/1	P/S Conc Closed Web/Box Gird	< none >
1	206/1	Timber Column or Pile Extensi	All timber pile in Bent 2 leaning severly to the West and out of plane, Steel cables in place to stop further movement, false bent also in place at bent 2. Piles in bent 1 moderate decay and splitting, water soaked.
1	234/1	Reinforced Conc Cap	< none >
1	334/1	Metal Bridge Railing - Coated	< none >
1	361/1	Scour	Moderate amount of stream degradation at bent 2 around pile, stream has migrated East.
1	503/1	Reinforced Concrete Curb	< none >
1	601/1	Alignment, Out-of-Plane	ALL PILES IN BENT 2 ARE CONSIDERABLY OUT OF ALIGNMENT. HEAVY ROTATION OF BENT 2. FLASE BENT HAS BEEN PLACE AT BENT 2. Minor rotation noted in Bent 1.
1	605/1	Transitions (Approach/Deck)	< none >
1	606/1	Drains	< none >
1	608/1	Longitudinal Joints	JOINTS ARE LEAKING
1	610/1	Channel Drift	Minor around piles at bent 2.
1	611/1	Erosion	Mionor on banks up and downstream.
1	612/1	Channel Alignment	Minor turns, has migrated East under structure, needs channel work under structure.
1	613/1	Vegetation	< none >
1	614/1	Erosion Control/Protection	Sheet pile in place behind both end bents.

BRIDGE NOTES

False bent in place at bent 2 due to heavy rotation of bent, piles are severly out of line.

018-B00080N
04-28-2009

Bent 2, False bent in place.

Bent 1

Timber pile typical