

**IOWA DEPARTMENT OF TRANSPORTATION**

To Office Bridges & Structures Date March 16, 2007  
Attention All Employees Ref. No. 521.3  
From Gary Novey  
Office Bridges and Structures  
Subject MM No. 165 (Revision to C9.1.11 Concept Repair Memo)

The following example concept repair memo has been updated and should replace the example shown in article C9.1.11 of Section 9.1 Bridge Repair in the Bridge Design Manual (See Attachment A). Please use this updated memo when developing repair concepts. If you have any questions please check with Dean Bierwagen or me.

GAN:dgb:bj

**IOWA DEPARTMENT OF TRANSPORTATION**

To Office District X

Date January 1, 2007

Attention <District Maintenance Manager>

Ref No. <County> County  
<Project Number>

From <Bridge Design Engineer>

PIN <PIN>

Office Bridges and Structures

Design No(s). <Design #>

File No. <File #>

FHWA No. <FHWA #>

Subject <Revised> Concept for Bridge <Floor Overlay or Repair> of <Bridge size and type>  
Bridge Maintenance No. 0000.0X000

The bridge on <Route> over <Route, River, RR, etc.> has been <scheduled or programmed> for <an overlay or a repair> to be let on <letting date>. < It is currently not in the five year program.> The <estimated or programmed> cost estimate is <estimated or programmed cost estimate>. I inspected the bridge on <Date> with <Bridge employees, other than yourself> of the Office of Bridges and Structures, and <Other personnel>, <Position> of <Office or consultant>.

**EXISTING CONDITIONS**

<Description of Bridge condition found from maint. report and inspection. Mention only conditions needing attention. Include rail type.>

<Description of Approach type and condition from maint. report, include guardrail type>

**RECOMMENDATIONS**

It is recommended that the following repairs be made:

1. <Be specific, a plan will be prepared based on this information>
- 2.

Traffic control will involve <TBR, Shoulder strengthening, traffic signals, floodlighting, etc.>

The District should provide a site survey of the utilities.

All recipients of this letter should review this concept of work to be accomplished and advise the Office of Bridges and Structures of any comments you have by <Date(approx. 3 weeks from date sent)>. After this time period, the concept will be considered approved or will be revised according to concerns.

Estimated cost of repairs is as follows:

	<u>QUANTITY</u>	<u>UNIT</u>	<u>RATE</u>	<u>AMOUNT</u>
Removal of Existing PC Overlay	1002	sy	\$10	\$10,020
Bridge Floor Overlay	1002	sy	\$50	\$50,100

Class A Bridge Floor Repair	26	sy	\$100	\$2,600
Removals (joint and rails)	1	LS	\$10,000	\$10,000
Retrofit Concrete Barrier Rail	670	ft	\$40	\$26,800
Concrete Repair (abut. footing, curb)	5	sf	\$1000	\$5,000
Steel Extrusion Joint with Neoprene	82	ft	\$100	\$8,200
Structural Concrete (joint repair)	10	cy	\$500	\$5,000
Flowable Mortar and Earth Fill	1	LS	\$2,000	\$2,000
Removal of Approach Pavement	136	sy	\$4	\$544
Reinforced Bridge Approach Section	136	sy	\$85	\$11,560
Guardrail	250	ft	\$16	\$4,000
RE-76 End Sections	4	ea	\$1,000	\$4,000
Temporary Flood Lighting	2	ea	\$1,580	\$3,160
Temporary Traffic Signals	2	ea	\$7,250	\$14,500
TBR	1250	ft	\$15	\$18,750
Traffic Control	1	LS	\$5,000	\$5,000
Mobilization & Contingencies (15%)	1	LS	\$24,000	<u>\$24,000</u>
			TOTAL	\$205,234

<Bridge Design Engineer's Initials(CAPITALS)>/baj  
cc: <District Engineer>, <District>  
<Asst. District Engineer>, <District>  
<District Construction Engineer>, <District>  
<District Operations Manager>, District Operations Manager, <City>  
<Bridge Crew Leader>, Bridge Crew Leader, <District>  
M. Kennerly, Design  
<Design Section Leader>, Design  
J. Ranney, Program Management  
M. Swenson, Project Scheduling  
J. Smith, Contracts  
K. Mahoney, Highway Division  
M. Dillavou, Engineering Bureau  
D. Newell, Location and Environment  
B. Brakke  
N. McDonald  
G. Novey  
<Bridge Design Section Leader>  
W. Sunday, Construction  
File

Add to cc: if on Interstate:

C. Monk, FHWA

Add to cc: if RR is involved:

S. Banks, Rail Transportation

Add to cc: if consultant project:

<Consultant contact>, <Consultant>

R. Meyer

Note: Place a copy in the File envelope.