

Structure Inventory and Appraisal Sheet (English Units)

Bridge Key: 7910 Agency ID: 061B00086N SR: 19.2 SD/FO: SD

IDENTIFICATION

State 1: 21 Kentucky Struc Num 8: 061B00086N
 Facility Carried 7: KY-3437 Location 9: .1 MI W OF KY 1232 @ GRAY
 Rte.(On/Under)5A: Route On Structure Rte. Signing Prefix 5B: 3 State Hwy
 Level of Service 5C: 1 Mainline Rte. Number 5D: 03437
 Directional Suffix 5E: 0 N/A (NBI) % Responsibility : Unknown
 SHD District 2: District 11 County Code 3: Knox (061)
 Place Code 4: FIPS 0000 Mile Post 11: 1.639 mi
 Feature Intersected 8: EAST FK BIG INDIAN CR
 Latitude 16: 36d 56' 28" Longitude 17: 084d 00' 44"
 Border Bridge Code 98: Unknown (P)
 Border Bridge Number 99:

INSPECTION

Frequency 91: 12 months Inspection Date 90: 7/13/2010 Next Inspection: 07/13/2011
 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: 07/13/2010 Next Elem. Insp. Due: 07/13/2011

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 28: 09 Rural Local
 Defense Hwy 110: 0 Not a STRAHNET hwy Historical Significance 37: 5 Not eligible for NRHP
 Owner 22: 01 State Highway Agency
 Custodian 21: 01 State Highway Agency

STRUCTURE TYPE AND MATERIALS

Number of Approach Spans 46: 0 Number of Spans Main Unit 45: 1
 Main Span Material/Design 43A/B:
 5 Prestressed Concrete 05 Multiple Box Beam
 Deck Type 107: 9 Other
 Wearing Surface 108A: 6 Bituminous
 Membrane 108B: 0 None
 Deck Protection 108C: None

CONDITION

Deck 58: 6 Satisfactory Super 59: 4 Poor Sub 60: 3 Serious
 Culvert 62: N N/A (NBI) Channel/Channel Protection 61: 4 Protection Undermined

LOAD RATING AND POSTING

Inventory Rating Method 65: 1 LF Load Factor Operating Rating Method 63: 1 LF Load Factor
 Inventory Rating 66: HS4.5 Operating Rating 64: HS4.5
 Design Load 31: 5 MS 18 (HS 20) Posting 70: 0 >39.9% below
 Posting status 41: P Posted for load

AGE AND SERVICE

Year Built 27: 1986 Year Reconstructed 106: -4
 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: 3.1 mi
 ADT 29: 542 Truck ADT 109: % Year of ADT 30: 2010

APPRAISAL

Bridge Rail 36A: 0 Substandard Approach Rail 36C: 0 Substandard
 Transition 36B: 0 Substandard Approach Rail Ends 36D: 0 Substandard
 Str. Evaluation 67: 3 Deck Geometry 68: 2 Intolerable - Replace
 Underclearance, Vertical and Horizontal 69: N Not applicable (NBI)
 Waterway Adequacy 71: 8 Equal Desirable Approach Alignment 72: 5 Above Tolerable
 Scour Critical 113: 4 Stable, needs action

GEOMETRIC DATA

Length Max Span 48: 24.0 ft Structure Length 49: 24.0 ft
 Curb/Sdwik Width L 50A: 0.8 ft Curb/Sidewalk Width R 50B: 0.8 ft
 Width Curb to Curb 51: 19.5 ft Width Out to Out 52: 21.0 ft
 Approach Roadway Width 32: 18.0 ft Median 33: 0 No median (w/ shoulders)
 Deck Area: 504. sq. ft
 Skew 34: 0.00 * Structure Flared 35: 0 No flare
 Vertical Clearance 10: 99.99 ft Horiz. Clearance 47: 19.69 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

PROPOSED IMPROVEMENTS

Bridge Cost 94: \$ 0 Type of Work 75: Unknown (P)
 Roadway Cost 95: \$ 0 Length of Improvement 78: 0.0 ft
 Total Cost 96: \$ 0 Future ADT 114: 681
 Year of Cost Estimate 97: Unknown Year of Future ADT 115: 2030

NAVIGATION DATA

Navigation Control 38: 0 Permit Not Required
 Vertical Clearance 39: 0.0 ft Horizontal Clearance 40: 0.0 ft
 Pier Protection 111: 1 Not Required Lift Bridge Vertical Clearance 118: 0.0 ft

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 | 13/4 | Unp Conc Deck/AC Ovl | (SF) | 468 | 100% | 468 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 |
| 1 | 104/1 | P/S Conc Box Girder | (LF) | 168 | 83% | 140 | 17% | 28 | 0% | 0 | 0% | 0 | 0% | 0 |
| 1 | 215/1 | R/Conc Abutment | (LF) | 78 | 1% | 1 | 62% | 48 | 37% | 29 | 0% | 0 | 0% | 0 |
| 1 | 225/3 | Unpnt Sil Submd Pile | (EA) | 8 | 0% | 0 | 0% | 0 | 100% | 8 | 0% | 0 | 0% | 0 |
| 1 | 334/1 | Metal Rail Coated | (LF) | 48 | 83% | 40 | 17% | 8 | 0% | 0 | 0% | 0 | 0% | 0 |
| 1 | 361/1 | Scour Smart Flag | (EA) | 1 | 0% | 0 | 100% | 1 | 0% | 0 | 0% | 0 | 0% | 0 |

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|----------|---------|---------------------|-------|-----------|--------|------------|--------|------------|--------|------------|--------|------------|--------|------------|
| 1 | 363/1 | Section Loss SmFlag | (EA) | 1 | 0 % | 0 | 0 % | 0 | 100 % | 1 | 0 % | 0 | 0 % | 0 |
| 1 | 503/1 | RC Curb | (LF) | 48 | 69 % | 33 | 31 % | 15 | 0 % | 0 | 0 % | 0 | 0 % | 0 |
| 1 | 606/1 | Drains | (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 | Embankment 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 |

| Str Unit | Elm/Env | Description | Element Notes |
|----------|---------|----------------------------------|---|
| 1 | 13/4 | Concrete Deck - Unprotected w/ A | DECK IS IN OVERALL GOOD CONDITION. |
| 1 | 104/1 | P/S Conc Closed Web/Box Girder | SOME HAIRLINE LONGITUDINAL CRACKING MINOR STAINS. |
| 1 | 215/1 | Reinforced Conc Abutment | UNDERCUT ABUTMENT 2 FULL WIDTH EXPOSING PILE WHICH HAVE VARYING DEGREES OF CORROSION AND SECTION LOSS THE PILES APPEAR TO BE SOUND THE ABUTMENT WAS ORIGINALLY POURED WITHOUT A STANDARD FOOTER |
| 1 | 225/3 | Unpainted Steel Submerged Pile | PILES EXPOSED OF UNKNOWN DEPTH. RUSTY WERE SEEN. AT MUDLINE/WATERLINE SOME SECTION LOSS LAMELLAR CORROSION FORMED AND FLAKING. |
| 1 | 334/1 | Metal Bridge Railing - Coated | MINOR BENDING |
| 1 | 361/1 | Scour | UNDER AT ABUTMENT |
| 1 | 363/1 | Section Loss | AT EXPOSED PILES FROM MUDLINE TO TOP OF WATERLINE |
| 1 | 503/1 | Reinforced Concrete Curb | HAIRLINE CRACKING SOME MINOR SPALLING MOSTLY AT ENDS |
| 1 | 606/1 | Drains | CLOGGED WITH ASPHALT |
| 1 | 610/1 | Channel Drift | HAS A GATE AT INLET |
| 1 | 611/1 | Embankment Erosion | EROSION UPSTREAM,DOWNSTREAM, AT WINGS. |
| 1 | 612/1 | Channel Alignment | CHANNEL MEANDERS BRIDGE |

BRIDGE NOTES

BOTH ABUTMENTS NEED TO BE ENCASED TO PREVENT FURTHER DEACY TO THE EXPOSED PILES.

PAST INSPECTION

Inspection Date: 07/13/2010 Type: 3 Substandard (12 months)
 Inspector: MFROST Pontis User Key: MFROST - Mike F
 Scope:
 NBI: Other: Element:
 Underwater: Fracture Critical:

INSPECTION NOTES

POSTED FOR 8 TONS EACH SIDE