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To: [Ashley Smith \(StructureSmith\)](#); "[Clark Hyland](#)"
Cc: [Sherwyn Williams](#); [Mike Stannard](#)
Subject: Variation of Opinion List for CTV Report 120123
Date: Wednesday, 25 January 2012 7:07:28 p.m.
Attachments: [Variation of Opinion List 120123 report.pdf](#)

Clark, Ashley,

As just discussed with Clark, the way in which these issues have been worded is not acceptable to DBH for reasons discussed. I believe the same ends can be met with the following revised wording. I would like you both to consider my recommendations and make changes to the report so that the "Variations in Opinion" are better phrased along the lines of my recommendations.

1. p12: **Generally**, the output of the NTHA analyses **was regarded as** not inconsistent with ... 2010. However, it could be that a lower level of response ...
2. p20: The recommendation of the standard, **and possibly its intent**, as represented ...
3. p21: Delete "by HCL". (It is described as "One interpretation, " which is enough signal.
4. p50: Delete: "In HCL view this may indicate" and replace with "It is possible that this indicated". Then change would to could after anchor bolts. Then add to para: This slippage, if it occurred, could not be verified
5. p73: Delete "In the view of HCL" Change to: It could be that the lack of flexural damage at the base was indicative of the Spandrel Panel having been close to full contact with the column prior to the February Aftershock.
6. p77: Delete "appeared to HCL" and replace with " could be". Then delete "Both authors consider that".
7. p89: Delete last sentence in para
8. p92: Delete "in SSL view" and replace with "it was noted". Delete: "Both authors agreed that" (The spandrel panels...). Delete: "HCL considered that a" and replace with "One possible".
9. p98: Delete: "by HCL"
10. p108: Amend 2nd and 3rd paras of Scenario 4 to: The greater inter-storey drift along Line F would then have led to greater flexural hinging at the tops and bases of the perimeter columns, **but hinges would be unlikely to form at midheight if the** columns became restrained by the pre-cast concrete spandrel panels installed between them.
It is possible that this Level 4 Drag Bar disconnection did not take place because ... (There appear to be no issues with Appendix G?)
11. p113: Delete: "Opinion was divided over how". Reword to: The mid-height column hinging may have occurred during the collapse rather than **prior to it**. (Delete whole sentence: This was because ... Start next para: On the other hand ... Insert: **In such a case it is possible that ..** the lack of adequate confining ...
12. p121: Vertical acceleration effects: I don't see the relevance of this material. Where is it leading?
13. p121: Delete: "HCL is of the view" in para 3. Replace with: "It is possible to conclude".
Next para: Delete: "This remains an issue". (covered by next sentence) Next para (final para of Analysis and Design of Irregular Structures) : Delete whole paragraph. It is not clear what the relevance of this is. Would some not argue that calibration between ERSA and NTHA is fraught with difficulty? Why raise the issue?

Please review, action and advise proposed changes.

Regards and thanks

David

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