W.10.E.1.

AGENDA COVER MEMO

DATE: March 15, 2004

TO: Lane County Board of Commissioners

DEPT.: Public Works

PRESENTED BY: Sonny Chickering

County Engineer

AGENDA ITEM TITLE: In The Matter of Revising Load Posting on the Row River Bridge at

M.P. 16.64.

I. MOTION

THAT THE ORDER BE APPROVED REVISING THE LOAD POSTING (19 TONS, 27 TONS AND 27 TONS) FOR THE ROW RIVER BRIDGE AT M. P. 16.64.

II. ISSUE OR PROBLEM

Recent inspections have revealed structural damage warranting a reduction in the load posting for this bridge.

III. DISCUSSION

A. Background:

An inspection of the Row River Bridge at M. P.16.64 on Row River Road that was performed by Parsons, Brinckerhoff, Quade and Douglas, Inc. (P-B), under contract to Oregon Department of Transportation, (ODOT) has revealed defects in the load-carrying members of the bridge due to shear cracking. The inspection was conducted as part of an ongoing program of bridge inspections that is required in order to comply with National Bridge Inspection Standards (NBIS).

The County has hired is own consultant, OTAK, Inc., to provide a detailed engineering assessment of the structural capacity of the involved structural members and of the bridge as a whole. OTAK has completed their analysis and is recommending that the operating load rating for this bridge be posted at 13 tons, 16 tons and 17 tons.

B. Analysis:

Lane Code 15.215 provides that the Director of the Department of Public Works is delegated authority by the Board to impose temporary weight restrictions on roads and bridges under emergency conditions, and may post bridges or roads with such weight restrictions in the event of threat to public safety or extensive damage to public roads or bridges. The code language requires that the action be abated unless confirmed at the next public meeting of the Board with a duly-executed Board Order. Based on analysis of the OTAK report, the County Engineer has determined that the shear cracking does not constitute an emergency situation, and staff is therefore requesting Board authorization in advance for the posting of a revised load restriction.

Because there is redundancy in the structural members of the bridge and the shear cracking would therefore not result in a catastrophic failure of the entire bridge but could result result in a more gradual weakening in the affected components that would be noted on subsequent followup inspections, it is recommended that the bridge be kept open for traffic with reduced load postings.

The average daily traffic (ADT) on this section of Row River Road is estimated to be approximately 1000 vehicles, and the vast majority of the traffic consists of passenger cars, light trucks and school buses. Lane County has been awarded \$993,000.00 in Oregon Transportation Investment Act of 2003 (OTIA) III money for replacement of the bridge, and the project has been added to the Draft 05/09 Capital Improvement Program. (CIP)

Staff recommends posting the bridge at a slightly higher rating than recommended by OTAK (19 tons, 27 tons and 27 tons) in order to accommodate the majority of traffic using the road with a minimum of inconvenience. Regular follow-up inspections by Public Works staff and/consultants will assure that any worsening of the defects will be noted and that a more restrictive posting will be initiated if warranted.

Keeping the Row River Bridge open on the weight-restricted basis of 19 tons, 27 tons and 27 tons will allow the majority of traffic to use the bridge without having to detour. This will be sufficient to accommodate vehicles such as unloaded log trucks and loaded school buses. Heavier loads can detour using either Lower Brice Creek Road to the north or by prior arrangement with the owners, obtaining permission to use a private, parallel crossing owned by Weyerhaeuser and the Bureau of Land Management located just south of Row River Road.

C. <u>Alternatives/Options</u>

- 1. Approve the Order authorizing the revised load posting for the Row River Bridge at M.P. 16.64.
- 2. Decline to approve the Order and direct staff otherwise.

D. Recommendations

Alternative No. 1 is recommended.

E. <u>Timing:</u>

The revised load posting will become effective as soon as appropriate signage can be installed.

IV. IMPLEMENTATION/FOLLOW-UP

Staff will follow up as outlined above and will notify local news media of the revised posting.

V. ATTACHMENTS:

Exhibit A - Revised Weight Limits Posting for the Row River Bridge at M. P. 16.64.

IN THE BOARD OF COUNTY COMMISSIONERS OF LANE COUNTY STATE OF OREGON

ORDER

(IN THE MATTER OF LOAD POSTING THE (ROW RIVER BRIDGE AT M. P. 16.64.

WHEREAS, the Row River Bridge at M. P. 16.64 on Row River Road has been inspected under a Oregon Department of Transportation contract with Parsons, Brinckerhoff, Quade and Douglas, Inc. (P-B) in compliance with National Bridge Inspection Standards (NBIS); and

WHEREAS, said inspection revealed defects in the load-carrying members of the bridge due to shear cracking; and

WHEREAS, the County's own engineering consultant, OTAK, Inc., has subsequently inspected said bridge and has recommended a reduced load posting for certain truck types and axle spacing; and

WHEREAS, per Lane Code 15.215, the Director of the Department of Public Works is delegated authority to impose temporary weight restrictions on roads or bridges under emergency conditions and to have such action confirmed by Board action at the next public meeting of the Board; and

WHEREAS, based on analysis of the OTAK report, the County Engineer has determined that the shear cracking of the bridge members does not constitute an emergency situation, and that therefore a revised load posting for the bridge may be imposed by prior Board authorization; and

WHEREAS, the County Engineer has recommended a slightly higher load posting of 19 tons, 27 tons and 27 tons in order to best serve the citizens of Lane County and to accommodate the majority of the traffic using this bridge without having to detour; and

WHEREAS, traffic exceeding these limits can detour around said bridge via two possible routes; and

WHEREAS, follow-up inspections conducted by County staff or consultants will reveal any worsening of the shear cracking and allow further load restrictions to be initiated if warranted; NOW THEREFORE

BE IT ORDERED, that the County Engineer's recommendation to post the Row River Bridge at M. P. 16.64 be authorized as shown on Exhibit A.

Dated this	day of	, 2004.
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		GL.:
		Chair Lane County Board of Commissioners

APPROVED AS TO FORM

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WEIGHT LIMITS

19 TONS 27 TONS 27 TONS

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