From: Steve Liakos [mailto:SCLiakos@dot.state.nh.us]

Sent: Tuesday, January 29, 2013 9:02 AM

To: 'Planning Department' **Subject:** RE: Bridge Wear

Hi Marcia.

Hope all is well with you and Happy New Year..

To answer your question, the wear or life span of the bridge would probably not matter very much if these trips by the trucks were increased significantly on the bridge providing that:

- The weight of the loaded trucks are under the design live load of the bridge.
- The trucks are not "bumping" on the bridge. This "bumping" occurs when one or both of the roadway approaches to the bridge settles at the beginning of the bridge. The truck then goes down into the hole, then comes up and smacks onto the bridge, causing possible damage to the end of the concrete bridge deck or expansion joint. With a situation like you have, I would have someone observe if any bumping is occurring, and then patch the settled areas if they exist. Our design code actually tells us that bumping (technically called impact) can increase the effective live load of the truck by up to 30%! That makes elimination of bumps at the bridge very important, especially on bridges that have heavy trucks going over them.
- Bumping damage is obviously accelerated with higher vehicle speeds, so any speeding should be enforced.

I hope this answers your question. Please feel free to contact me with any further questions.

Stephen C. Liakos, PE Bridge Engineer

NHDOT-Bureau of Planning & Community Assistance

Tel: 603-271-4420 Fax: 603-271-8093

E-mail: scliakos@dot.state.nh.us

----Original Message----

From: Planning Department [mailto:barrplan@metrocast.net]

Sent: Tuesday, January 29, 2013 8:16 AM

To: Steve Liakos **Subject:** Bridge Wear

Steve

Would it be possible to determine what level of wear would occur to the bridge beyond what it is currently experiencing given 60 trips per day, 30 empty and 30 full loads?

Marcia

Marcia J. Gasses
Town Planner & Land Use Administrator
P.O. Box 660
333 Calef Hwy
Barrington, NH 03825
(0) 603.664.0195

(C) 603.312.4468 <u>barrplan@metrocast.net</u> <u>barrplan@gmail.com</u>

From: Steve Liakos [mailto:SCLiakos@dot.state.nh.us]

Sent: Wednesday, October 31, 2012 10:33 AM

To: 'Planning Department'

Subject: RE: Notes from Bridge Meeting

Hi Marcia,

The vehicles mentioned appear to be in compliance, which the stipulation that they truly do not exceed legal load limits. If the vehicles have the capacity to hold more than legal loads..., they probably will. Bottom line is that it comes down to enforcement.

Through the string of e-mails below, I was unable to extract a copy of the meeting minutes. Could you please send me a copy either electronically or a hard copy? I would like to have a copy for my file, as I do not have a photographic memory of all that we discussed! Thank you.

Feel free to contact me if you have any further questions.

Stephen C. Liakos, PE Bridge Engineer NHDOT-Bureau of Planning & Community Assistance Tel: 603-271-4420

Fax: 603-271-8093

E-mail: scliakos@dot.state.nh.us

----Original Message-----

From: Planning Department [mailto:barrplan@metrocast.net]

Sent: Wednesday, October 31, 2012 9:23 AM

To: Steve Liakos

Subject: FW: Notes from Bridge Meeting

Stephen,

The response to your question at our meeting at the Green Hill Road Bridge has been provided by Jason Hill. Please let me know if you need more information from the applicant or the Town.

Marcia

Marcia J. Gasses
Town Planner & Land Use Administrator
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barrplan@gmail.com

From: Jason Hill [mailto:jhill@tfmoran.com]
Sent: Tuesday, October 30, 2012 4:50 PM

To: 'Planning Department'

Subject: RE: Notes from Bridge Meeting

Marcia.

I wanted to respond to the request in these minutes for specifications on the proposed truck that will be utilizing the bridge.

Truck traffic from the new development will be either a standard tri axle SUV dump truck or a standard tri axle semi trailer loaded not to exceed the legal load limits in accordance with RSA 266:18-a. Please provide this to Steve Liakos as requested in the minutes you forwarded 10/25. Please do not hesitate to contact me with any questions or comments.

Regards.

Jason S. Hill

TFMoran, Inc.48 Constitution Drive Bedford, NH 03110

Tel: (603) 472-4488 Fax: (603) 472-9747

jhill@tfmoran.com

From: Planning Department [mailto:barrplan@metrocast.net]

Sent: Thursday, October 25, 2012 9:52 AM

To: Jeff Kevan; Jason Hill

Subject: FW: Notes from Bridge Meeting

Jason & Jeff

The notes from the Town meeting with Dubois & King and the DOT on the Green Hill Road Bridge are attached.

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From: Scott M. Bourcier [mailto:sbourcier@dubois-king.com]

Sent: Thursday, October 25, 2012 9:34 AM

To: 'Planning Department' **Cc:** 'Jeffrey Adler'; 'Peter Cook'

Subject: RE: Notes from Bridge Meeting

Attached is a copy of the NHDOT Bridge Inspection Report of Green Hill Road Bridge (NHDOT Bridge No. 109/162). Please retain for your file.

-----Original Message-----

From: Scott M. Bourcier [mailto:SBourcier@dubois-king.com]

Sent: Thursday, October 25, 2012 9:30 AM

To: 'Planning Department'

Cc: 'Jeffrey Adler'; 'Peter Cook (peterccook123@qmail.com)'

Subject: RE: Notes from Bridge Meeting

Marcia:

Sorry about the tardiness of the meeting minutes; please see attached. At your convenience, please review and let me know if there are any modifications that you would like to make on these minutes. If not, please accept these minutes as final.

Thank you,

Scott

Scott Bourcier, P.E.

Project Manager



Celebrating 50 YEARS of Dedicated Civil Engineering Excellence

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-----Original Message-----

From: Planning Department [mailto:barrplan@metrocast.net]

Sent: Tuesday, October 23, 2012 2:51 PM

To: sbourcier@dubois-king.com
Subject: Notes from Bridge Meeting

Scott

Have you had a chance to put together the notes from our meeting on the Green Hill Road Bridge?

Marcia

Marcia J. Gasses
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