Christine Havelka

From: Sent: To: Subject:	webforms@victoria.ca Wednesday, November 25, 2015 10:46 AM Council Secretary Thank you for your submission - City of Victoria - Address Council Form				
Name:	Ross Crockford	Date: November 25, 2015			
Address:	942 Richmond Avenue				
I wish to appear at the following Council meeting: November 26, 2015					
I represent:	johnsonstreetbridge.org				
Topic:	Bridge Questions				

Action you wish Council to take:

Ask lead engineer proposed questions re: bridge design, fabrication, installation and maintenance (PowerPoint presentation emailed separately)

CONTACT INFO:

Contact Name:
Contact Address:
Contact Phone Number:
Contact Email:

Ross Crockford 942 Richmond Avenue



BRIDGE QUESTIONS

Ross Crockford johnsonstreetbridge.org

supported solid axle (trunnion) Typical movable bridge:











from Kiewit's bid, page 14:

The bascule portion of the Indicative Design utilizes a mechanical concept that has not been widely used in previous movable bridge projects. While this concept is likely constructible, it utilizes relatively novel and/or potentially unproven technology based on the principle of a "rolling wheel", without a trunnion or axle. Kiewit conferred with EC Driver and a number of steel and machinery fabricators, who are all experienced in movable bridge design and/or construction. All expressed the opinion that there were likely more cost effective mechanical concepts for a bascule bridge than the one used as the basis for the Indicative Design.

It has also been Kiewit's experience that unique or unconventional design concepts often introduce unknown and/or unexpected elements of complexity or uncertainty at some point in the design, fabrication, installation or maintenance process. These unknowns and/or unexpected issues introduce the potential for additional costs which would conflict with the City's mandate to remain near or below the indicated Affordability Ceiling.

from Walsh's bid, page 9:

The rolling wheel design concept is extremely innovative but may pose challenges both for construction, ongoing maintenance and long term operation. To the best of our knowledge, the only other application of this bridge type, also designed by WilkinsonEyre, was built for the City of London's Canary Wharf development. That bridge is significantly smaller than the proposed Johnson Street Bridge. Maintenance of the support rollers might be very difficult since the entire weight of the bridge rests on these supports. Should repair or replacement be necessary, jacking of the entire truss will be required to remove the load from these supports. "unique or unconventional design concepts often introduce unknown and/or unexpected elements of complexity or uncertainty at some point in the design, fabrication, installation or maintenance process."



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- Cures quickly
- · No mixing ratios to measure
- Grouts base flange in final leveled
 aligned position
- High physical strengths
- High impact resistance
- · Strong bond to metal and concrete
- · Unaffected by freeze / thaw cycling
- Superior resistance to fatigue
- Chockfast Red is also available in Gray

Chockfast Red Technical Bulletin Chockfast Red Material Safety Data Sheet Chockfast Flyer Technical Details & Illustrations Tutorial



Canary Wharf bridges: no grout



"unique or unconventional design concepts often introduce unknown and/or unexpected elements of complexity or uncertainty at some point in the design, fabrication, installation or maintenance process."



From: "<u>kgriesing@hardesty-hanover.com</u>" <<u>kgriesing@hardesty-hanover.com</u>> Date: Wednesday, March 4, 2015 at 3:00 PM To: Jonathan Huggett <<u>ihuggett@jrhuggettco.com</u>> Subject: Re: FW: Focus Magazine

Jonathan-

Unfortunately, after reviewing the article and the specific points noted, H&H cannot provide a response since we don't know the history sufficiently to address the commentary from these publications. H&H developed our design based on the Project Development Report and the data provided to us from the Indicative Design.

The commentary in the articles predates H&H's involvement and I don't know the specifics of the prior discussions or commitments relative to the history of the project. I think MMM would have to address the history and the decisions that were made to set the direction of the project. I don't want to offer an opinion on matters that we were not involved with since it may lead to further confusion.

KRG

PDR Seismic design criteria, August 2012:

7% in 75	Possible	Ductile	Ductile	Possible loss	Pos
years (1 in	permanent loss	response may	response may	of service /	of s
1000)	of service.	be relied upon	be relied upon	permanent	per
		corresponding	corresponding	damage	dan