

## Misc Structures - North Central Region - 2009-11 Biennium

(Sorted by 2009-11#)

Structure Number:	Structure Name:	Repair Description:	Region:	2009-11 Priority#:	Bridge\$'s:
97/359ALT	KNAPPS HILL TUNNEL	Rehabilitate the Tunnel Liner (stage 4)	NC	10	\$500,000
SB00007	CANTILEVER SIGN STRUCT	Replace Cantilever Sign Support	NC	14	\$50,000
2 Misc Structures			Sum of \$'s =		\$550,000

# Bridge Preservation Program (P2)

# Misc Structures Form

Structure Number: 0002093A 97/359ALT	Structure Name: KNAPPS HILL TUNNEL	State Route: 97	Milepost: 224.70	Region: North Central
Year Built / YR Widened: 1936 / 1968	Structure Type: CLTun TLTun	Struct Length: 790.0 ft	Structure Width (c-c): 25.3 ft	Sufficiency Rating:
Average Daily Traffic: 3,427	Detour (miles) 18	Num of Lanes: 2		
Sign Struct Type:	Sign Struct Design:			
Date Inspected: 8/14/2007	Structr Adequacy:			
Superstr Code: 9	Safe Load: 5			
Substr Code: 9	Scour: N			
Project Number:	2007-09 Priority#:			
Repair Year: 2011	2009-11 Priority#:	10		
CPMS Ad Date:	Bridge \$'s:	\$500,000		
	Repair Total\$'s:	\$750,000		
				
<p><b>Repair Description:</b> Rehabilitate the Tunnel Liner (stage 4)</p>				
<p><b>COMMENTS</b></p>				
<p>The south portal and a 150ft interior section was rehabilitated and lined with shotcrete in 2001 as part of contract 5986. The north portal and a 150ft interior section with timber elements was rehabilitated and lined with shotcrete in 2003 as part of contract 6492. A section of the tunnel was rehabilitated and lined in 2006 as part of contract 7049.</p> <p>The remaining timber section (about 170 feet) will be rehabilitated in a project scheduled to be funded in the 2011-13 biennium.</p>				

# Bridge Preservation Program (P2)

# Misc Structures Form

Structure Number: SB00007 SB00007		Structure Name: CANTILEVER SIGN STRUCT		State Route: 2	Milepost: 70.67	Region: North Central
Year Built / YR Widened:		Structure Type: Cantilever		Struct Length: 14.0 ft	Structure Width (c-c): ft	Sufficiency Rating:
Average Daily Traffic:		Detour (miles)	Num of Lanes: 1			
Sign Struct Type:						
Sign Struct Design: Cantilever Sign Struct						
Date Inspected: 8/6/2002		Structr Adequacy:				
Superstr Code: 6		Safe Load:				
Substr Code: 6		Scour:				
Project Number:		2007-09 Priority#:	10			
Repair Year:		2009-11 Priority#:	15			
CPMS Ad Date:		Bridge \$'s:	\$50,000			
		Repair Total\$'s:	\$200,000			
<h2>No Photo Available</h2>						
<b>Repair Description:</b> Replace Cantilever Sign Support						
<b>COMMENTS</b>						
A variety of indications were found among several anchor bolts in 2002. Location of indications changed after torquing. Program for replacement, and monitor indications. 6" diameter chords have surface cracks and rust in galvanizing. End chord connections have up to 1/16" gaps and surface rust throughout plates. End chord connection nuts not accessible thus tightness not verified. Four 1 3/4" x 66" anchor bolts. UT indication @ 12.75 (10% : 80% screen height) at the NW bolt and an indication @ 16.75 (10%) at the SE bolt. Location of indications changed after torquing. No hardened washers. Minimal nut engagement. Standoff is 1".						