

**Attachment #1 for Field Check of Project No. 77-58 KA-0716-01**

US-77 over Big Blue River

Prepared By: Terry Fleck

Date: 2/11/2010

FEATURE	EXISTING BRIDGE	MODIFIED/NEW BRIDGE		
Structure Number	(013)	(062)		
Station	60+40.00	60+78.25		
Structure Type	SLTC	WWCC		
Spans / Box Size	160'-2@200'-160'	165'-2@210'-165'		
Bridge Length / Box Length	727.0'	756.5'		
Roadway /Skew / Hor. Curve	26' / 0° / None	40' / 0° / None		
Design Method / Design Loading	WSD / H20	LRFD / HL-93 – 5 <sup>th</sup> Ed.		
AADT (Yr.) / % Trucks	3500(2011) / 11.5% Trucks	4000 (2031) / 11.5% Trucks		
Posting/Restrictions	25-43-43 Tons	NA		
Deck Protection	NA	Epoxy Rebar w/3" Cover		
Bridge Railing	Steel Guard Rail	32" Corral Rail w/o Curbs		
Approach Pavement	Asphalt	Concrete / 33' Approach Slabs		
Utilities/Attachments	4 phone lines, USGS Stream Gauge	4 phone lines, USGS Stream Gauge		
Slope Protection	Earth Berms	Slope Protection (Riprap Stone)		
Drainage Area (sq. mi.)	8448.5	8448.5		
Q, Des. Freq./Overtopping Freq.(yr.)	NA / >100	100 / >100		
Waterway Below Design HW (ft <sup>2</sup> )	11,771	11,573		
Design Highwater Clearance (ft.)	21.12' (Design HW)(w/o Tuttle Cr.) 1.5' (Historic HW)(w/ Tuttle Cr.)	25.6' (Design HW)(w/o Tuttle Cr.) 2.7' (Historic HW)(w/ Tuttle Cr.)		
FEMA Area	Zone A	Zone A		
<b>EXISTING BRIDGE: Last Inspection Date: 4/23/2008</b>				
<b>RATING/INDEX</b>	<b>VALUE</b>	<b>CONDITION RATING</b>	<b>COMMENT</b>	
Sufficiency Rating	20.7: SD	Deck	3	60% Det., Steel Plates
Bridge Condition Index	30	Superstructure	4	Stringers Cribbed
Bridge Health Index	68.6	Substructure	6	Exposed Reinf. Steel
<b>HISTORY</b>	<b>COMMENT</b>	<b>FEATURE</b>	<b>COMMENT</b>	
Year Built / Modified	1950 /1967	USGS Gauge	Replace	

<b>Bridge No. 77-58-14.77(062)</b>	<b>SCOPE:</b> Bridge Replacement	<b>Scheduled Let Date:</b> April 2011
<b>Estimated Bridge Removal Cost – \$10,000 (Not included in Construction Cost)(2011)</b>		
883 Est. Structure Constr. Cost	\$6,926,000 (2011)	Fld. Check Est. Structure Constr. Cost \$6,290,000 (2011)

**Comments**

- The bridge was previously field checked March 9, 2009. Since the original field check, the alignment has been revised and the proposed structure is now located 100' downstream of the existing bridge rather than 100' upstream.
- There is a USGS stream gauge mounted on the existing structure and the Corps of Engineers requested that a new gauge be mounted on the proposed structure. The gauging information is vital to their operation and they do not want any down time that may occur during relocation of the existing gauge. This will be discussed with the USGS and if necessary incorporated in the final plans.
- The Hydraulic Assessment Checklist and the Field Check plans with comments are to be considered part of this report.