

Memorandum Date: December 14, 2007  
Order Date: January 2, 2008

W. 4. I. 1.

**TO:** Board of County Commissioners

**DEPARTMENT:** Public Works

**PRESENTED BY:** Bill Morgan, County Engineer

**AGENDA ITEM TITLE:** IN THE MATTER OF CONFIRMING THE PUBLIC WORKS  
DIRECTOR'S POSTING OF THE PERKINS CREEK  
BRIDGE ON BIGGS ROAD (A LOCAL ACCESS ROAD).

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**I. MOTION**

Move approval of the Order Confirming the Public Works Director's action in posting the Perkins Creek Road Bridge on Biggs Road (a Local Access Road) with a load limit of 4 tons, 7 tons, and 6 tons.

**II. AGENDA ITEM SUMMARY**

The State Bridge Engineer has recommended that the Perkins Creek Bridge (Bridge No. 18752) be posted for load limits of 4 tons, 7 tons and 6 tons, based on the results of a recent inspection which indicated decreased load-carrying capacity due to deterioration in the bridge decking and pile caps. The Bridge Engineer recommended that the signage indicating the recommended posting be in place no later than January 1, 2008.

Biggs Road residents were notified by letter on December 10, 2007, of the State Bridge Engineer's recommendation and on December 12, 2007, the Public Works Director and County Engineer met with the Board, to inform it of the State Bridge Engineer's recommendation and to seek direction as to action to be taken by staff with regard to the recommended posting. At the meeting, the Board directed that the bridge be posted in accordance with the State Bridge Engineer's recommendation.

**III. BACKGROUND/IMPLICATIONS OF ACTION**

**A. Board Action and Other History**

Biggs Road is a Local Access Road intersecting the south side of Perkins Road approximately ¼ mile easterly of Huston Road and about ½ mile easterly of the Veneta UGB and City Limit. The Maintenance Road Book shows a total length of 0.249 mile for this road, and the Perkins Creek Bridge is located approximately 0.2 mile south of the intersection with Perkins Road. ODOT's recommendation is that this bridge be posted for a reduced load until repaired or replaced, and that "It is ultimately the owner's responsibility to have the structure posted", and the signs should be in place no later than January 1, 2008. The State inspector may not be aware of the legal status of Biggs Road and was under the impression that it is a Lane County-owned bridge rather than a privately-constructed and maintained bridge located on a Local Access Road.

The Load Rating Summary Report prepared by the State of Oregon indicates that the bridge was built in 1988. This would coincide with the timing of Order 87-9-18-1, approving the closing of the Biggs Road Bridge pursuant to ORS 810.030, in which the BCC ordered the bridge be closed and that "Public Works and legal staff work with the land owners in finding a way for the land owners to finance the necessary bridge improvements". Collective staff recollection is that

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the residents found the estimates for the work to be too high and found another way to finance the new bridge.

The minutes of the meeting indicate that the BCC approved a motion to close the bridge as soon as possible and that the County go on record as willing to extend financial help on a reimbursable basis to be determined through legal and Public Works staff.

The Regional Land Information Database (RLID) shows 8 site addresses on Biggs Road, and a review of Map 18-05-05 indicates that at least 5 properties containing 6 dwelling units need to cross the bridge in order to reach the respective properties from Perkins Road.

Pursuant to the direction from the Board, the signs informing of the recommended posting were installed on December 13, 2007. Lane Code 15.215 provides that the Public Works Director's action in posting the bridge shall be abated unless confirmed at the next public meeting of the Board with a duly executed Board Order.

In addition, the Board directed staff to investigate means to assist the residents of Biggs Road in determining potential cost of the needed repair or replacements, what permit(s) will be needed, potential material sources and what funding sources may be available to pay for the cost of the work. It is anticipated that County staff will bring this information back to the Board and the residents on February 13, 2008.

**B. Policy Issues**

Posting the bridge is in accordance with direction given to staff with regard to hazards on Local Access Roads pursuant to Order 06-1-18-8, and is in the public interest with regard to informing the public of a potential hazard.

**C. Board Goals**

This project is related to the County Goal of ensuring the public's safety.

**D. Financial and/or Resource Considerations**

The County is not required to take any action with regard to improvement, repair or maintenance of Local Access Roads, but may exercise jurisdiction over them through Board Action. The costs of posting the signage and investigation and analysis needed to report back to the Board will come from the Road Fund, although staff will be separately accounting for these costs.

**E. Analysis**

The Lane Code provides that the Public Works Director's action will be abated if not confirmed by an Order of the Board at the next regular meeting. County staff has not done any detailed analysis of this bridge that would support a different recommendation.

**F. Alternatives/Options**

1. Approve the Order.

2. Deny approval of the Order and direct staff otherwise.

**IV. TIMING/IMPLEMENTATION**

Upon approval, staff will notify local news media and area emergency service providers of the bridge posting.

**V. RECOMMENDATION**

Approve the Order.

**VI. FOLLOW-UP**

Staff will return to the Board with a discussion item to advise it of the results of the investigation and analysis of the options for the residents to repair or replace the bridge as soon as this work has been completed and anticipate this will be at the Board meeting of February 13, 2008.

**VII. ATTACHMENTS**

Attachment 1-Letter from Bruce V. Johnson, P.E., State Bridge Engineer  
Exhibit A – Graphic showing posting signage



# Oregon

Theodore R. Kulongoski, Governor

**Department of Transportation**  
Transportation Building  
355 Capitol St. NE, Rm. 301  
Salem, OR 97301-3871

November 20, 2007

FILE CODE:

Ollie Snowden  
Public Works Director  
Lane County  
3040 N Delta Hwy  
Eugene, OR 97408



Bruce V. Johnson, P.E., S.E.  
State Bridge Engineer

**SUBJECT: Load Restriction Recommendation  
Perkins Creek Bridge (Br.No.18752)  
Lane County**

The Perkins Creek Bridge (Br.No.18752) was inspected in March 2007. This inspection shows that the deck has decay in numerous planks and the timber caps at bents 1, 2, 4 and 5 have considerable decay. Bent 2 has temporary repairs. Timber caps at bents 1, 3 and 5 are supported by three piles and have adequate capacity. The inspection report indicates the substructure is in critical condition. The two pile cap at bent 4 controls the rating. The load rating was updated to reflect current conditions. Based on the results of the updated load rating, the bridge should be posted at 4 tons for Type 3, 7 tons for Type 3S2 and 6 tons for Type 3-3 trucks.

Since bridges that can not carry at least 3 tons of live load are required to be closed, this bridge is very close to having to be closed.

## ATTACHMENT 1

### **Posting Responsibility**

ODOT recommends this bridge be posted for load until repaired or replaced. It is ultimately the owner's responsibility to have the structure posted. Due to the poor condition and limited capacity to carry live load, the signs should be in place not later than January 1<sup>st</sup> 2008.

To assist us in managing the bridge load rating program, please let us know as soon as the new posting signs are installed. Please send a digital image of the posting sign to verify the posting complies with ODOT recommendations. Contact Joe Charbonneau, Load Rating Engineer, (503) 986-3387, for any questions on these issues.

- cc: Bert Hartman, Bridge Program Unit Manager  
Gary Bowling, Bridge Operations Managing Engineer  
Steve Tuttle, Local Agency Coordinator  
Tim Rogers, FHWA Oregon Division Bridge Engineer  
Holly Winston, Local Agency Standards Engineer
- bc: Richard Groff, Senior Load Rating Engineer  
John Milcarek, Load Rater  
Joe Charbonneau, Load Rating Engineer



**ATTACHMENT 1**  
**Oregon Department of Transportation**  
**Technical Services Branch**

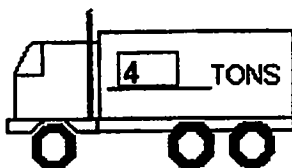
Bridge Engineering Section  
 Local Agency Bridge Load Rating  
 Posting Summary Sheet

Local Agency: LANE  
 Date: 3/1/2002

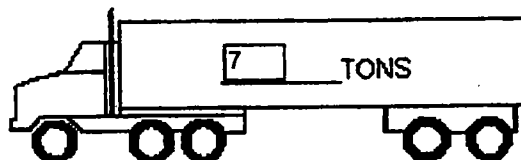
NBIS Bridge Number: 18752

Truck	Inventory	Operating	Posting Required
HS Equivalent	HS 2	HS 3	N/A
HS 20 (36 Ton)	3.2 Tons	5.4 Tons	N/A
Type 3 (25 Ton)	Tons	4.8 Tons	YES
Type 3S2 (40 Ton)	Tons	7.6 Tons	YES
Type 3-3 (40 Ton)	Tons	6.0 Tons	YES
Permit 5 (60.25 Ton)	Tons	12.7 Tons	N/A
Permit 6 (75.25 Ton)	Tons	11.3 Tons	N/A
Permit 7 (92.5 Ton)	Tons	16.7 Tons	N/A

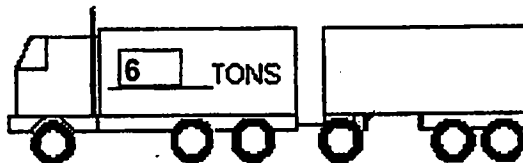
**OREGON LEGAL LOADS  
 RECOMMENDED POSTING**



TYPE 3



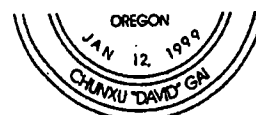
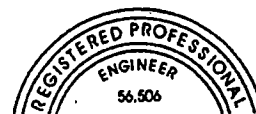
TYPE 3S2




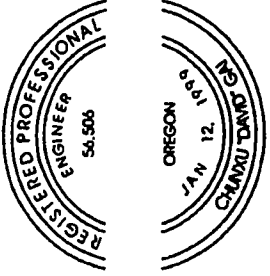
TYPE 3-3

**COMMENTS:**

Posting Required. Cap at Bent 4 controls. Deck also rates low.



EXPIRES 6/30/03

		<b>OREGON D.O.T. BRIDGE SECTION</b> <b>LOAD RATING SUMMARY REPORT (PAGE 1)</b> <small>For local agency bridges. Latest Revision 9/13/1995</small>									
<b>BRIDGE DATA..</b> BRIDGE #: 18752    NBI FEATURE: Parkina Creek HIGHWAY NAME: PUBLIC ROAD    HIGHWAY #: 8043 REGION: 2    DIST: 5    COUNTY: LANE    MILEPOST: 0.20 YEAR BUILT: 1988    DESIGN LOADING:    OWNER: LANE COUNTY SPAN DESC: 4 Span timber girder structure w/ timber pile bents OTHER DESC: Girders run cont over bts 2 & 4. Bl 2 has been shored. Bl 4 is two column bent with 33% section loss in timber cap											
<b>LOAD RATING ENGINEER DATA..</b> FIRM: OBEC / ODOT    ENGINEER: TCW / JMC RATING DATE: 11/8/2007											
<b>LATEST INSPECTION DATA..</b> INSP. DATE: 3/2/2007    ADT: 30    ADTT: 1 DECK: 5    SUPERSTR: 5    SUBSTR: 2 CONDITION RATINGS → 5											
<b>RATING DATA..</b> LRFD FACTORS: LOAD FACTOR LOAD RATINGS FOR N.B.I.: IMPACT 1st: 1.00    7 <sub>2</sub> : 1.00    OPERATING: HS    3.0 INVENTORY CODE: (2-ton): 203    OPER. CODE: (2-ton): 205    Multiple Lanes: 0.583 COMMENTS: Assume 15% section loss in deck and 33% section loss in timber cap at bent 4											
<b>SECTIONS EVALUATED:</b> 6											
LOAD:	R.F.	Limit State or V	1st rating control CONTROLLING... MEMBER	SPAN	LOCATION	R.F.	Limit State or V	2nd rating control CONTROLLING... MEMBER	SPAN	LOCATION	
DESIGN & LEGAL VEHICLES HS20 (72K) TYPE 3 (50K) TYPE 3S2 MAX (80K) TYPE 3-3 (80K) AASHTO LANE LOAD	0.15	Ser	V	1.00 XB_Bent4	1 of 1	0.25L	Ser	+M	1.00 XB_Bent4	1 of 1	0.5L
	0.19	Ser	V	1.00 XB_Bent4	1 of 1	0.25L	Ser	+M	1.00 XB_Bent4	1 of 1	0.5L
	0.19	Ser	V	1.00 XB_Bent4	1 of 1	0.25L	Ser	+M	1.00 XB_Bent4	1 of 1	0.5L
	0.20	Ser	V	1.00 XB_Bent4	1 of 1	0.25L	Ser	+M	1.00 XB_Bent4	1 of 1	0.5L
PERMIT VEHICLES, MULTIPLE LANES, FULL IMPACT PERMIT-5 (120.5K) PERMIT-6 (150.5K) PERMIT-7 (185.0K) SPECIAL-1 SPECIAL-2	0.17	Ser	V	1.00 XB_Bent4	1 of 1	0.25L	Ser	+M	1.00 XB_Bent4	1 of 1	0.5L
	0.12	Ser	V	1.00 XB_Bent4	1 of 1	0.25L	Ser	+M	1.00 XB_Bent4	1 of 1	0.5L
	0.15	Ser	V	1.00 XB_Bent4	1 of 1	0.25L	Ser	+M	1.00 XB_Bent4	1 of 1	0.5L
	0.15	Ser	V	1.00 XB_Bent4	1 of 1	0.25L	Ser	+M	1.00 XB_Bent4	1 of 1	0.5L
PERMIT VEHICLES, SINGLE LANE, NO IMPACT PERMIT-5 (120.5K) PERMIT-6 (150.5K) PERMIT-7 (185.0K) SPECIAL-1 SPECIAL-2	0.21	Ser	V	1.00 XB_Bent4	1 of 1	0.25L	Ser	+M	1.00 XB_Bent4	1 of 1	0.5L
	0.15	Ser	V	1.00 XB_Bent4	1 of 1	0.25L	Ser	+M	1.00 XB_Bent4	1 of 1	0.5L
	0.18	Ser	V	1.00 XB_Bent4	1 of 1	0.25L	Ser	+M	1.00 XB_Bent4	1 of 1	0.5L
	0.18	Ser	V	1.00 XB_Bent4	1 of 1	0.25L	Ser	+M	1.00 XB_Bent4	1 of 1	0.5L
PERMIT VEHICLES, SINGLE LANE, 10% IMPACT PERMIT-5 (120.5K) PERMIT-6 (150.5K) PERMIT-7 (185.0K) SPECIAL-1 SPECIAL-2	0.21	Ser	V	1.00 XB_Bent4	1 of 1	0.25L	Ser	+M	1.00 XB_Bent4	1 of 1	0.5L
	0.15	Ser	V	1.00 XB_Bent4	1 of 1	0.25L	Ser	+M	1.00 XB_Bent4	1 of 1	0.5L
	0.18	Ser	V	1.00 XB_Bent4	1 of 1	0.25L	Ser	+M	1.00 XB_Bent4	1 of 1	0.5L
	0.18	Ser	V	1.00 XB_Bent4	1 of 1	0.25L	Ser	+M	1.00 XB_Bent4	1 of 1	0.5L

OREGON D.O.T. BRIDGE SECTION LOAD RATING WORKSHEET (PAGE 2)									
BRIDGE NO: 18752 BRIDGE NAME: Perkins Creek		RATING DATE: 11/8/2007							
SECTION EVALUATED	1st	2nd	3rd	4th	5th	6th	7th	8th	
LRFD Brass OUT File Name: FORCE TYPE (+/-M or V): PHI (Resistance Factor): MEMBER (eg. Int. girder): SPAN (eg. 1 of 4): LOCATION (eg. 0.1L): AASHTO Impact (1+I) P/S Only: NBI RATINGS (HS20 VEHICLE) INVENTORY (HS20) OPERATING (HS20)	TMBSTG_EOUT V BEARING 3 OF 4 3D	TMBSTG_EOUT M STRINGER 3 OF 4 0.4L	TMBSTG_EOUT M STRINGER 3 OF 4 0.5L	TMBSTG_EOUT M DECK 0.5L	XB_TIMB4.xls +M 1.00 XB_Bent4 1 of 1 0.5L	XB_TIMB4.xls V 1.00 XB_Bent4 1 of 1 0.25L			
DESIGN & LEGAL VEHICLES HS20 (72K) TYPE 3 (50K) TYPE 3S2 MAX (80K) TYPE 3-3 (80K) AASHTO LANE LOAD	6.01 Ser 6.93 Ser 6.80 Ser 7.58 Ser	2.47 Ser 3.18 Ser 3.14 Ser 3.86 Ser	2.51 Ser 3.30 Ser 3.25 Ser 4.00 Ser	0.47 Ser 0.75 Ser 0.75 Ser 0.78 Ser	0.33 Ser 0.40 Ser 0.40 Ser 0.43 Ser	0.15 Ser 0.19 Ser 0.19 Ser 0.20 Ser			
PERMIT VEHICLES, MULTIPLE LANES, FULL IMPACT PERMIT-5 (120.5K) PERMIT-6 (150.5K) PERMIT-7 (185.0K) SPECIAL-1 SPECIAL-2	5.58 Ser 4.74 Ser 5.58 Ser	2.61 Ser 2.43 Ser 2.61 Ser	2.72 Ser 2.40 Ser 2.72 Ser	0.62 Ser 0.62 Ser 0.62 Ser	0.37 Ser 0.26 Ser 0.33 Ser	0.17 Ser 0.12 Ser 0.15 Ser			
PERMIT VEHICLES, SINGLE LANE, FULL IMPACT PERMIT-5 (120.5K) PERMIT-6 (150.5K) PERMIT-7 (185.0K) SPECIAL-1 SPECIAL-2	5.58 Ser 4.74 Ser 5.58 Ser	2.61 Ser 2.43 Ser 2.61 Ser	2.72 Ser 2.40 Ser 2.72 Ser	0.62 Ser 0.62 Ser 0.62 Ser	0.37 Ser 0.26 Ser 0.33 Ser	0.17 Ser 0.12 Ser 0.15 Ser			
PERMIT VEHICLES, SINGLE LANE, 10% IMPACT PERMIT-5 (120.5K) PERMIT-6 (150.5K) PERMIT-7 (185.0K) SPECIAL-1 SPECIAL-2	5.58 Ser 4.74 Ser 5.58 Ser	2.61 Ser 2.43 Ser 2.61 Ser	2.72 Ser 2.40 Ser 2.72 Ser	0.62 Ser 0.62 Ser 0.62 Ser	0.37 Ser 0.26 Ser 0.33 Ser	0.17 Ser 0.12 Ser 0.15 Ser			



**IN THE BOARD OF COUNTY COMMISSIONERS  
OF LANE COUNTY, OREGON**

**ORDER NO.**

( IN THE MATTER OF CONFIRMING THE  
( PUBLIC WORKS DIRECTOR'S POSTING OF  
( THE PERKINS CREEK BRIDGE ON BIGGS  
( ROAD (A LOCAL ACCESS ROAD).  
(

**WHEREAS**, the Oregon State Bridge Engineer has notified Lane County of his recommendation for posting to the Perkins Creek Bridge (Bridge No. 18752) on Biggs Road in the Veneta area of Lane County; and

**WHEREAS**, the State Bridge Engineer's recommendation for posting of the Perkins Creek Bridge on Biggs Road is for 4 tons for Type 3 loading, 7 tons for Type 3S2 loading, and 6 tons for Type 3-3 loading due to deterioration in the wood bridge decking and pile caps, and that the signage indicating the recommended posting be in place not later than January 1, 2008; and

**WHEREAS**, as provided by Lane Code 15.215, the Public Works Director has directed, after advising the Board of the necessity for such action, that the signs indicating the posting be installed by County staff in order to protect public safety; and

**WHEREAS**, said signs were installed on December 13, 2007; and

**WHEREAS**, Lane Code 15.215 further provides that the Public Works Director's action shall be abated unless confirmed at the next public meeting of the Board with a duly-executed Board Order; and

**WHEREAS**, the Board of County Commissioners has considered this posting at the next Board meeting on January 2, 2008; **NOW THEREFORE**,

**IT IS ORDERED** that the Public Works Director's action in posting the Perkins Creek Bridge as shown on Exhibit A be confirmed.

**DATED** this \_\_\_\_\_ day of \_\_\_\_\_, 2008.

\_\_\_\_\_  
Chair,  
Board of County Commissioners

APPROVED AS TO FORM

Date 12-26-07 lane county

\_\_\_\_\_  
OFFICE OF LEGAL COUNSEL

EXHIBIT A

WEIGHT

LIMIT



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