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## AGENDA COVER MEMO

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DATE: March 22, 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 London Road Bridge  
at M.P. 13.01.

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### I. MOTION

THAT THE ORDER BE APPROVED REVISING THE LOAD POSTING (19 TONS, 27 TONS AND 27 TONS) FOR THE LONDON ROAD BRIDGE AT M.P. 13.01.

### 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 London Road Bridge at M.P. 13.01 on London 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 its 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 in a more gradual weakening in the affected components that would be noted on subsequent follow up 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 London Road is estimated to be approximately 350 vehicles. Lane County has been awarded \$973,000.00 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. Normally, bridge inspections are performed by the County's consultant every two years. In the case of this bridge, regular follow-up inspections will be scheduled and performed every two months by County staff to ensure that any worsening of the defects will be noted and that a more restrictive posting or other action will be initiated if warranted.

Keeping the London Road 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. The only known potential detour route around this bridge crossing is the Weyerhaeuser haul road. It intersects London Road just south of the bridge and also  $1 \frac{3}{4}$  miles northerly of the bridge. Once the reduced load posting is posted, drivers with loads in excess of the posted limits may contact Weyerhaeuser Timber Co., and seek to obtain permission to utilize its haul road in order to bypass this bridge. When the new bridge is under construction, and the existing bridge is removed, Weyerhaeuser has indicated that they would be willing to consider an agreement whereby all traffic could use the haul road until the new bridge is ready for traffic. Staff and the County's consultant will explore this option, as well as other alternatives which may be available to serve the needs of users of this portion of London Road.

C. Alternatives/Options

1. Approve the Order authorizing the revised load posting for the London Road Bridge at M.P. 13.01
2. Decline to approve the Order and direct staff otherwise.

D. Recommendations

Alternative No. 1 is recommended.

E. Timing

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 London Road Bridge at M.P. 13.01

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

**ORDER**

**(IN THE MATTER OF LOAD POSTING THE  
LONDON ROAD BRIDGE AT M. P. 13.01.**

**WHEREAS**, the London Road Bridge at M. P. 13.01 on London 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 seek to detour around said bridge via a private haul road; 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 London Road Bridge at M. P. 13.01 be authorized as shown on Exhibit A.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2004.

\_\_\_\_\_  
Chair  
Lane County Board of Commissioners

APPROVED AS TO FORM  
Date 4-1-04 Lane County  
*[Signature]*  
\_\_\_\_\_  
CLERK

# WEIGHT LIMITS

	19	TONS
	27	TONS
	27	TONS

OR12-5b